

**COMMONWEALTH OF KENTUCKY  
BEFORE THE KENTUCKY STATE BOARD  
ON ELECTRIC GENERATION AND TRANSMISSION SITING**

**In the Matter of the Application of AEUG Madison            )**  
**Solar, LLC for a Construction Certificate to Construct    ) Case No. 2020-00219**  
**a Merchant Electric Generating Facility                    )**

---

**AEUG MADISON SOLAR, LLC’S RESPONSE TO THE CONSULTANT’S REPORT**

---

AEUG Madison Solar, LLC (“AEUG Madison”), by counsel, hereby provides its Response to the report prepared by Wells Engineering. In this Response, AEUG Madison will generally describe the background, comment on Wells Engineering’s review of the components of the Site Assessment Report and discuss Wells Engineering’s proposed mitigation measures.

**I. BACKGROUND**

AEUG Madison proposes to construct a 100-megawatt alternating current photovoltaic (PV) electricity generation facility, situated on land in Madison County. Prior to filing an application with the Siting Board, AEUG Madison obtained a conditional use permit (“CUP”) from the Madison County Board of Adjustments on December 7, 2020, a copy of which is attached hereto as Exhibit 1. The CUP authorizes the solar facility to be constructed on properties in Madison County leased by AEUG Madison with numerous conditions ranging from minimum setbacks, landscape screening, and decommissioning. These conditions placed on the project by the local agency alleviate the need for duplicative mitigation measures required by the Siting Board.

After obtaining the CUP, AEUG Madison filed an application for a certificate to construct this solar-energy project with the Siting Board on December 11, 2020. Prior to that

filing, AEUG Madison communicated with neighbors and local community leaders throughout its planning process within the constraints dictated by the Covid-19 safety measures.

AEUG Madison held a virtual community meeting on Monday, August 3, 2020. This meeting was held virtually out of an abundance of caution due to the COVID-19 situation. Neighbors of the project were invited to pick up dinner at a Drive-Thru BBQ between 5:30 and 6:30 p.m., followed by an online virtual presentation about the Project at 7:00 p.m. The dinner was catered by Smokin' Jax from Madison County and was well attended with over 30 dinners distributed and approximately 30 participants attending the online virtual presentation.

Pursuant to the notice requirements of KRS 278.706 and the Siting Board's Order dated July 15, 2020, AEUG Madison also held a public meeting on August 6, 2020, at the Madison County Public Library and online to inform the public about the Project and receive comments from them. Approximately 27 people participated in the public meeting virtually and seven participated in person.

The CUP required by Madison County has further enhanced public involvement in the Project Area. Since submitting the CUP application in August 2020, AEUG Madison has been present at four public meetings before the Madison County Board of Adjustments. The application process included a public notice via posting 17 signs that were 4 feet tall by 4 feet wide at participating landowners' properties.

Most recently, AEUG Madison hosted an informational event at Dreaming Creek Brewery in Richmond on March 25, 2021. AEUG Madison's staff attended the event in-person to answer questions that the public had about its project. The event featured live music from local band Nightshade and Kyle's Kitchen Food Truck. The *Richmond Register* published an

article in advance of the event,<sup>1</sup> which provided additional notice for the event. In addition, AEUG Madison procured pollinator seed packs which were distributed at the event and are looking for partners for further distribution in the community.

Consistent with KRS 278.708(5), the Siting Board retained Wells Engineering to review the site assessment report (“SAR”) filed by AEUG Madison and provide recommendations concerning the adequacy of the SAR and proposed mitigation measures.<sup>2</sup> Pursuant to subsection (2)(a) of that statute, the SAR is required to have a description of the proposed facility, including surrounding land uses, legal boundaries, proposed access controls, location of structures on the property, location of roadways, location of utility infrastructure, setbacks, and anticipated noise. The SAR must also include evaluation of four aspects of the project:

1. the compatibility of the facility with scenic surroundings,
2. potential changes in property values and land use resulting from the proposed facility for property owners adjacent to the facility,
3. anticipated peak and average noise levels associated with the facility's construction and operation, and
4. impact of the facility’s operation on road and rail traffic to and within the facility, including anticipated levels of fugitive dust and any anticipated degradation of roads and lands.

KRS 278.708(2)(b)-(e).

## **II. DISCUSSION**

In addition to its own review of the Site Assessment Report, Wells Engineering retained Cloverlake Consulting to analyze the proposed project related to the contents of the Site Assessment Report.

---

<sup>1</sup> A copy of the Article is attached hereto as Exhibit 2.

<sup>2</sup> In Section 2 of its report, Wells Engineering provided general information related to solar-energy generating facilities. Some of the information may not be directly applicable to AEUG Madison’s project. For example, AUEG Madison does not currently plan on using concrete for the installation of panels or battery storage.

## **A. Description of the proposed facility**

### **1. Surrounding land uses**

As indicated in the Site Assessment Report, the surrounding land use for the project is primarily agricultural and residential.<sup>3</sup> Cloverlake Consulting also determined the majority of the project site was located on agricultural land.<sup>4</sup> It specifically found that the Site Assessment report is in compliance with the intent of the statute as it relates to surrounding land use.<sup>5</sup>

Wells Engineering requested that the site layout and 2-mile vicinity maps include identification of the Red House Baptist Church and water bodies.<sup>6</sup> The preliminary site development plan includes locations of ponds, lakes, and creeks. AEUG Madison will update that site layout plan to include Red House Baptist Church.<sup>7</sup>

### **2. The legal boundaries of the proposed site**

Cloverlake Consulting specifically found that the data contained in the Site Assessment report is in compliance with the intent of the statute as it relates to legal boundaries of the proposed site.<sup>8</sup> Wells Engineering noted that there may be some discrepancies with the application materials and the Madison County PVA records.<sup>9</sup> AEUG Madison has worked closely with the Madison County Planning Director throughout the CUP process. The Planning Director also reviewed the PVA records and did not indicate any inconsistencies, but there may

---

<sup>3</sup> Site Assessment Report at 1.

<sup>4</sup> Cloverlake Consulting Report at 4.

<sup>5</sup> *Id.* at 5. Throughout most of the report, Cloverlake Consulting mentions that AEUG Madison's Site Assessment Report is in compliance with the intent of KRS 278.216 until its conclusion on page 27 where it indicates that the Site Assessment Report is in compliance with KRS 278.708. Because KRS 278.216 applies to utilities instead of merchant electric generating facilities, we presume Cloverlake Consulting's statements were intended to refer to KRS 278.708, as it did in the conclusion.

<sup>6</sup> Wells Engineering Report at 11.

<sup>7</sup> It is not clear why Wells Engineering has proposed to include the church on the 2-mile vicinity map because KRS 278.706(2)(b) does not require identification of churches as it only requires identification of "residential neighborhoods, the nearest residential structures, schools, and public and private parks." But if the Siting Board would prefer the 2-mile vicinity map to be updated to show the location of the church, that can be accomplished.

<sup>8</sup> Cloverlake Consulting Report at 6.

<sup>9</sup> Wells Engineering Report at 12.

be discrepancies resulting from a timing lag in the update of the information, as the legal boundaries were based on preliminary title review and the deed information at a specific date. The final ALTA/NSPS Land Title Survey will be the final resolution of any land ownership inconsistencies.

### **3. Proposed access control to the site**

Cloverlake Consulting summarized the project's anticipated proposed access locations and plans.<sup>10</sup> It specifically found that the data contained in the Site Assessment report is in compliance with the intent of the statute as it relates to proposed access control to the site.<sup>11</sup> Wells Engineering noted that conceptual designs do not completely address NERC requirements.<sup>12</sup> AEUG Madison will ensure compliance with any NERC or FERC requirement as the design and engineering of the project is finalized.

### **4. The location of facility buildings, transmission lines, and other structures**

Wells Engineering and Cloverlake Consulting provided brief sections on location of facility buildings, transmission lines, and other structures. Cloverlake Consulting specifically found that the data contained in the Site Assessment report is in compliance with the intent of the statute as it relates to this element.<sup>13</sup>

### **5. Location and use of access ways, internal roads, and railways**

Cloverlake Consulting specifically found that the data contained in the Site Assessment report is in compliance with the intent of the statute as it relates to the location and use of access ways, internal roads, and railways. Wells Engineering noted that the project's internal roads are

---

<sup>10</sup> *Id.*

<sup>11</sup> *Id.* at 7.

<sup>12</sup> *See* Wells Engineering Report at 12.

<sup>13</sup> *See* Cloverlake Consulting Report at 8.

intended to be gravel and that railroads are not applicable to this site.<sup>14</sup> It also noted that bridges may need evaluation for their load bearing capacity, specifically identifying a crossing of Otter Creek by Bill Eades Road. AEUG Madison is aware of the limitations of that specific bridge, and it does not intend to use that bridge (or any other bridges) for any vehicular traffic exceeding capacity of a bridge.

## **6. Existing or proposed utilities to service the facility**

Cloverlake Consulting specifically found that the data contained in the Site Assessment report is in compliance with the intent of the statute as it relates to the existing or proposed utilities to service the facility.<sup>15</sup> Wells Engineering suggested that there would be no utilities to the project other than phone or internet.<sup>16</sup> This is incorrect. As AEUG Madison stated in response to Item 3 of the Siting Board Staff's Second Request for Information and Item 4 of Wells Engineering Second Request for Information, the project will receive retail electric service for its operations building from the local retail electric supplier, which will probably be Clark Energy Cooperative. If electric service is needed during construction, it will be provided by the appropriate provider, which is either Clark Energy Cooperative or Kentucky Utilities. The project will also need potable water and wastewater facilities, but on-site systems are being considered in lieu of connection to a public system.

## **7. Compliance with applicable setback requirements as provided under KRS 278.704(2), (3), (4), or (5)**

KRS 278.704 is clear: locally determined setback requirements have primacy over other setback requirements identified in that statute. As a condition of the CUP that was approved by the Madison County Board of Adjustments, AEUG Madison must maintain a setback of 200 feet

---

<sup>14</sup> See Wells Engineering Report at 14.

<sup>15</sup> See Cloverlake Consulting Report at 8.

<sup>16</sup> See Wells Engineering Report at 15.

from its facility to the center of a road, any adjacent non-participating landowner, and any adjacent property that contains a residence. Wells Engineering acknowledged that the 200-foot setback is required by the statute,<sup>17</sup> and moreover, stated that *“Compared to other solar developments, the current proposed setback [of 200 feet] is greater than most we have seen.”*<sup>18</sup> Likewise, Cloverlake Consulting specifically found that the data contained in the Site Assessment report is in compliance with the intent of the statute as it relates to setbacks.<sup>19</sup>

### **8. Evaluation of the noise levels expected to be produced by the facility**

As stated by Wells Engineering, it appointed “industry leading expert [W. Thomas Chaney of Cloverlake Consulting] for the Environmental Assessment of site for Noise, Traffic & Fugitive dust.”<sup>20</sup> Cloverlake Consulting provided an in-depth analysis of the expected noise levels from the site during construction and operation.<sup>21</sup>

This industry-leading expert relied on an article published by the U.S. Environmental Protection Agency in 1974 supporting a determination that an Ldn exceeding 55 dbA would adversely affect public health and welfare.<sup>22</sup> Cloverlake Consulting summarized the anticipated noise during construction<sup>23</sup> and operation. It noted that the anticipated noise level during

---

<sup>17</sup> Wells Engineering statement that the “KRS required setback is 2000 feet” is overly broad. As it relates to solar facilities, KRS 278.704 provides primacy for local setback requirements, but where there is no local setback requirement, the only setback requirement is 2,000 feet from any residential neighborhood, school, hospital, or nursing home facility.

<sup>18</sup> Wells Engineering Report at 15 (emphasis added).

<sup>19</sup> Cloverlake Consulting Report at 8.

<sup>20</sup> Wells Engineering Report at 15.

<sup>21</sup> Cloverlake Consulting noted that the panels’ tracking system would be operated by 24-volt brushless DC motors. AEUG Madison anticipates using an air driven system that utilizes compressed air to operate the tracking system. These air compressors are installed near each inverter and are estimated to create a noise level of 50dBA at 30 feet away. Therefore, the noise from the air compressors would not differ significantly from a motor evaluated by Wells Engineering.

<sup>22</sup> Cloverlake Consulting Report at 11.

<sup>23</sup> In discussing the construction period, Cloverlake Consulting identified a ten-month schedule based on information provided in the Site Assessment Report. AEUG Madison now anticipates that the project will be slightly different from that anticipated timeline, such that mobilization for the project is anticipated to begin in November 2021 with substantial completion in November or December 2022. Cloverlake Consulting also refers to a City of Richmond noise ordinance, but that ordinance does not apply to this project site as the site is outside City limits.

operation would be approximately 53.9 dbA Ldn, which Cloverlake Consulting notes is below the EPA's 55 dbA standard.<sup>24</sup> Cloverlake Consulting specifically found that the data contained in the Site Assessment report is in compliance with the intent of the statute as it relates to noise.<sup>25</sup>

### **B. Compatibility of the Facility with Scenic Surroundings**

Regarding scenic surroundings, both Wells Engineering and Cloverlake Consulting referred to the visual assessment report prepared by Tetra Tech and filed with the Site Assessment Report. The visual assessment noted:

The views can be vastly different from one location to another, even in proximity, because of the rolling terrain and vegetation. Viewers in proximity to the Project may have unobstructed or partially screened views and include adjacent rural residences and travelers along the local roads and highways. Existing vegetation between the solar arrays and the residences will be left in place, to the extent practicable, to help screen the Project and reduce visual impacts from the adjacent homes. It is anticipated that views of the Project from surrounding places (e.g., Richmond, Ford) would generally be screened by vegetation and structures associated with development. Roadways and rural residential development located outside of built communities would have elevated views towards the Project. Views would vary from completely screened to partially screened to unobstructed.<sup>26</sup>

Wells Engineering also presented additional information related to specific locations, each of which supported the project's minimal impact to the scenic surroundings. At viewpoint 3, Wells Engineering noted that "believe the combination of the distance and the existing of some many human made features already in the form of the substation and the power lines will mean little in visual impact from that distance."<sup>27</sup> With respect to viewpoint 4, it stated: "With the setback so large this should allow enough greenery to keep the impact to a

---

<sup>24</sup> Cloverlake Consulting Report at 15.

<sup>25</sup> *Id.* at 16.

<sup>26</sup> Cloverlake Consulting Report at 18.

<sup>27</sup> Wells Engineering Report at 16.



minimum.”<sup>28</sup> And in relation to views from Boone Trail Road, it indicated: “There are some residences along this road, but the topography is such that *most of the view is obscured* by a gentle rise and the tree line along the creek.”<sup>29</sup>

Ultimately, Wells Engineering concluded:

*While there will always be impact to the scenery of neighboring properties the impact of this project is minimal.* The combination of the topography, existing tree line, existing human made features, and the *large setback* from the property line proposed by the developer works well to minimize the impact. The major exceptions to this are the project participants and a few other directly neighboring landowners.<sup>30</sup>

Cloverlake Consulting similarly determined that any impact of the project to the scenic surroundings would be relatively minor by concluding that the evaluation of the facility with the scenic surroundings in in compliance with the intent of the statute.<sup>31</sup>

### **C. Potential Changes in Property Values**

Wells Engineering requested both Cloverlake Consulting and Mary McClinton Clay to review the property-value report submitted in the Site Assessment Report as prepared by Richard Kirkland. Finding that Mr. Kirkland’s report was in compliance with the intent of the statute related to the project’s potential impact on property values, Cloverlake Consulting provided the following quote:

The matched pair analysis shows no impact in home values due to abutting or adjoining a solar farm as well as no impact to abutting or adjacent vacant residential or agricultural land. The criteria that typically correlates with downward adjustments on property values such as noise, odor, and traffic all indicate that a

---

<sup>28</sup> *Id.* at 17.

<sup>29</sup> *Id.* at 18 (emphasis added).

<sup>30</sup> *Id.* at 19 (emphasis added).

<sup>31</sup> Cloverlake Consulting Report at 18.

solar farm is a compatible use for rural/residential transition areas and that it would function in a harmonious manner with this area.

Very similar solar farms in very similar areas have been found by hundreds of towns and counties not to have a substantial injury to abutting or adjoining properties, and many of those findings of no impact have been upheld by appellate courts. Similar solar farms have been approved adjoining agricultural uses, schools, churches, and residential developments. Industrial uses rarely absorb negative impacts from adjoining uses.

Based on the data and analysis in this report, it is my professional opinion that the solar farm proposed at the subject property *will have no impact* on the value of adjoining or abutting property and that the proposed use is in harmony with the area in which it is located. I note that some of the positive implications of a solar farm that have been expressed by people living next to solar farms include protection from future development of residential developments or other more intrusive uses, reduced dust, odor and chemicals from former farming operations, protection from light pollution at night, it's quiet, and there is minimal traffic.<sup>32</sup>

Ms. Clay's assessment is not as favorable as the assessments from Wells Engineering and Cloverlake Consulting, but she has been a vocal opponent of development, including solar, for years. As an example, Ms. Clay was a member of the Bourbon County Comprehensive Plan Task Force, when the members discussed whether to include solar-energy facilities in the Comprehensive Plan. Minutes of a September 2016 Task Force Meeting indicated that, on the topic of solar facilities, "Mary Clay stated I think there are a lot of unintended consequences. I don't think we want to encourage it, they are so unsightly."<sup>33</sup>

Not only has Ms. Clay exhibited bias against solar development, her professional review of Mr. Kirkland's report is defective. Mr. Kirkland provides rebuttal in his responsive letter attached hereto as Exhibit 4. In summary, Mr. Kirkland points out (1) how the methodology he

---

<sup>32</sup> Cloverlake Consulting Report at 19 (emphasis added); *see also* Wells Engineering Report at 20.

<sup>33</sup> *See* Minutes of the September 2016 Bourbon County Comprehensive Plan Task Force meeting, attached hereto as Exhibit 3.

used is a common appraisal approach, (2) that there are additional university studies that support his conclusions, (3) that his report was identified as a consulting report that is subject to USPAP's Competency, Ethics, and Jurisdictional Exception Rules, (4) what is and is not relevant in considering viewshed in this analysis, (5) and several other erroneous findings of her report.

Wells Engineering concludes that there are differences of opinion. But it also states: "To deny the property rights of those participating in the development for the viewshed of a neighbor when there are so many other 'co-dominant' features would seem extreme." AEUG Madison agrees with this sentiment. It also agrees with the Siting Board which found in two prior cases that there is sufficient evidence that "solar facility will more than likely not have any adverse impact on nearby property values" because the characteristics of the solar facility's operations is passive in nature in that it does not produce any air, noise, waste, or water pollution nor does it create any traffic issues during operations."<sup>34</sup>

#### **D. Anticipated Peak and Average Noise Levels**

Section II(A)(8) above provides information on Wells Engineering's and Cloverlake Consulting's findings related to peak and average noise levels. In this section, Cloverlake Consulting reiterates its prior conclusion that "[i]t is not anticipated that noise levels during peak construction and operation will affect any sensitive noise receptors within or adjacent to the site."<sup>35</sup> AEUG Madison agrees with this conclusion.

#### **E. Traffic and Fugitive Dust**

Wells Engineering relied exclusively on the "industry leading expert" Cloverlake Consulting for the analysis of any impact on traffic or fugitive dust.<sup>36</sup> In regards to road and rail

---

<sup>34</sup> *SR Turkey Creek Solar, LLC*, Case No. 2020-00040 at 14-15 (KSB Sept. 23, 2020); *Glover Creek Solar, LLC*, Case No. 2020-00043 at 15 (KSB Sept. 23, 2020)

<sup>35</sup> Cloverlake Consulting Report at 20.

<sup>36</sup> Wells Engineering Report at 15.

traffic, Cloverlake Consulting made the following conclusion: “Operation of the facility is not expected to cause a significant impact to local traffic as the expected traffic to be contributed to the area will be similar to that of a typical single-family home.”<sup>37</sup> Similarly, it determined that “the proposed facility will have no impacts on rail facilities as a result of Project construction or operation.”<sup>38</sup> It determined that the data contained in the Site Assessment report is in compliance with the intent of the statute as it relates to road and rail traffic.<sup>39</sup>

As for fugitive dust impact, Cloverlake Consulting explained that “[t]he proposed facility will only have minimal fugitive dust during construction.”<sup>40</sup> Because of possible PM 10 (particulate matter 10 microns or less in diameter) during construction, Cloverlake Consulting recommended AEUG Madison prepare a plan to control fugitive dust and PM 10, which AEUG Madison can do. As for operations, Cloverlake Consulting determined that “the only source of dust emissions would be due to occasional maintenance vehicle traffic on the access roads.”<sup>41</sup>

### **III. Proposed Mitigation Measures**

In addition to the mitigation measures proposed by AEUG Madison, Wells Engineering and Cloverlake Consulting proposed the following mitigation measures, to which AEUG Madison responds.

1. Create a Site Survey Map indicating the property boundaries. This will be a good reference for current and future needs of the project.

*Response: AEUG Madison agrees to have a final ALTA/NSPS Land Title Survey completed prior to start of construction.*

---

<sup>37</sup> Cloverlake Consulting Report at 20.

<sup>38</sup> *Id.* at 22

<sup>39</sup> *Id.* at 20, 22.

<sup>40</sup> *Id.* at 21. In its analysis, Cloverlake Consulting again relies on a previously identified anticipated construction schedule, which is projected to be delayed approximately two months, such that it is now anticipated that any earth moving activities would occur from December 2021 to May 2022.

<sup>41</sup> *Id.*

2. Identify properties with the most effected viewshed and provide a vegetation buffer to create a visual break.

*Response: Vegetative buffers are required by the Madison County Conditional Use Permit, as follows:*

*“8. Landscaping: A landscaping screen will be provided between the required fencing and the perimeter of the solar farm.*

*a) The screening shall consist of a continuous line of native evergreen foliage and/or native shrubs and/or native trees and/or any existing wooded area and/or plantings of tall native grasses and other native flowering plants. Screening shall not be required if solar farm is not visible to a dwelling or roadway by virtue of existing topography as determined by the Madison County Planning and Development Director.”*

*Accordingly, AEUG Madison will comply with this condition of the CUP.*

3. Create an over-all plot plan indicating all water bodies, bridges, culverts, access roads, power lines, residential and public structures, etc.

*Response: AEUG Madison will submit a final site plan that includes the above-mentioned items.*

4. Update the property ownership records.

*Response: AEUG Madison agrees to have a final ALTA/NSPS Land Title Survey completed prior to start of construction.*

5. Provide Site access control as per NERC guidelines.

*Response: AEUG Madison will be required to comply with NERC regulations and other applicable law regardless of whether the Siting Board includes this as a mitigating measure.*

6. For locating the Solar Modules and Other associated equipment of the plant maintain sufficient clearance from the existing power lines

*Response: AEUG Madison agrees to this measure. Specifically, AEUG Madison will maintain the required clearance for each easement and duly permit the required crossings of the easements, where needed.*

7. Evaluate the existing bridges for their load bearing capacity for construction, operation, and Maintenance.

*Response: AEUG Madison agrees to this measure.*

8. Construct new bridge wherever required necessary.

*Response: AEUG Madison agrees to this measure. To the extent that a new bridge is required at the project site, AEUG Madison*

*will construct or contract for the construction of that bridge. To the extent that an existing bridge will be utilized, AEUG Madison will evaluate whether protection or additional structural support for that bridge is needed for adequate use during construction or operations.*

9. Adhere to the setback distance at all locations as per guidelines from the local planning zone authority.

*Response: AEUG Madison agrees with this mitigation measure.*

10. Historic Resources: No specific requirements regarding historic resources are called for in KRS 278.708, however, it should be noted that this area is rich with potential archeologic sites and historic buildings that could be affected by the construction of this solar farm. Fort Boonesborough, Whitehall and other historic sites are located within the local vicinity. Mitigation of the impacts of this proposed site should include Coordination with, at a minimum, the Madison County Historical Society (MCHS) and the Kentucky Historic Preservation Office (SHPO). A search of archeologic and historic resources should be done in the files of the SHPO and the MCHS. Although the construction of the solar farm could be disruptive to archeologic sites, no field surveys are recommended.

*Response: AEUG Madison agrees to this measure.*

11. Traffic Safety: Most of the roads adjacent and through the site are narrow and, in some cases, curvy. The Applicant should submit a detailed plan on how traffic safety will be maintained during the construction of the facility ten days before commencing construction.

*Response: AEUG Madison agrees to this measure.*

12. Fugitive Dust & PM10: The applicant will submit in writing the specific plan to control fugitive dust and PM 10 during the construction process ten days prior to commencing construction.

*Response: AEUG Madison agrees to this measure.*

13. Protection of Streams: Ten days prior to the commencement of construction, the Applicant will provide a detailed plan on how they will protect the streams in the project area. The site assessment documents in several locations says that certain mitigation measures regarding erosion and protection of water resources “may” be carried out. This needs to be clearly specified.

*Response: Pursuant to Kentucky regulations, AEUG Madison will be required to obtain a Kentucky Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction Activities. It will prepare a Stormwater Pollution Prevention Plan that will outline protection measures including, but not limited to, installation of BMP's that will control runoff.*

14. The primary focus should be on preventing turbidity being added to local streams as a result of erosion during construction.

*Response: AEUG Madison agrees to this measure as it is part of the Stormwater Pollution Prevention Plan.*

Cloverlake Consulting also reviewed the mitigation measures proposed by AEUG Madison in its Site Assessment Report, one of which related to requesting an Approved Jurisdictional Determination (“AJD”) through the U.S. Army Corps of Engineers (“Corps”).<sup>42</sup> On further review, AEUG Madison does not believe an AJD will be necessary for this development. The current site plan will likely require a nationwide permit (“NWP”) from the Corps. Regardless of the final design, AEUG Madison understands its obligation to comply with federal regulations and will obtain all necessary permits.

#### **IV. CONCLUSION**

Wells Engineering’s report is favorable for approval of a construction certificate for AEUG Madison’s project. In addition, it retained Cloverlake Consulting to perform additional analysis, and Cloverlake Consulting concluded that “all sections of the [site assessment] report are in compliance with the intent of KRS 278.708.”<sup>43</sup> Beyond the support of these two reports, it is important to remember that the local planning authority in Madison County has thoroughly reviewed the project and issued numerous conditions on the Conditional Use Permit, thereby making it unnecessary for the Siting Board to place duplicative mitigation measures when the local authority has already imposed conditions on these issues. AEUG Madison encourages the

---

<sup>42</sup> Cloverlake Consulting Report at 23-25.

<sup>43</sup> *Id.* at 27.

Siting Board to issue the certificate of construction for this project based on Wells Engineering's report as well as the local planning authority's review, approval, and conditions.

Respectfully submitted,  
Sturgill, Turner, Barker, & Moloney, PLLC



---

James W. Gardner  
M. Todd Osterloh  
333 West Vine Street, Suite 1500  
Lexington, KY 40507  
Phone: 859-255-8581  
Fax: 859.231.0851  
[jgardner@sturgillturner.com](mailto:jgardner@sturgillturner.com)  
[tosterloh@sturgillturner.com](mailto:tosterloh@sturgillturner.com)

**COUNSEL FOR AEUG MADISON**





Planning & Building Codes  
135 W. Irvine St., 3<sup>rd</sup> Floor  
Richmond, KY 40475  
859-624-4780  
[www.madisoncountky.us](http://www.madisoncountky.us)

## CERTIFICATION OF LAND USE RESTRICTION

**NAME: AEUG Madison Solar, LLC**

**ADDRESS: 55 E. Monroe St. Suite 1925, Chicago, IL 60603**

### TYPE OF RESTRICTION(S):

- Zoning Map Amendment: \_\_\_\_\_ To \_\_\_\_\_ Zone
- Development Plan
- Unrecorded Subdivision Plat
- Dimensional Variance
- Conditional Use Permit
- Conditional Zoning Condition
- Other; Specify: \_\_\_\_\_

### SPECIFICATIONS:

The Madison County Board of Adjustments has issued a Conditional Use Permit for the operation of a Commercial Solar Farm on the following Madison County PVA parcels, for applicable conditions please see attached.

- a. 167 E Bill Eads Road, Richmond, Ky
- b. PVA Parcel # 0066-0000-00015, D Tract 1-3, Red House Road
- c. PVA Parcel # 0053-0000-0017-2, Tract 2, Three Forks Road
- d. 600 Three Forks Road, Richmond, Ky
- e. PVA Parcel # 0053-0000-0017-4, Tract 4, Three Forks Road
- f. PVA Parcel # 0053-0000-0017-5, Tract 5, Three Forks Road
- g. PVA Parcel # 0053-0000-0017-6, Tract 6, Three Forks Road
- h. 510 Three Forks Road, Richmond, Ky
- i. 2146 Red House Road, Richmond, Ky
- j. 172 E Bill Eads Road, Richmond, Ky
- k. 433 Lost Fork Road, Richmond, Ky
- l. 1050 Boone Trial Road, Richmond, Ky
- m. 285 E Bill Eads Road, Richmond, Ky





Planning & Building Codes  
135 W. Irvine St., 3<sup>rd</sup> Floor  
Richmond, KY 40475  
859-624-4780  
[www.madisoncountky.us](http://www.madisoncountky.us)

- n. PVA Parcel # 0066-0000-0001, E Bill Eads Road
- o. 2255 Red House Road, Richmond, Ky
- p. 2103 Red House Road, Richmond, Ky
- q. 1802 Red House Road, Richmond, Ky
- r. PVA Parcel # 0066-0000-0025-A, Red House Road
- s. PVA Parcel # 0066-0000-0017-B, Tract 3-Three Forks Road
- t. PVA Parcel # 0066-0000-0017-IB, Tract 2B-Three Forks Road
- u. 150 Lost Fork Road, Richmond, Ky

Issued: December 7, 2020

A handwritten signature in black ink, appearing to read "Scott Thomas", is written over a horizontal line.

Director, Planning & Development

Solar Farm Facilities are subject to the following requirements/conditions:

1. **Setbacks:** Setbacks shall be 200ft from the center of any road. Setbacks shall be 200ft between the solar facility (includes fencing, panels, structures, or other related equipment) and any adjacent nonparticipating property. Setbacks shall be 200ft between the solar facility (includes fencing, panels, structures or other related equipment) and any adjacent property which contains a residence.

2. **Solar Panel Height:** Height of panels shall not exceed 10ft at maximum tilt of the solar panels

3. **Fencing:** A Fence shall be constructed to enclose and secure the solar farm facility. Fencing shall be at least 6ft in height above ground level. If fencing is made of chain link material it must be slatted with a color to match the surrounding environment. If fencing is not a chain link material, fence must be made of an opaque material with color of natural wood or surrounding environment. This fence must meet all electric utility safety and security guidelines.

4. **Maintenance:** Applicant shall provide to the Madison County Planning and Development Director a continuing maintenance plan for the entire project prior to construction and before production of solar energy commences on the solar farm. This plan will be updated annually on July 1st. This plan will include but not be limited to the following:

- a. Any physical modifications to the solar farm and/or its infrastructure
- b. Complaints pertaining to setbacks, noise, appearance, safety, lighting and any use of public roads received by the applicant, owner and/or operator concerning the solar farm facility and the resolutions of such complaints
- c. Calls for emergency services, including the nature of the emergency and how it was resolved – this includes any environmental incidents whether considered emergency or not
- d. Status/proof of liability insurance
- e. Maintenance of Access Roads, Solar Panels, vegetation control, fence line maintenance, trash and debris clean up, wildlife protection, creek and stream protection and environmental protection
- f. In addition this plan must provide a local point of contact should an emergency or other issue arise
- g. Any other information that the County might reasonably request on the initial plans or annual updates
- h. Within 30 days of submission of initial and subsequent Maintenance Plans to the Planning and Development Director, the Planning and Development Office will review the Maintenance Plan and conduct an on-site field inspection of the solar farm facility.
- i. Within 60 days of Maintenance Plan submission, Planning and Development office will compile a written report of any findings and request the help of any Madison County department to assist them with any remedy recommendations. The Solar Farm Facility will have a reasonable time, set by the Planning and Development Director, to remedy any maintenance issues not found to comply.
- j. There will be a \$500 Fee for the initial and each subsequent annual maintenance plans. This fee will be due upon submission of each report. Failure to provide the annual maintenance plans and payment of required fee shall be considered a cessation of operations.
- k. The Applicant, owner and/or operator of the solar farm facility shall provide, the Madison County Planning and Development office personnel and any other person(s) accompanied by and deemed necessary by the Madison County Planning and Development office to be present, access to the Solar Farm Facility upon a 24 hour notice. Failure to provide access shall be deemed a violation of this Conditional Use Permit.

5. **Installation and Design:** Solar Farm Facility will be designed and located to prevent/limit glare toward any adjacent properties and all roadways in addition to any requirements of the Federal Aviation Administration

6. **Lighting:** Lighting will be shielded and directed so that it does not spill on to adjacent properties and roadways.

7. **Noise:** Noise levels, during operation, shall not exceed 50 decibels when measured at the property line of an adjacent nonparticipating properties. Noise levels will be enforced by local and state officials.

8. **Landscaping:** A landscaping screen will be provided between the required fencing and the perimeter of the solar farm.

a) The screening shall consist of a continuous line of native evergreen foliage and/or native shrubs and/or native trees and/or any existing wooded area and/or plantings of tall native grasses and other native flowering plants. Screening shall not be required if solar farm is not visible to a dwelling or roadway by virtue of existing topography as determined by the Madison County Planning and Development Director.

b) Landscaping under panels will be of native or other types of grasses. No gravel or concrete ground covering unless needed for roadway or to be support pads for accessory equipment or allow proper drainage.

9) **Wiring:** All Wiring between solar panels and other facilities (ie substations, O&M Buildings, Inverters) shall be underground unless applicant can show a special hardship in a particular location. A waiver may be granted by the Madison County Planning and Development Director.

10) **Outdoor storage:** Only outdoor storage of materials, vehicles and equipment that directly support the operation and maintenance of this solar farm facility will be allowed and shall be subject to the same fencing and screening requirements as the rest of the solar farm unless already within the confines of the required fencing in Condition #3.

11) **Buildings:** Any buildings built in support of this solar farm must be constructed of material that best blend in with the surrounding environment (ie: color, building height, foundation type, etc). This condition will be at the discretion of the Planning and Development director.

12) **Access Points:** Any new access point for this project from county roads must be approved by the Madison County Road Supervisor. These access points must be similar in design to the surrounding properties. Any new access points on state highways must be approved by the KY State Highway Department and must also be similar in design to the surrounding properties.

13) **Roads:** Prior to the start of construction, the applicant will provide the Madison County Road Department with a roads survey. This survey will map and log all the conditions of the county roads that will be used during the construction of this project. This will ensure that the applicant returns the roads post construction to pre-construction condition or better. In addition, the applicant shall post a bond in an amount determined by the Madison County Road Supervisor sufficient to guarantee the above. Madison County Fiscal Court will be the beneficiary of such bond.

14) **Decommission:** Prior to the start of construction, applicant will submit a decommissioning plan to the Madison County Planning and Development office and make it available to anyone upon request. Applicant will commit to the following decommissioning requirements to be performed within 12 months from the date the lease expires or terminates or proof that the Solar Farm Facility is no longer generating/producing solar energy:

a. Description of the plan to remove the solar farm facility equipment, solar panels and any other improvements and restore the land to its previous use upon the end of the project's life

- b. Provisions for Removal of solar facilities, structures, debris and associated equipment to a depth of not less than 4ft of surface grade and the sequence in which removal is to be expected
- c. Provisions for removal of all infrastructure including concrete mountings and foundations
- d. Provisions to restore the land to as close to pre-construction condition as reasonably practical including soil and vegetation restoration
- e. An estimate of the decommissioning costs in future dollars at the time of filing certified by a disinterested third party certified professional engineer
- f. A written financial plan approved by the Planning and Development Director to ensure that funds will be available for decommissioning and land restoration
- g. A provision that the terms of the decommissioning plan shall be binding upon the applicant, owner and/or operator and any of their successors, assigns or heirs
- h. Upon review of the decommissioning plan, the Planning and Development Director/Office shall set an amount to be held in the form of a Bond
- i. This Plan shall state that the project applicant/owner/operator shall provide the Madison County Fiscal Court with financial assurance to cover the estimated costs of decommissioning of the solar farm facility/project and that the Madison County Fiscal Court shall have access to the solar farm facility/project and to the Bond proceeds to effect or complete decommissioning within one (1) year after cessation of operations; and,
- j. The Applicant/owner/operator shall provide Madison County Planning and Development Director/Office with a new estimate of the cost of decommissioning of the solar farm facility/project every five (5) years under the same conditions as set forth in this section above. Salvage value of structures, electrical wire and other appurtenances shall be considered within the cost estimate calculations. Upon receipt of this new estimate, the county may require, and the applicant, owner and/or operator shall provide, a new financial plan for decommissioning acceptable to the Planning and Development Director/Office or their designated representative. A new Bond amount may be determined and required to ensure decommissioning is adequately funded. Failure to provide these new cost estimates and updated financial plans every five (5) years shall be considered a cessation of operations.

**15) Bonds/Guarantees:** ACCIONA Energy USA Global LLC, the 100% owner of AEUG Madison Solar, LLC, will provide a bond/guarantee ensuring the decommissioning of the site under the proposed requirements stated above. The beneficiary of said bond/guarantee shall be:

- a. If leased there will be a dual beneficiary between the property owner and Madison County Fiscal court. In the event the property owner fails to reclaim the property to pre-construction condition, Madison County Fiscal court shall have the sole authority to execute the bond for purposes of reclaiming the property to pre-construction condition.
- b. If property is owned by applicant, then Madison County Fiscal court will be beneficiary of said bond/guarantee and shall have the sole authority to execute the bond for purposes of reclaiming property to pre-construction condition.

**16) Safety:** Applicant shall provide a report to the planning and development office identifying any special hazards associated with this project. Report will identify any special signage High Hazard areas or specialized training that may be required for first responders related to this project.

**17) Compliance:**

In addition to the items listed above the applicant must comply with any and all Local, State, and Federal guidelines that would be related to a project such as this. In the event the applicant fails to comply with any condition mentioned above, the permit to operate this facility will be suspended and the facility must cease production until such time as the deficiencies are corrected or the solar farm facility/project must be decommissioned.

#### **18) Cessation of Operations:**

If any Solar Farm Facility/Project has not been in operation and production of solar energy electricity for at least two hundred seventy (270) consecutive days then it will be deemed to be in cessation of operations and decommissioning must commence. The Madison County Planning and Development Office/Director shall notify applicant, owner and/or operator of their decommissioning commitment. Within 30 days the applicant, owner and/or operator shall provide evidence of operation and production of solar energy electricity or begin decommissioning. If the applicant, owner and/or operator fails to refuse to begin decommissioning then the Madison County Fiscal Court has the right to bring legal action and claim Bond proceeds to begin decommissioning.

#### **19) Indemnification and Liability:**

- a. The applicant, owner and/or operator of the solar farm facility/project shall defend, indemnify, and hold harmless the County of Madison and its officials from and against any and all claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses and liabilities whatsoever, including attorney's fees, without limitation, arising out of acts or omissions of the applicant, owner and/or operator associated with the construction and/or operation of this solar farm facility/project.
- b. The applicant, owner and/or operator of the solar farm facility/project shall maintain a current general liability policy covering bodily injury and property damage with limits set by the Planning and Development Office/Director and/or their designated representative sufficient to cover a project of this size. Evidence of liability coverage must be reported and presented to the Madison County Planning and Development Office/Director prior to any construction and on an annual basis every July 1<sup>st</sup>. Any loss of coverage must be reported to the Madison County Planning and Development Office/Director within three (3) working days of loss. Failure to maintain coverage shall be considered a cessation of operations.

#### **20) Penalties**

- a. A failure to obtain applicable building permit(s) for construction of this solar farm facility/project or failure to comply with the requirements of a building permit or the provisions of this Conditional Use Permit shall be deemed a violation of this Conditional Use Permit. The Madison County Attorney and/or the KY Commonwealth Attorney may bring action to enforce compliance.
- b. Applicant, Owner and or Operator could be imposed with fines of not less than \$25 or no more than \$500 for violations of any of the terms of this Conditional Use Permit.
- c. Nothing herein shall prevent the Madison County Fiscal Court from seeking such other legal remedies available to prevent or remedy any violations of this Conditional Use Permit.

# Richmond Register

March 24, 2021

## DCB, Acciona to host Springtime Solar Soiree

By Taylor Six

As Acciona's solar farm proceeds to move into Madison County, officials with the project are looking to further their community outreach efforts with an informational discussion.

Acciona — a Spanish-based conglomerate focused on infrastructure and renewable energy — announced their decision to move into the county in 2020.

On Thursday, the staff will be at Dreaming Creek Brewery for the Springtime Solar Soiree — a causal gathering where area residents can learn details about the 1,100 acre project and its timing through those directly involved.

"We know there is a lot of interest in what we have proposed and we thought this would be a fun way to connect with members of the community, share the latest on the project and answer any questions people have about our plans," said Adam Stratton, director of solar development with Acciona.

Previously, many in the community and in the area of where the farm is proposed, had a lot of questions about the project and what impact it will have on Madison County.

According to Stratton, a lot of community members still have a lot of questions



"I would say that people still have questions," he said. "They want to know what a solar farm looks like and what the impacts will be on the land. We understand that and look forward to sharing some new resources that we have developed, like examples of what solar farms look like from certain distances. It puts people's mind at ease when they see how visual impact can be really reduced by distance and plantings."

He said, with the soiree, the company hopes the event will spread excitement about what the project will bring to the community from the construction jobs which will hopefully help in post-COVID recovery.

The company also plans to incorporate pollinator plantings at the site.

The event will feature live music from local band NightshadE and Kyle's Kitchen Food Truck, and other prizes for those that attend.

"We have been really excited about the reception we have received in Madison County," Stratton told The Register. "We understand what we are proposing is new, and people have questions, which we continue to answer. We are looking forward to having a chance to hear from more people and to hopefully, build more relationships that will help make this a successful project for us and for the county."

The event will be held at Dreaming Creek Brewery on 109 E. Irvine Street, Thursday, March 25, from 6 to 8 p.m.

Reach Taylor Six at 859-524-6695 or follow her on Twitter at @TaylorSixRR.



**BOURBON COUNTY  
COMPREHENSIVE PLAN TASK FORCE  
September 8, 2016**

**PRESENT: Gary Wilson, Mike Withrow, Guy Bowman, Andrea Lacy, Mary Clay, Mark Offutt, Gordon Wilson and Michelle Thornsburg**

Andrea Lacy stated I really want to focus forward in during this meeting, I have provided some points to start talking about implementation and I brought the maps in because I want to start at a really high level rather than delving into the land use section and comparing and contrasting 2004 versus 2008 land use map. I would like to look at how we going about land use in the county and then focus in on the city. But I want to start with the county level view and talk about what our ordinance covers generally and how that will impact the way in which we choose to implement the plan. So those changes that we need to make to the ordinances, small area plans, we might want to conduct corridor studies we would want to conduct that would then lead to an overlay district or zone that provides design guidelines for certain areas in particular, Main Street. Right now it is a basic commercial for a lot of the lots, we have certain setbacks that is a way of developing auto centric manner so the cars are in the front and the building is in the back but there are some things we want to think harder about in keeping our Main Street intact and making it so that it is safe and walkable for people in town. That's just one example. I want to start at the higher level view of the county itself. When I first looked at the county ordinance, I was pleasantly surprised to see the A-2 zone in the county because as a planner I focus on seeing growth in those naturally existing nodes around the county. Those are Ruddles Mills, Centerville, Clintonville and Little Rock. The ordinance has language in it and this language we could explore changing this in time, but as of right now, the ordinance shows a ½ mile radius around each of these nodes to be designated for residential development, so Squires Pointe is one example of that which we could talk more about sort of the origination of the A-2 and then following that Squires Pointe but the idea is that the development is concentrating around those areas. That is currently how the ordinance shows for those A-2 zones. Mike Withrow stated it talks about small area development districts and then doesn't it identify what they are, but does it leave some area in there to have other small area development districts? Mr. Bowman stated I don't think it does. It is very specific on where those are going. Mike Withrow stated because if you drive around the county it looks like there are some of them out there. Mr. Bowman stated well some of those in the county were preexisting, you see clusters of homes. Mr. Withrow stated you get to the intersection of Peacock Road and Currentsville and there are even lots of record that are an acre or two acres. Mrs. Lacy stated right so if in the future we wanted to identify other zones that could be, or rather small area.....Mr. Withrow asked if I have a 2 acre lot of record, can I build a house on it? Mr. Bowman stated if it is already existing yes, you can subdivide it down to a two acre lot. Mrs. Lacy stated yes you could build on it and you could apply for a variance if you need to. Mr. Withrow stated so it doesn't matter if it is A-2 or A-1 or whatever, I am speaking of in the county. Mr. Bowman stated if it was pre-existing the zoning ordinance, like right now if you say you want to subdivide 2 acres off my 20.....Mr. Withrow stated yeah there are areas out there that are already.....Mr. Bowman stated well there are like small communities out there that are like that. Mrs. Thornsburg

stated but you can't put a single wide on it. Mr. Withrow stated so really by default, by lots of record, there is already small area development districts. Andrea stated right that were grandfathered in. So what the 4 mean, they are not necessarily zoned A-2 right now, but if somebody came forth with a development plan, I as staff would look at the ordinance and say okay is this within an half mile radius of this area, if yes, then I am going to be more likely to recommend it for approval if it is also in alignment with the comprehensive plan support these small areas throughout the county, then that is one added level of review or reference that I would make. Mr. Withrow is our function as a comp plan update committee should we identify spots? Andrea stated you could identify additional areas that you would like to amend the A-2 zone to include or those A-2 small areas to include. Mr. Withrow stated that way it would make it easier if somebody did come and want to go out here and rezone this and make it a small area, and they come back and say well it was identified in the comp plan update that this area for growth. Andrea stated right that is the first step for.....Guy Bowman stated that is one intent for the next comp plan not this one, because we are going to open up a big can of worms if we start opening up development out in the county, we want to get this one done, I don't mean to say we are going to short change this one, but we kind of are if we are going to be doing that. Cause what we are going to do if we start opening up new development out in the county, you are going to slow this down to a grinding halt and you know that. So I would suggest we not talk about new zones out in the county in this one, but immediately after this one, open it wide up to anything that is reasonable, that would be my suggestion in doing this in this particular function. Let's get this one legal and then this next one, the overlays and things that she is talking about, those are going to be important in the next one, other types of development in the county is going to be extremely important as well.....Mr. Withrow stated I agree.....Guy Bowman stated but I don't want to slow this one down to a grinding halt.....Mr. Withrow stated in an effort to not slow things down, I will tell you this, and Gordon you were in on these meetings that we met before, much like adopting the Goals and Objectives, we adopted land use maps and that was presented before Millersburg, North Middletown and the Paris City Commission and they have all approved those. I wish Stan was here, he was the guy with the pencil that was coloring them in. Andrea stated right and those were actually what was passed on to Bluegrass ADD when they wrote the land use portion of the plan, what they did was they looked at the acreages through GIS from the 2004 plan and they compared them to what was approved.....Mr. Withrow stated but they on their own left like 3 or 4 parcels out, the industrial sites were mysteriously missing so I mean I don't have a photographic memory I can't remember everything we picked out so it makes me wonder what else they left out. Andrea stated no they didn't produce any maps, they produced tables for us and they were based off the maps. The map that you and I were looking at was the map that Charlie and I were sitting down and looking at the other day that was from the 2004 plan, does that make sense? Mr. Withrow stated it does, the map we looked it was penciled in industrial but it was left off.....Andrea stated well the map that is going to be included in the plan and what we want to talk about is this one right here, this is the one that you gave me. Do we all have a consensus that yes this is the map that was approved? Everyone stated yes.

Discussion regarding property in Millersburg in the flood plain. Andrea stated that is noted in the section in the comp plan.

Discussion regarding septic tanks. Specific language in the ordinance regarding septic tanks.

Randall Lowman came into the meeting. Andrea recapped what we had already gone over for Randall.

We can put language in the implementation section of the plan if we want to either expand or conduct further studies about future A-2 designations. Guy Bowman stated we should probably leave it more general in saying further development in the county instead of saying further A-2 development. Make it a little more general so it doesn't close you into a box. Randall stated make it opened so it can be more inclusive. Guy Bowman stated well it just opens the ideas up rather than just thinking about A-2 zone.

Discussion regarding water capacity for county development. Mr. Withrow stated the City of Paris has run water out North Middletown Road, Millersburg Road, Georgetown Road and are working on a project on Lexington Road so we are going out in every direction. It would depend on the size of the development. Clintonville and Centerville both have Kentucky American Water. Andrea will obtain the maps of existing utilities to include as existing infrastructure. There is already a section on that, but it doesn't show the lines and how far out each one goes. Mr. Withrow stated that the Bluegrass ADD would probably have a better map for the whole county and all the lines.

Andrea stated I would like to continue to focus on talking about implementation with implementing the, looking at the amendment or the changing of these areas out in the county in the future, I would envision some sort of work group would be, we would put together a work group to meet on a regular basis and to work through the language and if changing some zones would be the result, then that is the method in which I would focus on getting it done. Mr. Offutt asked what would be your goals in changing the A-2 out in the county, what would you be trying to accomplish with that? Andrea stated further specify because in the zoning ordinance it is very vague and the A-2 zone is more targeted towards strictly residential development but if there were ways that we could encourage mixed uses in the very core of these areas, like down in Clintonville, you have a store, develop small area planning to look at encouraging growth and develop town centers. So where you have both commercial and residential, mixed use. Mr. Offutt stated so I am just asking, I guess that store has been grandfathered in that area for ever and ever, I guess, it was there before. Andrea stated so if you look down here you can see the yellow that is in Clintonville area, this is all zoned as R-1 currently, there is one business B-2 zone property. Guy Bowman stated there must have been a business there as some point because a lot of those zones were done when they implemented the zoning ordinance, they went around the county and found little pockets like that that didn't meet the A-1 zone, we didn't have an A-2 zone. So basically everything outside the city limits was A-1, but they knew there were pockets around the county that had clusters of homes and things like that so they gave them a zone that best matched something in the zoning ordinance, they may not exactly match, but that was the closest match. So you might have a B-2, maybe someone had a mechanic shop out of a barn out there somewhere and everyone was fine with it but they had to give him a business zone because he had a business, it may or may not exist today, but that's how those zones were created, they were just randomly, okay here is a pocket of homes, they kind of look like R-2 so

let's just put R-2 on it. Andrea stated yeah and so here whether they intended to or not, they are providing a basis for further developing a town center concept throughout the county. To not only serve the residents that are here but to draw people in. Guy Bowman stated well that was the intent of the A-2 zone on those cross roads communities, because literally Clintonville is a cross road, you go half a mile outside those cross roads and anywhere within there is subject to an A-2 zone. Typically, if you look at like Clintonville, that setup is just like Centerville, there is a store, some homes around there, a little bit of a mixed bag around there and that is what the intent was, it is already a living center for a certain number of people, so just make that denser where the density is already started. But if you want to go out say Winchester Road and put a development in, today you can't do that. Not saying you shouldn't do that or you won't be able to do that in the future, but today you can't do that.

Andrea stated the other part of it are specific subdivision regulations or at least.....

Mary Clay came into the meeting at 2:30 p.m. (Andrea recapped what we have already gone over)

Andrea stated there are different ways to incentivize or encourage smart growth, cluster type developments, conservation subdivision designs and different ways of growing that is also sensitive to the natural surroundings. Often time's municipalities or communities will have within their subdivision regulations certain language that encourages smarter type of growth in that way. Curious of what your thoughts are, right now, the subdivision regulations (in audible) but if we are encouraging smart development to occur, we are also encouraging more healthy communities. So what I am suggesting is that in the future we look at the subdivision regulations closer to encourage that type of growth. Mr. Withrow stated the subdivision regulations needed to be updated 10 or 20 years ago and haven't been done. The city updated our zoning ordinance and the next step was to do the subdivision regulations, but it hasn't been done. The city adopted a city ordinance that is known as the subdivision regulations, it gets complicated on how you change them because the subdivision regulations are approved by the planning commission I do believe but we also have them adopted as a city ordinance. Guy Bowman stated well we do need to update our subdivision regulations, go through them and update where we need to, there shouldn't be two that we are going by. So if there are items in an ordinance that are followed as opposed to the subdivision regulations, it gets kind of sticky so that's the thing..... Mr. Withrow stated that needs to be looked at from time to time and updated.

Discussion regarding the sidewalks. Need to focus on existing infrastructure and improving it. Something needs to change in the ordinance about the sidewalks. Mr. Withrow stated a misconception is that the City owns the sidewalks and they do not. The actual individual property owners own the sidewalks and the ordinance says they are supposed to maintain it. There are other communities that the City owns them. But here, it is the property owner's sidewalk, it is not the City's sidewalk. Debra asked how Georgetown, Woodford and Clark, how do they do it? Mike stated it is the individual property owner's responsibility to maintain their sidewalk. There is no sidewalk program in the City's budget.

Andrea stated it should be a part of implementation, starting to embrace and move forward with our pedestrian and sidewalk plan that has been adopted. Mike stated that Stan Galbraith is working on a plan to incentivize people to replace and upgrade their sidewalks by giving them tax credits or tax breaks on their city property tax. Mary Clay stated I think you either have to enforce it or change the rule. Maybe a lot of these people don't know, maybe you should have an article in the newspaper and explain what the situation is and let them know what is required of them and if they don't do it, inform them of the what the consequence is because it hadn't been enforced, so they just let it go.

Debra Hamelback & Randall discussed creating a Main Street Merchant Board in order to help each other. Andrea stated that would be great and go into the implementation as well.

Other public facilities. What has occurred recently, what your ideas are, what are some plans that are put forth. Debra stated that the original master plan for the park is beautiful if it is ever to come. There is a big athletic facility concept is out there, but no spot picked out yet. That is something that could be included in the comp plan – an avenue to implement something like that. Mary Clay asked what are the specifications for the park with respect to finding a spot? What are you looking for? Mark Offutt stated they are looking for 200 acres centrally located close to the City limits. An ad will be run in the paper stating they are looking for property to purchase for a park. Then see what kind of response we get. Basically sending a feeler out to see if anyone is interested in selling. Mary Clay stated it seems to me that the best place to put one is Ron Carter's farm, he is on both sides of the road. Mike Withrow stated they submitted that for a flood mitigation project to channel water and the grant would purchase the property and also channel some water through there. Mary Clay stated the thing that appealed to her about this is it is zoned PUD, there is no demand for PUD, however it is zoned that. I figured if someone could buy it like CMC/CLA maybe the Hinkles, put a conservation easement on it because it is zoned PUD, let's say it is worth \$10,000 an acre as a PUD because there is no demand. Then buy it for \$10,000 an acre, put a conservation easement on it, it now becomes worth \$5,000 an acre just as ag land, they get the tax benefit and to shelter other income from other sources then they donate it to the City for the \$5,000, they get that tax credit. So it is not costing anybody anything, the Carters get the maximum value for the PUD right now, whoever puts up the money gets all the tax credit, so they aren't out anything and the City gets the park. Guy Bowman stated I would suggest not put it inside the bypass. We are talking about growth in the city, that is going to be a prime spot for growth in the city in the future inside the bypass, it is a big chunk of land. I think it will be more valuable from the City's standpoint for development.

(Lengthy discussion regarding placement of the athletic park)

Andrea brought up not only just recreation but also transportation, so like we have a rail line in the city that is not used currently and there are Federal grant funds that could go towards a rails to trails project. This is just one example. But when you think about transportation, and in the transportation section of the plan, it is very lite on alternative modes of transportation. Are there other projects that have been talked about in the past or on the back burner that you would like to bring up regarding alternate modes of transportation? Trying to gather information here. Discussion regarding the abandon line that intersects 19<sup>th</sup> street, Clintonville Road, behind Bourbon County Schools and

across Bethlehem Road. Possibly good for a walk way to tie all Bourbon County school campus in with all those subdivisions. CSX owns it the abandon line. Mary Clay offered to talk to CSX about the abandon line. The rails to trails is huge and a lot of people are getting involved in it now.

Discussion about bike path on Paris Pike. There is plenty of space for a bike path.

Andrea stated that the bike and pedestrian plan really needs to develop legs.....it has been sitting there and I think that is another aspect of implementation that we need to create.

Guy stated that is one of the things we want to do with the County portion of that any kind of alternate transportation trails or anything like that, I think that is important, green space is important to include in the implementation section.

Andrea stated she listed several other items under implementation that I would like to touch upon and hear your thoughts about. Small area planning at the much higher level view at the county itself. So in the future if we could focus on those, Clintonville, Centerville, Ruddles Mill, Little Rock, even Millersburg and North Middletown if in the future we either got funding for the development of small area plans or through our budget if we wanted to allocate resources toward developing a plan for those area we could do so. Now in the City of Paris itself, one of the things that continually comes up regarding land use is the fact that we have this beautiful Main Street that has so much potential yet our ordinance could be refined to having an overlay district or something that maintains that character. One of the implementation measures that is recommended is conducting a Main Street corridor study and then further developing an overlay district so that we can maintain a similar appeal to what we have now making the Main Street walkable. Any thoughts about that? Guy stated in my opinion, Main Street is a sensitive area development wise and it defines the character of your town so I think it would actually be good to have someone from the outside to look at all that and get a fresh look. Even in the Planning Commission when we have development along the Main Street corridor I'd say from Bypass to Bypass we have contention because you don't want all these little strip centers down through Main Street and things like that. It would just define what that design and character is going to be and just makes it easier for everyone to understand and your City has to define what it wants to look like. Mike Withrow stated it would be similar to the Park Pike Corridor Commission which makes it agonizing to do anything and rightly so, but I can see how it would deter people from developing and locating on Main Street because there are so many hoops and hurdles to go through to be able to locate down there. Randall stated a town like this needs the overlay on Main Street because when outside people come in they will ask for this. Mary Clay stated we have to understand what the problems are and what the potential is before we get some outside person in that is going to tell us what...you have to analyze the situation and figure out what we want and after we have understood the pros and cons and the problems and the solutions at that point you get somebody in so then you can talk to them intelligently rather than just .....Andrea stated that is called a corridor study. Mike Withrow stated we have 23 empty buildings down there, I mean do you want to put more restrictions on it? Mary Clay stated no, once you get to the urban center, you don't want restrictions, I mean the Paris Pike Corridor is something else....Mike Withrow stated I just know it is an overlay zone and it was a big deal to make that happen then we build a 4 lane highway

between here and Millersburg there is no overlay zone or anything, you can pretty much do what ever the heck you want out there. Why didn't we do anything on Millersburg Road, an overlay zone or anything regulating any development along that stretch of highway. Mary Clay stated well I think Planning & Zoning, zoning regulations control that. Mike Withrow stated they didn't control the Paris Pike? It will just be another hoop and hurdle that says you can't paint your building pink if you wanted to. Andrea stated but in talking about an overlay zone, we are not getting down to pain colors....this is again getting into the weeds but we want to agree here that we would like to conduct a corridor study to understand what it is that we need on Main Street and if as a result of the corridor study we would like to then further develop an overlay district then that's what we will do. Now I would differ in that overlay districts contribute to further economic development in the community and I believe there is literature that backs that. Again, that is getting too far down the line, what we want to do is identify in the plan that we are going to look at the Main Street area in more detail and decide upon the conduction of a corridor study so that we can be informed about what it is that we are deciding to do, what changes we are deciding to do to our ordinance.

Guy stated when we talk about an overlay zone, we are talking about, you take a defined area, like just to throw out there from Bypass to Bypass, similar to Paris Pike. If we want to take Main Street and we are going apply this strip overlay over Main Street from Bypass to Bypass, regardless of what your actual zone is, you are still subject to your actual zone plus whatever is in that overlay. So what that does, that overlay puts additional requirements on your property if you are located in that overlay just to say this is what our town wants to see when you drive down Main Street this is what our town wants to see. Debra stated we should absolutely do that. Guy stated but you are kind of controlling how the area looks and interacts with transportation and everything else.

Andrea asked Randall if he had experience with corridor studies? Randall stated he hasn't written one but I have worked with consultants in the past on them.

Andrea stated okay, moving on. Historic Preservation and Cultural Resources, this is another aspect of the comprehensive plan that we are going to have to look at expanding upon. So currently we have one locally recognized historic district surrounding the Courthouse Square. On the historic register there are 4 districts within Paris within the downtown area and then there are 6 or 7 rural historic district throughout the county. Mike Withrow stated you need to define Historic District, when it applies to planning and zoning, we have 1 area that is identified in the City Ordinance. Now that is not to say there are federal historic districts all around town. (Discussion regarding historic districts) (Discussion regarding the cell tower possibly going up on Main Street)

Andrea stated the point being we want to explore how to expand historic designations throughout the county. Now the preservation counsel, I did meet with them and learn about what they have already done. They were really the force behind establishing these districts on the historic register and there are just 100's of structures throughout the county. It is just a matter of how and if we want to take it to the next step of recognizing it at the local level. Mike Withrow stated if they are that concerned with it, why for 30 or 40 years haven't they taken our ordinance and said hey we know you have them established in here, we want to expand on that ordinance. In my lifetime, it has never

changed, it is always been a block around the courthouse for 40 years. Andrea stated well then that is kind of contradictory to what they .....We can start building a relationship with the Kentucky Heritage Council who is going to provide us with the maps that show where those structures are. They have all that information it is just a matter of someone asking to receive it. The other benefit of developing a preservation program is funds. If communities become a certified local government you can apply for grant funds to go toward the revitalization of your community. So there are certain things that if we were to pursue and explore down the line, there could be an economic benefit to us.

(Discussion regard small development article in the Wall Street Journal)

Andrea stated lets shift gears. I want to talk about energy for a moment and how energy applies to our ordinances. Currently, it is recognized minimally within the ordinance. I am talking about things such as wind turbans, solar, things that you wouldn't ordinarily think are compatible with this area. Wind power is less desirable than solar however our ordinances currently only acknowledge solar as residential roof mount on a very small scale. But you have these other communities like Clark, Harrison who are developing these large solar farms and I am not necessarily advocating for it however if we were to be approached, our ordinances are ready for something like that. And thinking about land use, where are some areas that we would want to encourage these uses to go or the updating of our ordinance for residential solar. So I wanted to bring that up just to plant the seed, I think that we should acknowledge it in the comprehensive plan and that we need to look into updating the ordinance language. Mike Withrow stated we can just say that we encourage it, but right now it is not feasible. Mary Clay stated I think there are a lot of unintended consequences. I don't think we want to encourage it, they are so unsightly. Guy stated we can't just leave it alone because if we are approached by someone....Mike Withrow stated because of where we are located, it wouldn't be feasible for a major corporation to come in here and buy 200 acres and put solar panels because our weather varies so much. Andrea stated I bring it up because I know that the market demand is out there and some sort of work group is going to have to be joined together of the planning commissioners to work out language because communities and residences have the incentives to adopt solar, farmers are might not necessarily be on a large scale, but I think that we need to build language into our ordinance to get with the times. We do need to look into energy more, we want to acknowledge that it is in there.

Guy stated we have a lot of good ideas out there, but we don't want to throw something out there too controversial at this point because we really do need to get this comp plan wrapped up. I am excited because we will have a lot of good ideas coming out to apply to a new comp plan. Mary Clay stated this comp plan can kind of lay the foundation for the next one....Guy stated oh this isn't going to stop, this is just a benchmark and once this one is finished, then that really starts the new one. Debra stated can't we just finish is and get it done in a month? Andrea stated there are 4 approvals that need to happen. Guy stated talking about new stuff just slows things down, we just need to get this one solid and then move on.

Andrea stated okay so let's go ahead and wrap up. I sent out the Land Use section we didn't get into the weeds on that so much. Bluegrass Add provided us with a draft, I would like for you to look



through it digest it and provide me with feedback. If it requires one on one meetings we can do that. Aside from that, you can expect 1 more meeting, a public hearing and then we will move forward with it. That is my goal.

Gordon Wilson asked about the color coded future land use maps, do they stand as they are? Andrea stated yeah, I mean you were there, you tell me. Mike Withrow stated on page 55 it talks about a B4 zone and we don't have a B4 zone. Other than that, I think it looks pretty good. Andrea stated I am sure I will be sitting down with Mary Clay.

Meeting adjourned.



# Kirkland Appraisals

Richard C. Kirkland, Jr., MAI  
9408 Northfield Court  
Raleigh, North Carolina 27603  
Phone (919) 414-8142  
[rkirkland2@gmail.com](mailto:rkirkland2@gmail.com)  
[www.kirklandappraisals.com](http://www.kirklandappraisals.com)

April 1, 2021

Ms. April Montgomery  
SWCA Environmental Consultants  
201 Chatham Street, Suite 3  
Sanford, NC 27330

**RE: Madison 2 Solar Impact Study**

Ms. Montgomery

The purpose of this letter is to address comments from the Wells Engineering Solar Generation Siting Final Report for Madison 2 Solar, that was submitted to the Kentucky Siting Board related to the market impact analysis that I completed on this project on February 5, 2021.

While I agree with the Wells Engineering conclusion of no impact on value for this project, I would like to respond to some comments both in the Wells Engineering summary as well as the review by Mary McClinton Clay, MAI that was included in the addenda of that report.

### ***Methodology***

While the Wells Engineering conclusion indicates that the methodology was not included in the report. The type of analysis as a Matched Pair Analysis or Paired Sales Analysis is indicated in the report, though it is not explained in detail it is a common appraisal methodology. This methodology is outlined in **The Appraisal of Real Estate**, Twelfth Edition by the Appraisal Institute pages 438-439. It is further detailed in **Real Estate Damages**, Third Edition, pages 33-36 by Randall Bell PhD, MAI. Paired sales analysis is used to support adjustments in appraisal work for factors ranging from the impact of having a garage, golf course view, or additional bedrooms. It is an appropriate methodology for addressing the question of impact of an adjoining solar farm. The paired sales analysis is based on the theory that when two properties are in all other respects equivalent, a single difference can be measured to indicate the difference in price between them. Dr. Bell describes it as comparing a test area to control areas. In the example provided by Dr. Bell he shows five paired sales in the test area compared to 1 to 3 sales in the control areas to determine a difference. I have used 3 sales in the control areas in my analysis and I have far more than 5 sales considered in the test area near solar farms.

The Wells Engineering conclusion mentions studies only being funded by solar companies but there are two university studies of note that should be addressed. Ms. Clay identifies and discusses these in her analysis, but oddly uses the studies to conclude on the opposite of what both studies explicitly state that they concluded. I discuss both studies below and I note that I have discussed the findings of both studies with the researchers who conducted those studies to confirm the analysis presented below. I have also included two additional studies for consideration.

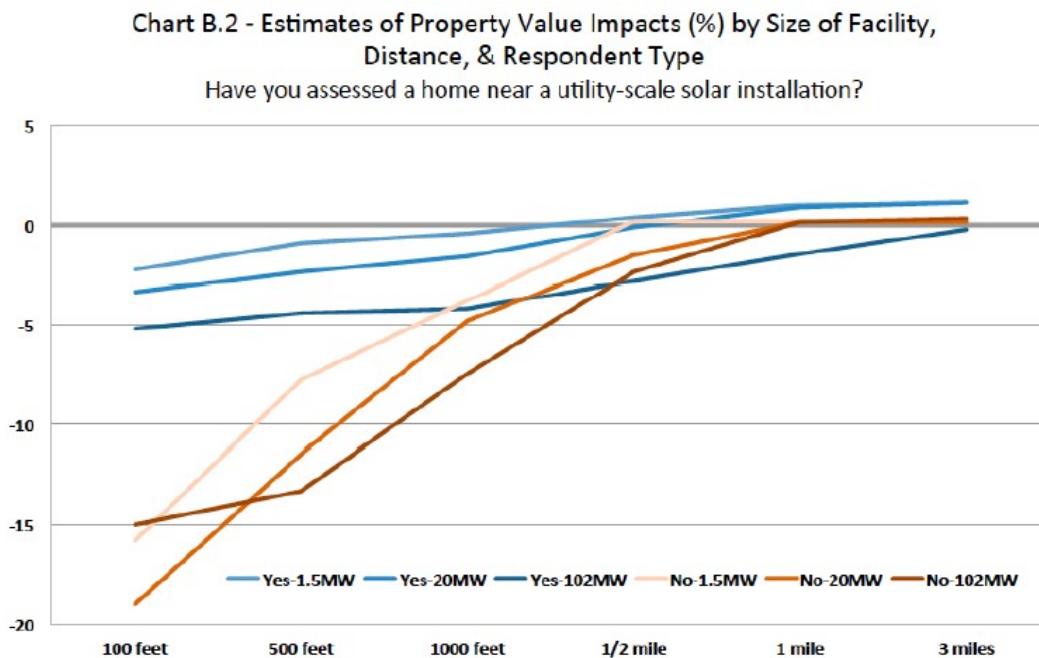


**A. University of Texas at Austin, May 2018**  
**An Exploration of Property-Value Impacts Near Utility-Scale Solar Installations**

This study considers solar farms from two angles. First it looks at where solar farms are being located and concludes that they are being located primarily in low density residential areas where there are fewer homes than in urban or suburban areas.

The second part is more applicable in that they conducted a survey of appraisers/assessors on their opinions of the possible impacts of proximity to a solar farm. They consider the question in terms of size of the adjoining solar farm and how close the adjoining home is to the solar farm. I am very familiar with this part of the study as I was interviewed by the researchers multiple times as they were developing this. One very important question that they ask within the survey is very illustrative. They asked if the appraiser being surveyed had ever appraised a property next to a solar farm. There is a very noticeable divide in the answers provided by appraisers who have experience appraising property next to a solar farm versus appraisers who self-identify as having no experience or knowledge related to that use.

On Page 16 of that study they have a chart showing the responses from appraisers related to proximity to a facility and size of the facility, but they separate the answers as shown below with appraisers with experience in appraising properties next to a solar farm shown in blue and those inexperienced shown in brown. Even within 100 feet of a 102 MW facility the response from experienced appraisers were -5% at most on impact. While inexperienced appraisers came up with significantly higher impacts. This chart clearly shows that an uninformed response widely diverges from the sales data available on this subject.



Furthermore, the question cited above does not consider any mitigating factors such as landscaping buffers or screens which would presumably reduce the minor impacts noted by experienced appraisers on this subject.

The conclusion of the researchers is shown on Page 23 indicated that “Results from our survey of residential home assessors show that the majority of respondents believe that proximity to a solar installation has either no impact or a positive impact on home values.”

This analysis supports a conclusion of no impact on adjoining property values for the subject property where homes are much further away than 100 feet from the adjoining solar panels.

### ***B. University of Rhode Island, September 2020***

#### **Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island**

The University of Rhode Island published a study entitled **Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island** on September 29, 2020 with lead researchers being Vasundhara Gaur and Corey Lang. I have read that study and interviewed Mr. Corey Lang related to that study. This study is often cited by opponents of solar farms but the findings of that study have some very specific caveats according to the report itself as well as Mr. Lang from the interview.

While that study does state in the Abstract that they found depreciation of homes within 1-mile of a solar farm, that impact is limited to non-rural locations. On Pages 16-18 of that study under Section 5.3 Heterogeneity in treatment effect they indicate that the impact that they found was limited to non-rural locations with the impact in rural locations effectively being zero. For the study they defined “rural” as a municipality/township with less than 850 population per square mile.

They further tested the robustness of that finding and even in areas up to 2,000 population per square mile they found no statistically significant data to suggest a negative impact. They have not specifically defined a point at which they found negative impacts to begin, as the sensitivity study stopped checking at the 2,000 population density.

Where they did find negative impacts was in high population density areas that was largely a factor of running the study in Massachusetts and Rhode Island which the study specifically cites as being the 2<sup>nd</sup> and 3<sup>rd</sup> most population dense states in the USA. Mr. Lang in conversation as well as in recorded presentations has indicated that the impact in these heavily populated areas may reflect a loss in value due to the scarce greenery in those areas and not specifically related to the solar farm itself. In other words, any development of that site might have a similar impact on property value.

So based on this study I have checked the population for the Boonesborough-White Hall CCD of Madison County, which has a population of 9,558 population for 2020 based on SiteToDoBusiness by ESRI and a total area of 47 square miles. This indicates a population density of 203 people per square mile which puts this well below the threshold indicated by the Rhode Island Study. Hometownlocator.com website indicates a population of 9,558 over that same area for an indicated density of 203 people per square mile. Both indicators are well below the threshold indicated by this study and support a finding of no impact on adjoining property values.

I therefore conclude that the Rhode Island Study supports the indication of no impact on adjoining properties for the proposed solar farm project.

**C. Master's Thesis: ECU by Zachary Dickerson July 2018**

**A Solar Farm in My Backyard? Resident Perspectives of Utility-Scale Solar in Eastern North Carolina**

This study was completed as part of a Master of Science in Geography Master's Thesis by Zachary Dickerson in July 2018. This study sets out to address three questions:

1. Are there different aspects that affect resident satisfaction regarding solar farms?
2. Are there variations in satisfaction for residents among different geographic settings, e.g. neighborhoods adjacent to the solar farms or distances from the solar farms?
3. How can insight from both the utility and planning sectors, combined with knowledge gained from residents, fill gaps in communication and policy writing in regard to solar farms?

This was done through survey and interview with adjacent and nearby neighbors of existing solar farms. The positive to neutral comments regarding the solar farms were significantly higher than negative. The researcher specifically indicates on Page 46 "The results show that respondents generally do not believe the solar farms pose a threat to their property values."

The most negative comments regarding the solar farms were about the lack of information about the approval process and the solar farm project prior to construction.

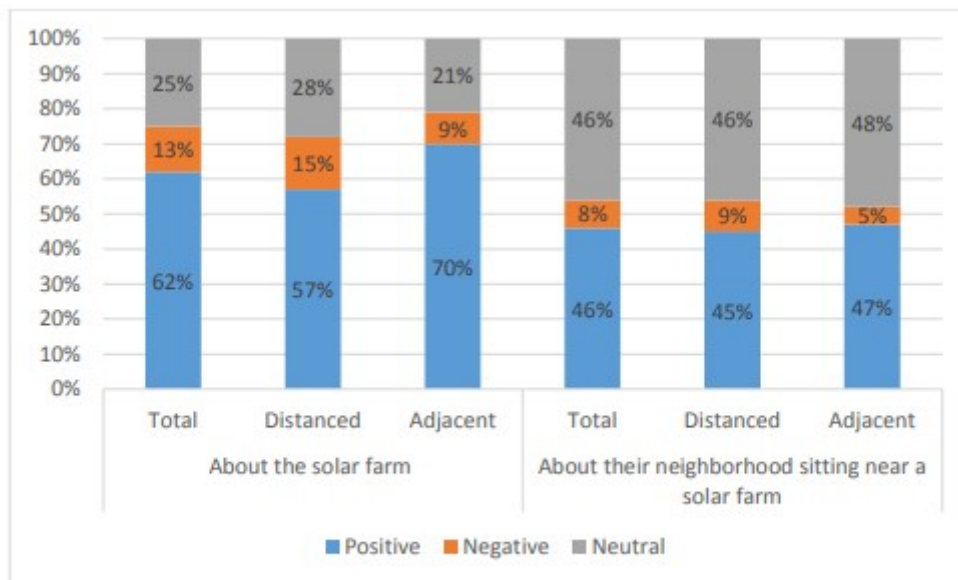


Figure 11: Residents' positive/negative word choices by geographic setting for both questions

**D. Ernest Orlando Lawrence Berkeley National Laboratory, December, 2019**

**The Impact of Wind Power Projects on Residential Property Values in the United States: A Multi-Site Hedonic Analysis**

This study addresses wind farms and not solar farms but it is a reasonable consideration. The activity on a wind farm is significantly different in terms of the mechanics and more particularly on the appearance or viewshed as wind farms cannot be screened from adjoining property owners. This study was commissioned by the Department of Energy and not by any developer. This study examined 7,500 home sales between 1996 and 2007 in order to track sales prices both before and after a wind energy facility was announced or built. This study specifically looked into possible stigma, nuisance, and scenic vista.

On page 17 of that study they conclude “Although the analysis cannot dismiss the possibility that individual homes or small numbers of homes have been or could be negatively impacted, it finds that if these impacts do exist, they are either too small and/or too infrequent to result in any widespread, statistically observable impact.”

Given that solar farms are a similar use, but with a lower profile and therefore a lower viewshed than the wind farms, it is reasonable to translate these findings of no impact to solar farms.

### ***Standards and Methodology***

In the review by Ms. Clay, she notes that the property fails to follow USPAP. This report is specifically noted as being a consulting assignment which falls under USPAP guidelines for Appraisal Practice as a valuation service and is not subject to Standards 1 and 2 of USPAP, but subject to the Competency, Ethics, and Jurisdictional Exception Rules. Reference to other sections of USPAP that do not apply is immaterial.

Moving to the Mary McClinton Clay, MAI review begins with a discussion on Methodology. As noted above, the methodology is supported. Her assertion that there are not enough data points is an opinion and not supported by the work she cites **Real Estate Damages** by Randall Bell, PhD, MAI. Matched pair data is used in supporting adjustments in appraisals as an ongoing function of appraisers on a daily basis and having reviewed countless such studies.

I have completed similar studies working in 19 states over the last 12 years. In that time I have worked with appraisers across the country and similar studies using the same methodology has not only been reviewed but those appraisers have also testified under oath in quasi-judicial hearings as to the adequacy and applicability of the methodology as well as the findings. I have included a list of appraisers who have testified as such include: Tom Hester, MAI, Damon Bidencope, MAI, Patricia McGarr, MAI, William J. Sapio, MAI, Christian P. Kaila, MAI, SRA, Susan D. Baldwin, MAI, AI-GRS, as well as others.

This same methodology used specifically for solar farms by Kirkland Appraisals, LLC has been upheld in at least three NC Superior Court cases of which I am aware as being significant, competent and material evidence.

### ***Viewshed***

The review by Ms. Clay indicates that viewshed was not considered though the report specifically addresses the appearance of the solar farm and discusses that as the primary area of concern as well as the factors that mitigate the appearance of the solar farm.

While Ms. Clay further notes by quoting Dr. Bell on Page 146 “Views of bodies of water, city lights, natural settings, parks, golf courses, and other amenities are considered desirable

features, particularly for residential properties.” Dr. Bell continues on Page 147 that “View amenities may or may not be protected by law or regulation. It is sometimes argued that views have value only if they are protected by a view easement, a zoning ordinance, or covenants, conditions, and restrictions (CC&Rs), although such protections are relatively uncommon as a practical matter. The market often assigns significant value to desirable views irrespective of whether or not such views are protected by law.”

Dr. Bell indicates that the view enhances and adjacent property, even if the adjacent property has no legal right to that view. However, he follows that with “This same concept applies to potentially undesirable views of a new development when the development conforms to applicable zoning and other regulations. Arguing value diminution in such cases is difficult, since the possible development of the offending property should have been known.”

This gets back to the point that if a property has development rights and could currently be developed in such a way that removes the viewshed such as a residential subdivision, then a less intrusive use such as a solar farm that is easily screened by landscaping would not have a greater impact on the viewshed of any perceived value adjoining properties claim for viewshed. Essentially, if there are more impactful uses currently allowed, then how can you claim damages for a less impactful use.

Ms. Clay compares the solar farm to high voltage transmission lines and studies on those, which is not comparable.

All of the cited studies on viewsheds are specific to protected views such as adjoining lakes, golf courses, and the like and not unprotected views such as at the subject property, which necessarily overstates the issue. I regularly work on conservation easements and agricultural easements and there is a measurable enhancement in most cases for being adjacent to preserved open space and farm land, but that is not this situation.

### ***McBride Place***

Ms. Clay compares sales prices to assessed values for determining impacts on value, which is not an acceptable appraisal method.

### ***Literature Review***

Inclusion of these other discussions and studies is not required, but I have included information above on the University Studies.

As noted earlier, Ms. Clay misrepresents the findings and conclusions of the University of Texas Study.

As noted earlier, Ms. Clay misrepresents the findings and conclusions of the University of Rhode Island.

Fred H. Beck and Associates, LLC documented a cancelled sales contract as an example of a negative impact. Mr. Beck has since indicated as documented in a report by Christian P. Kaila, MAI, SRA on December 28, 2018 for the Spotsylvania County Solar Project on Page 4 that Mr. Beck indicated that if there was landscaping to be around the proposed project then he would not see any drop in property value. The contract that fell through was thought at the time would be in full view of the solar farm with no landscaping. Also, there was no change to any assessments at that project as that solar farm was never built.

The literature review provided by Ms. Clay also does not consider any of the very many solar impact assessments that conclude no impact on value such as those completed by Patricia McGarr, MAI with Cohn Reznick, Christian P. Kaila, MAI, SRA, Donald Fisher, ARA, with Pomeroy Appraisers, and Kern G. Slucter, with Gannon Group. By only focusing on studies that show negative impacts and excluding any reference to the many studies showing no impacts she presents a biased review of the subject matter.

### ***Neighbor Agreements***

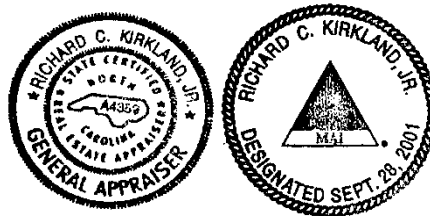
These are not indicative of market impacts, but more of a form of marketing the project to get neighbors on board with a project to improve chances of approval.

### ***North Star Case Study***

Returning to the Wells Engineering comments, the North Star case study indicated by Ms. Clay showed developers flipping property adjoining a solar farm at a loss. The problem with using this as an indicator on property value is that solar developers are not typically motivated in purchasing or selling homes adjoining their projects. In order to determine if there is a market impact you must be considering a market value which includes typically motivated buyers and sellers. This is akin to a lending institution selling surplus property, which frequently sells at a significant discount not due to any problem associated with the property but because the lending institution is not a typical seller and is just liquidating inventory. OREO (Other Real Estate Owned) property sales are generally not used in any appraisal analysis without careful consideration of the specifics of that transaction due to the atypical motivations. I know of situations where solar developers have acquired adjoining homes and then sold them at discounts just to get rid of the hassle. This is not a typical market participant and therefore not indicative of typical market activity. Motivated sellers, whether a lending institution or someone who needs to move quickly, are not good indicators of market value.

If you have any further questions please call me any time.

Sincerely,

Richard C. Kirkland, Jr., MAI  
Kirkland Appraisals, LLC