

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

In the Matter of:

ELECTRONIC APPLICATION OF TURKEY)	
CREEK SOLAR, LLC FOR A CONSTRUCTION)	
CERTIFICATE TO CONSTRUCT AN)	
APPROXIMATELY 50 MEGAWATT)	CASE NO.
MERCHANT ELECTRIC SOLAR)	2020-00040
GENERATING FACILITY IN GARRARD)	
COUNTY, KENTUCKY PURSUANT TO)	
KRS 278.700 AND 807 KAR 5:110)	

ORDER

The matter is before the Siting Board upon a petition filed by Turkey Creek Solar, LLC (Turkey Creek) requesting reconsideration and clarification of certain mitigation requirements imposed by the September 23, 2020 Order (Final Order). On March 27, 2020, Turkey Creek filed an application requesting a Certificate of Construction to construct a 50-megawatt alternating current (MWac) solar photovoltaic electric generating facility to be located in Lancaster, Garrard County, Kentucky. The Final Order conditionally authorized Turkey Creek a Certificate of Construction to construct the proposed solar facility subject to Turkey Creek complying with the mitigation requirements that were discussed in the Final Order and set forth in Appendix A to the Final Order. Turkey Creek states that it “has reviewed the Siting Board’s proposed mitigation measures in detail, and the majority of the measures are acceptable to Turkey Creek”¹ and that the instant “[p]etition is designed to seek changes and clarifications to a small

¹ Petition at 3.

group of mitigation measures that will inhibit the ability for solar to be developed in Kentucky, including the ability of the [Turkey Creek solar project] to move forward.”²

By way of context, Turkey Creek states that the solar project is in the mid-development phase with the next steps being procurement and contracting, financing, and power offtake.³ Turkey Creek also states that each step of the development process will be heavily scrutinized for risk by potential counterparties, including the Siting Board issuance of a construction certificate.⁴ Turkey Creek further states that its goal during this process is to reduce risk and ambiguity in order to put together a financing and construction bid package for the project that is without as much risk and straightforward as possible.⁵ Turkey Creek points out that constructing and operating projects, negotiating offtake agreements, and obtaining financing are all more difficult if there are regulatory conditions that are unusual for the industry, that are challenging for compliance based on the nature of the project, or that are ambiguous in a way that creates uncertainty for how to comply with the condition.⁶ Accordingly, Turkey Creek requests the Siting Board to reconsider and clarify the following mitigation measures that were set forth in the Final Order.

1. Final Site Layout Plan. Ordering paragraphs 2 and 4 of the Final Order required the following with respect to the final site layout plan:

2. Upon its completion, a final site layout plan shall be submitted to the Siting Board. Material deviations from the

² *Id.*

³ Petition at 2.

⁴ *Id.*

⁵ *Id.*

⁶ Petition at 2–3.

preliminary site layout plan which formed the basis for the instant review shall be clearly indicated on the revised graphic. Those material changes might include substantive changes in the location of solar panels, transformer, inverters, panel motors, substation, or other project facilities or infrastructure.

4. The Siting Board shall determine whether any deviation in the boundaries or site development plan is likely to create a materially different pattern or magnitude of impacts. If not, no further action is required, but if that is the case, Turkey Creek shall support the Siting Board's effort to revise its assessment of impacts and mitigation requirements.

Turkey Creek requests clarification with respect to the statement that "material changes" in the final site layout plan would "include substantive changes in the location of solar panels, transformer, inverters, panel motors, substation, or other project facilities or infrastructure." Turkey Creek seeks clarification that "substantive changes" should encompass those changes to the preliminary site plan that would negatively impact the surroundings of the facility, such as an increase in the footprint, a decrease in the setback distances, a change in the location of vegetative buffers, increased noise levels above those indicated in the application or reduced buffering, increase in the height of the infrastructure, and alteration in the type of equipment used at the facility that would increase noise or negatively impact the surroundings. Turkey Creek states that this mitigation measure was not contained within BBC Consulting's report, and therefore it did not have specific opportunity to comment on such a mitigation measure previously as allowed pursuant to KRS 278.708(6), which affords an applicant an opportunity to present evidence to the Siting Board regarding any mitigation measures. Turkey Creek also proposed the following revisions to ordering paragraphs 2 and 4 (strikethrough represents deletion and underline represents addition):

2. Upon its completion, a final site layout plan shall be submitted to the Siting Board. Material deviations from the preliminary site layout plan which formed the basis for the instant review shall be clearly indicated on the revised graphic. ~~Those material changes might include substantive changes in the location of solar panels, transformer, inverters, panel motors, substation, or other project facilities or infrastructure.~~ Changes from the preliminary site development plan will be considered material deviations if they are changes to the footprint, buffering, setbacks, height, noise, and equipment that result in a negative impact to neighboring properties in comparison to the preliminary site development plan.

4. The Siting Board shall determine whether any deviation in the boundaries or site development plan is likely to create a materially different pattern or magnitude of negative impacts to neighboring properties. If not, no further action is required, but if that is the case, Turkey Creek shall support the Siting Board's effort to revise its assessment of impacts and mitigation requirements.

The Siting Board finds that Turkey Creek's request for reconsideration and clarification of ordering paragraphs 2 and 4 should be granted so that further discovery on this particular mitigation measure can be conducted to clarify the intent of the mitigation measure regarding the final site layout plan and to determine the reasonableness of the revisions to ordering paragraphs 2 and 4 as proposed by Turkey Creek.

2. Vegetative Buffers. Ordering paragraph 7 required the following with respect to vegetative buffers:

7. Where there are potential visual or noise impacts created by the solar facility, Turkey Creek shall plant a 15-foot wide vegetative buffer consisting of two staggered rows of evergreen shrubs. The evergreen shrubs shall be either mature at the time of planting of at least six feet in height, or if Turkey Creek elects to plant non-mature evergreen shrubs of at least three feet at the time of planting, Turkey Creek shall also include additional temporary buffers that would immediately help to mitigate any potential noise and visual impacts until the evergreen shrubs have grown to maturity.

With respect to the initial clause, which requires the planting of a vegetative buffer where there are potential visual or noise impacts created by the solar facility, Turkey Creek submits that this requirement leaves room for ambiguity with respect to the location of the vegetative buffer. Turkey Creek interprets the requirement to require a 15-foot-wide vegetative buffer in the locations marked on the preliminary site plan filed in this matter by Turkey Creek. Because the site layout, including the buffer locations, was reviewed by the Siting Board, its consultant, and the community during the public comment process, Turkey Creek requests confirmation that the locations in the site plan be approved and deemed to satisfy this mitigation measure.

Turkey Creek also expresses concerns with respect to the requirement that mature evergreen shrubs should be used at the time of planting, or if nonmature evergreen shrubs are planted, then additional temporary buffers should be installed to immediately help to mitigate any potential noise and visual impacts until the evergreen shrubs have grown to maturity. Turkey Creek states that it did not have an opportunity to respond to this mitigation measure because it was not included in the consultant's report. Turkey Creek asserts that the planting of mature evergreen shrubs will place an unnecessary economic strain on the project as the cost of mature evergreen shrubs are significantly more than nonmature shrubs. Turkey Creek also asserts that additional temporary buffers are unnecessary. The nearest residence is approximately 400 feet from any planned solar facility. The vast majority of the solar-racking system will be installed further from the property boundaries, and the tamping process will occur over a limited period during construction. Turkey Creek attached a Noise Addendum to its petition, which showed that the loudest anticipated noise for the tamping process will be less than 85

decibels at the nearest residence that is approximately 400 feet from the pile-driving location.

Accordingly, Turkey Creek requests that the requirement that Turkey Creek should include additional temporary buffers to mitigate any potential noise and visual impacts until the evergreen shrubs have grown to maturity if Turkey Creek elects to plant nonmature evergreen shrubs of at least three feet at the time of planting be eliminated. Alternatively, if this request is denied and additional temporary buffers is still required, Turkey Creek requests that the Siting Board confirm that the vegetative buffer locations marked on the site plan are appropriate and identify which type of temporary buffers would be acceptable (e.g., canvas or install green slats on the chain link fence). Accordingly, Turkey Creek requests the following revision of ordering paragraph 7:

7. Where there are ~~potential~~ anticipated visual or noise impacts created by the solar facility, Turkey Creek shall plant a 15-foot wide vegetative buffer consisting of two staggered rows of evergreen shrubs in accordance with the vegetative buffer locations indicated on the preliminary site layout plan. ~~The evergreen shrubs shall be either mature at the time of planting of at least six feet in height, or if Turkey Creek elects to plant non-mature evergreen shrubs of at least 3 feet at the time of planting, Turkey Creek shall also include additional temporary buffers that would immediately help to mitigate any potential noise and visual impacts until the evergreen shrubs have grown to maturity.~~

The Siting Board finds that Turkey Creek's request for reconsideration and clarification of ordering paragraph 7 should be granted so that further discovery on this particular mitigation measure can be conducted to determine the additional cost of planting mature evergreen shrubs and to obtain additional information regarding the types of temporary buffers that could be implemented along with the associated costs of those temporary buffer options.

3. Tamping Process. Ordering paragraph 8 sets forth the following mitigation measure with respect to the tamping of the racking system:

8. Turkey Creek shall implement the modified vegetative buffers to those properties that are within 1,500 feet of the solar facilities' boundary lines before the tamping of the racking panels and Turkey Creek shall schedule the tamping process at these nearby homes so that the tamping will occur at the end of the tamping process period.

Turkey Creek states that this requirement was not included in the consultant's report, and therefore it did not have an opportunity to comment on the measure. Turkey Creek maintains that this requirement is vague and ambiguous as to the required location of the modified vegetative buffers. Turkey Creek asserts that it is not clear how to apply a modified buffer to benefit properties that are 1,500 feet away, and what that means for the specific location of the proposed vegetative buffer. Similar to mitigation measure set forth in ordering paragraph 7, Turkey Creek states that without clarification from the Siting Board, it is also unclear what process Turkey Creek should follow to confirm whether its proposed vegetative buffer locations are deemed to satisfy this mitigation measure. Lastly, Turkey Creek states that it is not clear why the tamping process close to nearby homes must be scheduled at the end of the tamping process. Turkey Creek points out that residences within 1,500 feet are scattered along various portions of the project limits. Turkey Creek contends that scheduling all of the tamping near residences within 1,500 feet at the end of the tamping process will be inefficient and will likely cause increased costs, delays, or other unintended consequences during construction with uncertain benefit to the community. Accordingly, Turkey Creek requests elimination of the requirement that it schedule tamping of select portions of the site on a certain schedule,

so that tamping can be planned according to the most efficient schedule based on site conditions at the time of installation.

The Siting Board finds that Turkey Creek's request for reconsideration and clarification of ordering paragraph 8 should be granted so that further discovery on this particular mitigation measure can be conducted to obtain additional information regarding Turkey Creek's claim that the tamping process as required is inefficient and would lead to an increase in cost or delays without any benefits to those nearby residences.

4. Working Hours. Ordering paragraph 11 limits the time for construction activities as follows:

11. Turkey Creek's construction activity, process, and deliveries shall be limited to the hours of 8 a.m. and 6 p.m. Monday through Saturday.

Turkey Creek asserts that this requirement is unusual for the solar industry and places a substantial restriction on Turkey Creek's ability to meet construction and operational deadlines. Turkey Creek also asserts that this restriction could interfere with its interconnection agreements and agreements with end-users, which carry significant penalties for delay and missed milestone dates. Turkey Creek further contends that its ability to respond to unanticipated delays caused by weather, logistics, international events, or other events outside of Turkey Creek's control would be restricted by this requirement. Turkey Creek added that the work hour limitations would likely lengthen the overall duration of construction activities.

Turkey Creek expresses concern that the limitation for construction activity, process, and deliveries would severely impact the viability of all solar projects in Kentucky, including the Project. In addition, finishing the project in a timely manner will

benefit the neighboring landowners by not unnecessarily prolonging construction activities. Accordingly, Turkey Creek requests that this condition be amended as follows to be consistent with BBC Consultants' recommendation that construction activities and deliveries be limited to the hours of 7 a.m. until 9 p.m. without limitation on the days of the week:

11. Turkey Creek's construction activity, process, and deliveries shall be limited to the hours of 7 a.m. and 9 p.m. ~~8 a.m. and 6 p.m. Monday through Saturday.~~

The Siting Board finds that Turkey Creek's request for reconsideration of ordering paragraph 11 should be granted so that further discovery on this particular mitigation measure can be conducted to obtain additional information regarding Turkey Creek's claim that the work hour limitations will inhibit its ability to respond to unanticipated construction delays and that the restriction could interfere with interconnection and end-user agreements.

5. Potential Damage to Roads. Ordering paragraph 17 requires Turkey Creek to address damages to roadways caused by the construction process. Specifically, ordering paragraph 17 states as follows:

17. Turkey Creek shall fix or pay for damage resulting from any vehicle transport to the project site.

Turkey Creek states that it did not have an opportunity to comment on this measure as the measure was not recommended in the consultant's report. Turkey Creek contends that it is unclear from this requirement how road damage will be assessed or allocated to Turkey Creek and with which regulatory body Turkey Creek should work to confirm compliance with this mitigation measure. Turkey Creek avers that this uncertainty has the potential to add significant cost and risk to its construction and transport contracts.

Turkey Creek requests a clarification that this mitigation measure would require that Turkey Creek fix or pay for damage resulting from any vehicle transport to the project site as may be required by the applicable transportation permits obtained from state and local road authorities because potential assessments associated with failing to comply with the permit requirements presumably encompass all concerns of the Kentucky Transportation Cabinet and other agencies regulating transportation. Accordingly, Turkey Creek requests the following amendment to ordering paragraph 17.

17. Turkey Creek shall fix or pay for damage resulting from any vehicle transport to the project site in accordance with all applicable transportation permits obtained from State and local road authorities.

The Siting Board finds that Turkey Creek's request for reconsideration of ordering paragraph 17 should be granted so that further discovery on this particular mitigation measure can be conducted to obtain additional information regarding Turkey Creek's proposed amendment to the language of ordering paragraph 17.

6. Ongoing Communication with Nearby Property Owners. Ordering paragraphs 19, 20, and 21 require that Turkey Creek communicate with nearby property owners regarding potential construction and operational noise on-site. The relevant ordering paragraphs provide as follows:

19. Turkey Creek shall remain in contact with nearby residents to confirm that noise levels are not unduly high or annoying after the pounding and placement of the solar panel racking begins. Any noise generator that creates noise levels in excess of 120 dB shall be considered unduly high or annoying.

20. If noise levels during the construction period are unacceptable to nearby residents or landowners (i.e., noise levels greater than 120 dB), Turkey Creek shall take such steps to mitigate the noise impact.

21. Turkey Creek shall contact nearby residents to confirm that noise levels are not unduly high or annoying after operations begin. Any noise generator that creates noise levels in excess of 120 dB shall be considered unduly high or annoying.

Turkey Creek states that it is concerned about the ambiguity of the measurement location for the 120 dB threshold. Turkey Creek points out that it is unclear whether the requirements relate to noise where it is generated or where it is heard on a neighboring property (the receptor). Turkey Creek maintains that if the standard is based on noise measured at the noise generator, it could severely impact the viability of solar projects in Kentucky. Turkey Creek further maintains that it is more appropriate to have a standard based on the noise receptor and not the noise generator. Accordingly, Turkey Creek requests confirmation that these three mitigation measures are focused on a potential noise receptor on a neighboring property. Because the noise could impact neighboring properties at the property boundaries, Turkey Creek also requests confirmation that only noise levels of 120 dB or greater at the project's external property boundaries would be considered unduly high or annoying. Turkey Creek further requests ordering paragraphs 19, 20, and 21 be amended as follows:

19. Turkey Creek shall remain in contact with nearby residents to confirm that noise levels are not unduly high or annoying after the pounding and placement of the solar panel racking begins. Noise levels from the project in excess of 120 dB at the project's external property boundaries shall be considered unduly high or annoying. ~~Any noise generator that creates noise levels in excess of 120 dB shall be considered unduly high or annoying.~~

20. If noise levels during the construction period are unacceptable to nearby residents or landowners (i.e., noise levels greater than 120 dB at the project's external property

boundaries), Turkey Creek shall take such steps to mitigate the noise impact.

21. Turkey Creek shall contact nearby residents to confirm that noise levels are not unduly high or annoying after operations begin. Noise levels from the project in excess of 120 dB at the project's external property boundaries shall be considered unduly high or annoying. ~~Any noise generator that creates noise levels in excess of 120 dB shall be considered unduly high or annoying.~~

The Siting Board finds that Turkey Creek's request for reconsideration of ordering paragraphs 19, 20, and 21 should be granted so that additional investigation can be conducted to determine the reasonableness of the proposed amendment to these three ordering paragraphs.

7. Setback for Inverters. Turkey Creek asserts that in granting its request for a deviation from the applicable setback requirements, the Siting Board required inverters to be located at least 626 feet from the closest residence and the Garrard County High School because the application provided that the location of the inverters to be at least at such a distance. Turkey Creek claims that any requirement that inverters be located no closer than 626 feet to the closest residence may threaten the viability of solar development projects in Kentucky. Turkey Creek acknowledges that the information provided in its application and in the Noise and Traffic Assessment regarding the distance of the inverters to the nearest residence was imprecise. Turkey Creek states that the identification of the 626-foot distance was based on a preliminary plan that was not intended to be rigid for the purposes of exact placement of infrastructure inside the project's planned footprint.

Turkey Creek maintains that the general setback limits of 200 feet from the external property boundaries and 300 feet from neighborhood properties are sufficient to address

the Siting Board's noise concerns. Even with these setbacks, Turkey Creek states that the nearest residence is approximately 400 feet away. Relying on the Noise Addendum attached as Exhibit 1 to the petition, Turkey Creek asserts that the noise level of a central inverter (the type of inverter included in the preliminary site plan) at 400 feet is less than 47 dB, which is less than noise levels associated with normal conversation or ambient noise at an urban residence. Accordingly, Turkey Creek requests that the Siting Board amend its requirement that the inverters be located at least 2,000 feet from the closest residence such that the minimum setback of inverters be the same as other facility infrastructure that will be no closer than 200 feet from the project's external property boundaries and 300 feet from neighborhoods. Turkey Creek notes that this amendment is critical in order for Turkey Creek to proceed towards financing and construction. Turkey Creek requests that ordering paragraph 2 be revised as follows:

2. Turkey Creek's motion for deviation from the 2,000 feet setback requirement is granted ~~except for the location of the inverters.~~ All solar infrastructure shall be at least 200 feet from the project's external property boundaries and 300 feet from any neighborhood.

The Siting Board finds that Turkey Creek's request for reconsideration of ordering paragraph 2 should be granted so that further discovery on the setback requirement of the inverters can be conducted to obtain additional information regarding Turkey Creek's proposed amendment to the language of ordering paragraph 2.

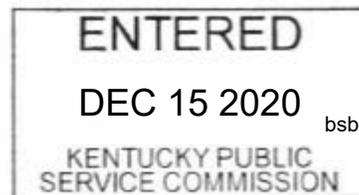
IT IS THEREFORE ORDERED that:

1. Turkey Creek's requests for reconsideration and clarification of the mitigation measures identified herein are granted for the purpose of conducting further investigation into those issues.

2. The procedural schedule set forth in the Appendix to this Order shall be followed.

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By the Kentucky State Board on Electric
Generation and Transmission Siting



ATTEST:

A handwritten signature in blue ink that reads "Linda C. Budwell". The signature is written in a cursive style and is positioned above a horizontal line.

Executive Director
Public Service Commission
on behalf of the Kentucky State
Board on Electric Generation
and Transmission Siting

Case No. 2020-00040

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON
ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE
NO. 2020-00040 DATED DEC 15 2020

First requests for information to Turkey Creek
shall be filed no later than 01/04/2021

Turkey Creek shall file responses to
first requests for information no later than 01/18/2021

Supplemental requests for information to Turkey Creek
shall be filed no later than 02/01/2021

Turkey Creek shall file responses to
supplemental requests for information no later than..... 02/15/2021

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