COMMONWEALTH OF KENTUCKY

BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

ELECTRONIC APPLICATION OF MT OLIVE CREEK SOLAR, LLC FOR A CERTIFICATE OF CONSTRUCTION FOR AN APPROXIMATELY 60 MEGAWATT MERCHANT ELECTRIC SOLAR GENERATING FACILITY IN RUSSELL COUNTY, KENTUCKY PURSUANT TO KRS 278.700 AND 807 KAR 5:110

CASE NO. 2020-00226

On May 7, 2021, Mt Olive Creek Solar LLC (Mt Olive Creek or Applicant) filed an application with the Kentucky State Board on Electric Generation and Transmission Siting (Siting Board) seeking a Construction Certificate to construct an approximately 60-megawatt alternating current (MWac) photovoltaic electricity generation facility (Project).

There are no intervenors in this matter. Pursuant to a procedural schedule established on June 8, 2021, Mt Olive Creek responded to two rounds of discovery. A site visit was held on July 27, 2021. Siting Board consultants, Harvey Economics, filed a review of the site assessment report (Harvey Economics Report) and Mt Olive Creek submitted its response to the Harvey Economics Report. In accordance with KRS 278.712 and upon the request of three Russell County residents, a local public meeting was held in Russell County on September 15, 2021, to take public comments on this proceeding. A formal hearing was held on September 28, 2021. Mt Olive Creek filed responses to post-hearing data requests on October 12, 2021. The matter now stands submitted for a decision.

PROPOSED MT OLIVE CREEK SOLAR FACILITY

The proposed solar facility is to be located in Russell County, at approximately 481 Sano Road, Russell Springs, Kentucky 42642 and the latitude and longitude are 37° 6'21.61"N, 85° 5'16.34"W.¹ The proposed Mt Olive Creek Solar Project will be located on approximately 475 acres.² The proposed site has been used for primarily agriculture and farming.³ Mt Olive Creek states Project components will include crystalline solar panels, racking, inverters, transformers, a DC-coupled energy storage system, one substation transformer, and associated wiring and balance of system.⁴ The solar facility has a rated capacity of 60 MWac, and the Project will interconnect to an on-site, existing transmission line owned by East Kentucky Power Cooperative (EKPC); at the Project's expense, EKPC will build a new tap line to interconnect the Project.⁵ The Project is located within the territory of PJM Interconnection LLC (PJM). PJM is the Regional Transmission Organization for 13 states including parts of Kentucky, and is managing the interconnection of the Project in coordination with EKPC, which owns the transmission infrastructure to which the project is proposing to interconnect.⁶ Mt Olive Creek made an interconnection application to PJM in June 2019 to interconnect the project on the Sewellton Jct–Webbs Crossroads 69 kV transmission line.⁷ The Project will be required

- ³ Id.
- ⁴ Id.

7 **Id**.

¹ Application Pleading at 1.

² Application, Section 2. Description of Proposed Site at 2.

⁵ Application, Section 7. Efforts to locate near Existing Electric Generation at 11.

⁶ Application, Section 9. Effect on Kentucky Electricity Generation System at 13.

to pay for any identified costs in order to interconnect and deliver electricity into the PJM and EKPC transmission system.⁸

Mt Olive Creek notes that there are six residential neighborhoods (as defined by KRS 278.700(6)) within 2,000 feet of the Project. Pursuant to KRS 278.704(4), Mt Olive Creek made a motion before the Siting Board for a deviation from this setback requirement, discussed later herein.

Pursuant to KRS 278.706(2)(c), Mt Olive Creek sent a sample letter to landowners whose property borders the proposed site, followed by the list of addresses and names of those landowners who were sent notices on April 23, 2021.⁹ Mt Olive Creek also published notice of the proposed solar facility in *The Times Journal* on April 8, 2021, which is the newspaper of general circulation in Russell County.¹⁰

In addition, Mt Olive Creek through its parent company Carolina Solar Energy III, LLC (Carolina Solar), engaged the public in other numerous ways regarding the Project prior to the filing of its application, as required by KRS 278.706(2)(f). Mt Olive Creek informs that through its initial developer partner Carolina Solar, it has been actively engaged with Russell County officials and the community since September 2019.¹¹ In September 2019, representatives of Carolina Solar met in-person Russell County Judge-Executive Gary Robertson, to introduce Carolina Solar Energy and to let him know about

⁸ Id. at 14.

⁹ Application, Section 3. Public Notice Evidence at 4 and Attachment F, Public Meeting Documentation.

¹⁰ *Id*.

¹¹ Application, Section 6. Public Notice Report at 7 and Attachment E, Public Involvement Activities.

the location of the Project.¹² Judge-Executive Robertson attended an introduction to solar energy facilities presented by solar companies, including Carolina Solar Energy, which took place in Marion County in October of 2019. Carolina Solar Energy also met on different occasions with various magistrates of the Russell County Fiscal Court, including the magistrate representing the district where the Project is located.¹³ Carolina Solar Energy presented the Project to Judge-Executive Robertson and the Russell County Fiscal Court on April 12, 2021, and requested the fiscal court's approval of an Industrial Revenue Bond (IRB) and associated Payment in Lieu of Taxes (PILOT) agreement for the Project. The fiscal court approved the IRB and PILOT after asking questions and hearing updates about the Project from Carolina Solar Energy.¹⁴

The Project filed a motion for approval of form of public meeting with the Siting Board, on July 15, 2020, setting forth a plan to hold the required public meeting. The Siting Board issued an Order July 21, 2020, approving the form of the public meeting.¹⁵ Three business days prior to the public meeting Carolina Solar posted a large printed copy of the layout map of the solar project on an easel at the entrance to the Russell County Courthouse, along with a copy of the public notice about the public meeting providing instructions on how to register and attend. Additionally, a notice announcing the public meeting was printed in Russell County's *The Times Journal* on July 23, 2020. The Project also mailed letters, dated July 21, 2020, to all adjoining landowners notifying

¹² *Id*.

- ¹³ *Id*.
- ¹⁴ *Id*.

¹⁵ Order (Ky. PSC July 21, 2020) and Application, Section 6. Public Notice Report at 8.

them of the meeting, and providing instructions on how to reserve a spot at the physical screening of the public meeting.¹⁶ Mt Olive Creek held that initial public meeting via Zoom at 5:30 pm CDT on August 6, 2020, with an in-person screening option. The meeting consisted of a prerecorded video describing the project and solar technology, and was followed by a question and answer session for the attendees. The physical portion of the meeting was held at the Lake Cumberland Area Development District Office, located at 2384 Lakeway Drive, Russell Springs, Kentucky.¹⁷ The second public meeting was held virtually on October 8, 2020. An option for an in-person meeting was made and the second public meeting was held without an in-person option.¹⁸

DISCUSSION

I. <u>Requirements Under KRS 278.708 – Site Assessment Report</u>

KRS 278.704(1) states that "[n]o person shall commence to construct a merchant electric generating facility until that person has applied for and obtained a construction certificate for the facility from the [Siting] [B]oard." KRS 278.708 requires a Site Assessment Report (SAR) be prepared and filed with an application. The SAR should provide (1) a detailed description of the proposed site; (2) an evaluation of the compatibility of the facility with scenic surroundings; (3) potential changes in property values and land use resulting from the siting, construction, and operation of the proposed facility for property owners adjacent to the facility; (4) evaluation of anticipated peak and

¹⁶ Application, Section 6. Public Notice Report at 8–9.

¹⁷ *Id.* at 8.

¹⁸ Id. at 9.

average noise levels associated with the facility's construction and operation at the property boundary; (5) the impact of the facility's operation on road and rail traffic to and within the facility, including anticipated levels of fugitive dust created by the traffic and any anticipated degradation of roads and lands in the vicinity of the facility; and (6) any mitigating measures to be implemented by the applicant to minimize or avoid adverse effects identified in the site assessment report.

Detailed Site Description

A SAR was filed by the Applicant, in the initial application. The SAR was prepared by the developer, Carolina Solar Energy. The updated site layout was provided on October 12, 2021, as part of Mt Olive Creek's responses to Siting Board's Post-Hearing Request for Information.¹⁹ The updated site layout is attached as Appendix B of this Order. The preliminary project layout includes the following items that will not materially change during the final design: Potential Project Footprint; utility easement; setbacks from property lines, roads, and non-participating residential homes; vegetative buffer locations; substation and interconnection equipment; and parcel boundaries.²⁰ However, the Applicant notes the location of the solar panels, racking, inverter, energy storage, and transformer equipment areas are indicative and may change within the Potential Project Footprint in the final design.²¹ Interior access roads, construction entrances, and security

¹⁹ Mt. Olive Creek's Response to Siting Board's Post-Hearing Request for Information (filed Oct. 12, 2021), Item 2.

²⁰ Application, SAR, Section 1. Description of Proposed Facility at 2–3.

²¹ *Id*.

fencing may also be modified from the Preliminary Project Layout.²² The Applicant commits to provide a final site plan to the Siting Board prior to construction.²³

The Project will be built upon approximately 475 acres, which has historically been used as pasture and crop land.²⁴ A map showing the location of residential structures, schools, and a wildlife management area, in relation to the proposed project was provided.²⁵ There are no public or private parks, or healthcare facilities within two miles of the Project's radius, and one school, approximately 1.42 miles from the Project. There are six residential neighborhoods within 2,000 feet of the Project's radius.²⁶

A more detailed description of the surrounding land uses was included in the Property Impact Report conducted by Kirkland Appraisals, LLC, which was described as a mix of agricultural and residential uses.²⁷ There are 44 adjacent parcels, with 70 percent classified as residential, 14 percent as agricultural, 14 percent as agricultural/residential, and 2 percent as commercial. In terms of acreage of the adjacent parcels, 24 percent is residential, 29 percent is agricultural, and 47 percent is agricultural/residential.²⁸ Information provided by Mt Olive Creek indicated that there are 16 non-participating residential homes within 300 feet of the Project boundary fence, and

²⁸ *Id.* at 3–4.

²² *Id.* at 3.

²³ *Id*. at 2.

²⁴ Application, Section 2. Description of Proposed Site at 2.

²⁵ Mt. Olive Creek's Response to Commission Staff's Initial Request for Information (filed July 7, 2021), Item 16.

²⁶ Id.

 $^{^{\}rm 27}$ Application, SAR, Attachment B, Property Value Impact Report, I. Proposed Project and Adjoining Uses at 3.

ten of them are within 300 feet of the nearest solar panels.²⁹ Carson Harkrader, CEO of Carolina Solar provided testimony during the evidentiary hearing conducted on September 28, 2021, clarifying that a building Mt Olive Creek believed to be a barn was in fact the home of Glen Shepherd, which was built immediately on his property line.³⁰ Accordingly, it has been clarified that there are 17 non-participating residential homes within 300 feet of the Project boundary fence, and 11 of them are within 300 feet of the nearest solar panels. Mt Olive Creek has committed to a minimum 150-foot setback for non-participating residences from the potential project footprint.³¹ An updated site layout and map was provided, showing this 150-foot setback for non-participating residences was also applied to Mr. Shepherd's residence.³²

Legal descriptions of all 13 parcels that are included in the project are located in the Boundary Survey and Legal Descriptions of the SAR.³³ Mt Olive Creek has six lease agreements and two purchase-and-sale agreements with individuals and families associated with those 13 parcels.³⁴

All areas where equipment is located will be fenced prior to the start of construction and all entrances to the site will be gated and locked at all times when workers are not

³¹ *Id*.

²⁹ Application, SAR, Section 1. Description of Proposed Facility at 2 *See also* Harvey Economics Review and Evaluation of Mt. Olive Creek's Site Assessment Report (filed Aug. 16, 2021)(Harvey Economics Report) at II-1 through II-2.

³⁰ Hearing Video Transcript of the September 28, 2021 Hearing at 01:39:52 PM.

³² Mt. Olive Creek's Response to Siting Board's Post-Hearing Request for Information (filed Oct. 12, 2021), Item 2.

³³ Application, SAR, Attachment E Boundary Survey and Legal Descriptions.

³⁴ Harvey Economics Report at III-6.

active on site, in order to comply with the National Electric Safety Code (NESC).³⁵ The Preliminary Project Layout states that the site will be surrounded by six-foot tall chain link fence with three strands of barbed wire (or similar design) to meet the NESC requirements.³⁶ Mt Olive Creek provided a map confirming that no lighting is proposed for the array area, the proposed interconnection substation will have some lighting and additional fencing and the proposed access gates will be locked with a standard keyed or combination lock, and emergency personnel will be provided a key or combination for access.³⁷ The Preliminary Project Layout shows nine potential site access points, although during operations, access will be limited to four entrances and the site will be monitored by camera.³⁸ Fencing will not limit public access to the family cemetery located along Sano Road within the Project boundaries.³⁹

The Preliminary Site Plan shows preliminary locations of access points and internal roads.⁴⁰ The internal roads will be compacted gravel, and there are no railroads, spurs, or other rail facilities in the project area.⁴¹

The Sewellton Jct--Webbs Crossroads 69 kV transmission line will serve the facility and carry electricity generated by the Project.⁴² No external utility services are anticipated

- ³⁸ Harvey Economics Report at II-2.
- ³⁹ Harvey Economics Report at III-8.
- ⁴⁰ *Id*.
- ⁴¹ Application, SAR, Attachment F, Noise and Traffic Study at 10.
- ⁴² Harvey Economics Report at II-2.

³⁵ Application, SAR, Section 1. Description of Proposed Facility at 2.

³⁶ Harvey Economics Report at III-8.

³⁷ Application, SAR, Attachment A, Preliminary Project Layout.

for Project operations, but if electricity service is required during construction or operation of the Project, it will be contracted with the local utility, South Kentucky Rural Electric Cooperative Corporation.⁴³ There will not be any water or sewer utilities servicing the Project on site.⁴⁴

Harvey Economics evaluated the data contained in the SAR and concluded that Mt Olive Creek has complied with the requirements for describing the facility and a site development plan, as required by KRS 278.708. However, Harvey Economics has mitigation measures and recommendations related to the description of the facility and the proposed site development plan. The Harvey Economics Report recommends the following mitigation measures:

1. A final site layout plan should be submitted to the Siting Board upon completion of the final site design. Deviations from the preliminary site layout plan, which formed the basis for Harvey Economics' review, should be clearly indicated on the revised graphic. Those changes would include, but are not limited to, location of solar panels, inverters, transformer, the warehouse, substation, operations and maintenance building, access points or other Project facilities or infrastructure.

2. Any change in Project boundaries from the information which formed this evaluation should be submitted to the Siting Board for review.

3. The Siting Board will determine if any deviation in the boundaries or site development plan is likely to create a materially different pattern or magnitude of impacts.

⁴³ *Id*.

⁴⁴ Id.

If not, no further action is required, but if yes, the Applicant will support the Siting Board's effort to revise its assessment of impacts and mitigation requirements.

4. A final Project-specific construction schedule, including revised estimates of on-site workers and commuter vehicle traffic, should be submitted to the Siting Board. Deviations from the preliminary construction schedule should be clearly indicated.

5. The Siting Board will determine if any deviation to the construction schedule or workforce estimates is likely to create a materially different pattern or magnitude of impacts. If not, no further action is required. If yes, the Applicant will support the Siting Board's effort to revise its assessment of impacts and mitigation requirements.

6. The Applicant or its contractor will control access to the site during construction and operation. All construction entrances will be gated and locked when not in use.

7. The Applicant's access control strategy should also include appropriate signage to warn potential trespassers. The Applicant must ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the public, local residents and business owners.

8. According to National Electrical Safety Code regulations, the security fence must be installed prior to any electrical installation work. The substation will have its own separate security fences installed.

9. The cemetery located within the Project boundary (north of Sano Road on the western side of the Project site) represents a potential conflict with one of the proposed construction access points, potential construction staging areas and Project infrastructure. The Applicant must inform the owner and living relatives of those interred

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of the proximate construction and facility plans and secure written approval of their recognition and acceptance of this plan.

Having reviewed the information and data contained in the SAR, the Siting Board finds that Mt Olive Creek has complied with the requirements for describing the facility and a site development plan, as required by KRS 278.708. However, the Siting Board finds it necessary to impose certain mitigation measures and requirements related to the description of the facility and the proposed site development plan. Specifically, the Siting Board will require that Mt Olive Creek keep the Siting Board apprised of changes throughout the development of the Project, and as such will order Mt Olive Creek to provide the final site plan before the commencement of construction. This plan shall clearly indicate and highlight any changes, including those to the design and boundaries of the Project, from the proposed site plan provided to the Siting Board during the pendency of this matter. Additionally, based on the concerns and proposals of Harvey Economics, the Siting Board further finds that the mitigation measures outlined in Appendix A to this Order, and in particular mitigation measures 1 through 8, shall be adhered to.

Compatibility with Scenic Surroundings

Mt Olive Creek states the Project is to be located in Russell County, at approximately 481 Sano Road, Russell Springs, Kentucky 42642 and the latitude and longitude are 37° 6'21.61"N, 85° 5'16.34"W.⁴⁵ The proposed Project will be located on approximately 475 acres.⁴⁶ The proposed site has been used for primarily agriculture

⁴⁵ Application, Application Pleadings at 1.

⁴⁶ Application, Section 2. Description of Proposed Site at 2.

and farming.⁴⁷ The topography of the project is generally rolling hills and existing vegetation.⁴⁸ Adjoining land use is a mix of agricultural, residential and a combination of the two.⁴⁹ Mt Olive Creek advises 24.21 percent of the adjoining property is zoned residential, 28.48 percent is zoned agricultural, and 46.92 percent is zoned agricultural/residential.⁵⁰

Mt Olive Creek notes via its Property Value Impact Report that the adjoining properties are well set back from the proposed solar panels, most of the site has good existing landscaping for screening the proposed solar farm, and that additional supplemental vegetation is proposed to supplement the areas where the existing trees are insufficient to provide a proper screen.⁵¹ Mt Olive Creek concedes that once the Project is complete, it will be visible from stretches of small county roadways around the Project area and that the Project will also be visible from Millerfield Road (HWY 76).⁵² Mt. Olive Creek noted Millerfield Road (HWY 76) is a more frequently-traveled road, as such the Project has proposed to fully buffer the view from Millerfield Road (HWY 76) with vegetative buffering to obscure the view of the facility.⁵³ There are also sections of vegetative buffer proposed to obscure the view of the Project from the closest adjacent neighbors who do not have an existing vegetative screen, and from the neighborhood on

⁵³ Id.

⁴⁷ Id.

⁴⁸ Harvey Economics Report at II-3.

⁴⁹ Application, SAR, Section 1. Description of Proposed Facility at 1.

⁵⁰ Id.

⁵¹ Application, SAR, Attachment B, Property Value Impact Report.

⁵² Application, SAR, Section 2. Compatibility with Scenic Surroundings at 6.

the West side of the Project on Sano Road.⁵⁴ There are five homes within 150 feet of the Project boundaries. Only two of these homes have existing vegetation to serve as a buffer; vegetative buffering is proposed in the site layout to add a visual screen for the other three residences.⁵⁵

The Harvey Economics Report notes the area surrounding the Project is rural and agricultural, with residential homes sprinkled throughout, generally on large parcels of land.⁵⁶ The report finds the combination of rolling hills and existing vegetation help mitigate negative visual impacts to residents and commuters associated with Project infrastructure or activities.⁵⁷ The report also notes that scenic compatibility focuses largely on the solar panels, which, at a maximum height of about 15 feet, would be the main source of visual impact.⁵⁸ As conceded by Mt Olive Creek, solar panels would be visible from certain roadways and from some adjacent properties that do not have much existing vegetation.⁵⁹ About 30 residential structures would be located within 600 feet of the solar panels, and a small family cemetery is situated within the Project boundaries near a construction access road that would have a clear view of many solar panels.⁶⁰ Additionally, the proposed Project substation is located in a remote area of the Project

⁵⁶ Harvey Economics Report at II-2.

⁵⁷ Id.

⁵⁸ Id.

⁵⁹ Id.

⁶⁰ *Id*. at II-3.

⁵⁴ Id.

⁵⁵ Id. at 7.

and is surrounded by extensive existing vegetation; however, the substation would be at least 1,500 feet from the nearest residence and would have no scenic impacts.⁶¹

The site visit conducted by Siting Board Staff and Harvey Economics confirmed information provided by Mt Olive Creek and gathered as part of the Project evaluation, particularly with regards to the rural nature and look of the area.⁶² Many trees, shrubs and other vegetation exist along roadways and on property boundaries in the vicinity of the Project area. Rolling hills and existing vegetation will help protect against negative visual impacts to local residents and commuters.⁶³ Additionally, The Project will use antiglare panels to minimize any occurrence of glare.⁶⁴ The Harvey Economics Report concludes the impact on neighboring properties to be minimal, noting that existing vegetation and the vegetative buffers proposed for specific locations surrounding the Project site will largely shield the panels from view for nearby residents and drivers.⁶⁵ The Project will use anti-glare panels, reducing or eliminating any glare, and the Applicant has committed to working with neighboring homeowners and business owners to address concerns related to the visual impact of the Project on its neighbors.⁶⁶ The Harvey Economics Report noted its belief that the only issue is the scenic compatibility with the small family cemetery, which will need to be addressed with mitigation measures.⁶⁷

- ⁶³ Id.
- ⁶⁴ Id.
- ⁶⁵ Harvey Economics Report at V-7.
- ⁶⁶ Id.
- ⁶⁷ Id.

⁶¹ Id.

⁶² Harvey Economics Report at V-6.

The Harvey Economics Report recommends the following mitigation measures:

1. The Applicant will not remove any existing vegetation unless the existing vegetation needs to be removed for placement of solar panels.

2. 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 nearby homes and roadways.

3. The Applicant will work with homeowners and business owners to address concerns related to the visual impact of the Project on its neighbors.

4. The Applicant should provide a visual buffer between Project infrastructure and residences or other occupied structures with a line of sight to the facility to the satisfaction of the affected property owners. If vegetation is used, plantings should reach eight feet high within four years. To the extent that an affected property owner indicates to the Applicant that such a buffer is not necessary, Mt Olive Creek will obtain that property owner's written consent and submit such consent in writing to the Siting Board.

5. The Applicant will follow through on its commitment to providing vegetative buffers at the locations indicated on the Preliminary Project Layout map included in the Application materials. If the final site layout plan deviates from the preliminary plan with regard to the locations of solar panels, inverters, substation or other Project infrastructure, an additional evaluation of the need for vegetative buffers will be conducted and reviewed by the Siting Board.

6. The Applicant will develop a vegetation management plan that describes the approach and procedures for maintaining or replacing vegetative buffers as needed.

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7. The cemetery located within the Project boundary along Sano Road represents a potential conflict with regard to scenic compatibility. The Applicant must inform the owner and living relatives of those interred of the proximate construction and facility plans and secure written approval of their recognition and acceptance of this plan.

8. The Applicant will cultivate at least two acres of native pollinator-friendly species onsite.

9. The Applicant has committed to using anti-glare panels and operating the panels in such a way that glare from the panels is minimized or eliminated. The Applicant will immediately adjust solar panel operations upon any complaint from those living, working or traveling in proximity to the Project. Failing this, the Applicant will cease operations until the glare is rectified.

Having reviewed the records of the proceeding, including Mt Olive Creek's responses to the Harvey Economics Report, the Siting Board finds that the passive characteristics of the proposed solar facility combined with current vegetation and the proposed vegetative buffers, along with other mitigation measures proposed by Mt Olive Creek will minimize the effects the proposed facility will have on the scenic surroundings of the site. The physical characteristics of the proposed solar facility also do not pose any adverse impact to the scenic surroundings given the location of the solar facility components and the proposed and current vegetative buffering. However to ensure the continued compatibility of scenic surrounding, mitigation measures addressing obligations to maintain or further develop vegetative buffers and keep the Siting Board informed of potentially material changes to the site plan are necessary. As such, and

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based on the record, additional mitigation measures regarding scenic compatibility are outlined in Appendix A to this Order, and in particular, mitigation measures 9 through 14. <u>Impact on Property Values</u>

With respect to impact on property values, Mt Olive Creek submitted a Property Value Impact Report from a certified real estate appraiser that found that, based upon a comparative analysis, the solar facility will have no impact on the property values of abutting or adjacent residential or agricultural properties.⁶⁸ The report indicates that the solar facility would function in a harmonious manner with the nearby surroundings, which is mostly agricultural, and that operation of the solar facility would not generate the level of noise, odor, or traffic impacts to negatively impact the nearby surroundings as compared to a fossil fuel generating facility or other industrial facility.

The Harvey Economics Report evaluated the impacts to property values by reviewing relevant existing literature related to solar facility impacts on property values, and prepared further analysis of the data provided in Mt Olive Creek's Property Value Impact Report. Among the literature reviewed by Harvey Economics was a 2020 study completed by economists at the University of Rhode Island, which found that in areas of high population density, houses within a one-mile radius depreciate by about 1.7 percent following construction of a solar array. However, the Harvey Economics Report states that the University of Rhode Island study performed additional analysis focused on impacts in more rural areas found that the effect in rural areas were effectively zero and that the negative externalities of solar arrays are only occurring in non-rural areas. Harvey Economics also reviewed a 2019 article produced by the American Planning Association,

⁶⁸ Application, SAR, Attachment B, Property Value Impact Report at 2.

which indicates that the impact of utility scale solar facilities is typically negligible on neighboring property values. Additionally, Harvey Economics also reviewed a 2018 University of Texas study, which included a geospatial analysis and a survey of residential property assessors to determine the potential for property value impacts related to solar projects. The results of the University of Texas study showed that a majority of survey respondents estimated a value impact of zero and geospatial analysis showed that relatively few homes would be impacted. Additional materials reviewed by Harvey Economics included several independent appraisal reports related to property value impacts for solar companies. The Harvey Economics Report states that overall conclusions of these independent appraisal reports were that solar facilities do not negatively impact property values.

In addition to reviewing the methodology and underlying matched pair analysis used in Mt Olive Creek's Property Value Impact Report, Harvey Economics also closely examined the data provided in the matched pair sets to determine the likelihood of a positive impact, negative impact, or no impact. It was determined that about 87 percent of matched pair comparisons reflected a sales price differential of between negative five percent and positive five percent, with almost 18 percent of comparisons showing no price differential at all. About 23 percent of all comparisons showed a negative impact on home prices, as compared with almost 59 percent of comparisons indicating a positive effect.⁶⁹ Harvey Economics concludes that the majority of matched pair comparisons resulted in no sales price difference or an increase in sales price due to adjacency to the solar facility property.

⁶⁹ Harvey Economics Report, Section 5 at V-15.

Harvey Economics also interviewed the Russell County property valuation administrator who is familiar with property valuation and real estate in Russell County and is well aware of the Mt Olive Creek solar project and the project details. The Russell County property valuation administrator expanded on the current property value market in Russell County, stating that the county is experiencing a very strong real estate market with high demand for homes, low inventory, and rising home prices.⁷⁰ This is mainly due in part to the effects of the pandemic with people moving away from densely packed areas for remote work, the currently low interest rates, and the presence of Lake Cumberland in Russell County. Harvey Economics relayed that the Russell County property valuation administrator stated that they did not believe the presence or operation of the Mt Olive Creek solar project would have any substantial impact on property values in the area. Additionally, Harvey Economics met with the Russell County judge-executive who indicated that while local residents were generally unaware of the Mt Olive Creek solar project, participating landowners were naturally supportive but property value impacts were a concern for some non-participating landowners near the solar project boundaries. Overall, the interviews conducted with the Russell County property value administer and Russell County judge-executive indicate there is no expected change in property values due to the Mt Olive Creek solar project and with the use of vegetation buffers the uncertainty felt by some individuals could be mitigated.

The Harvey Economics Report concludes that the current research indicates that the existence of solar facilities does not, in general, negatively impact property values for adjacent landowners. The report notes that Harvey Economics' own research point to a

⁷⁰ Harvey Economics Report, Section 2 at II-4.

conclusion of no discernible impacts to property values. The report concludes that property values in Russell County are unlikely to be affected by the siting of the Mt Olive Creek solar facility due to the strong real estate market and the level of existing and proposed vegetation surrounding the site decreasing its visibility.

Having reviewed the record, the Siting Board finds that there is sufficient evidence to conclude that the proposed Mt Olive Creek solar facility will, more than likely, not have any adverse impact on nearby property values. As noted earlier, the characteristics of the solar facilities 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.

Impact on Roads, Railways, and Fugitive Dust

With respect to the impact on roads, railways, and fugitive dust, Mt Olive Creek's Noise and Traffic Study as part of its SAR notes the proposed solar site will be east of KY Route 1729, north of KY Route 1545, and along both sides of KY Route 76; it will be along both sides of the local roads: Sano Road, Miller-Short Road, and Huff Lane/T Wethington Road.⁷¹ There will be a total of eight construction entrances: four entrances along Sano Road, one entrance along Miller-Short Road, one entrance opposite each other along KY Route 76, and one entrance from Huff Lane/T Wethington Road.⁷² These construction access points are anticipated to use either existing driveways or current field access points.⁷³ Mt Olive Creek confirms the Project will have no impact on railroad traffic as

⁷³ Id.

⁷¹ Application, SAR, Attachment F Noise and Traffic Study at 7.

⁷² Id.

there are no railroads, spurs, or other rail facilities in the Project area.⁷⁴ Mt Olive Creek advises the construction contractor will document roadway conditions with applicable transportation permits obtained from state and county road authorities before construction commences and be responsible for restoring impacted roadway to pre-construction conditions as required through the permitting process, and no improvements are anticipated to existing roadways for facility construction.⁷⁵

It is expected that construction of the solar facility will take 8 to 12 months.⁷⁶ Combining employee and typical delivery vehicles, up to 165 maximum daily vehicles are anticipated servicing the Project during construction.⁷⁷ The maximum daily traffic increase on area site roads is anticipated to be less than 110 vehicles (220 trips) per day from US Route 127 and less than 30 vehicles (60 trips) per day on the other roadways.⁷⁸ Two-way existing peak hour traffic volumes passing the site along state highways average under 175 vehicles an hour, which is fewer than three vehicles per minute.⁷⁹

Mt Olive Creek states in the Noise and Traffic Study of the SAR that site traffic during construction will arrive and depart like existing traffic patterns, with Table 9 in the study advising the predominant movement coming to/from US 127 south of the Project.⁸⁰ Construction is not anticipated to encroach onto a state right-of-way other than vehicles

⁷⁵ *Id*. at 9.

⁷⁶ Id. at 8.

⁷⁷ Id.

⁷⁸ Id.

⁷⁹ Id.

⁸⁰ Id.

⁷⁴ Id. at 10.

accessing the site from driveways, which may need to be upgraded.⁸¹ The Project will provide adequate traffic control signs and devices compliant with the Manual on Uniform Traffic Control Devices during construction, including work zone signage and Kentucky Transportation Cabinet (KYTC) certified flaggers to facilitate safe construction deliveries.⁸² Due to the narrow width, the contractor may need to conduct traffic stoppages on Sano Road, Miller-Short Road, Mt Olive Creek Road, or Huff Lane/T Wethington Road during construction. There may be temporary stoppages along KY Route 76 to facilitate deliveries in and out of site driveways.⁸³ The contractor will coordinate with the KYTC for conducting flagging to assist Class 21 vehicles turning to and from US Route 127. Disruptions to local property owners will be coordinated during construction. The construction contractor will document roadway conditions with applicable transportation permits obtained from state and county road authorities before construction conditions as required through the permitting process.⁸⁴

Harvey Economics finds that road and traffic impacts during operation will be minimal, but clearly evident during construction.⁸⁵ Traffic congestion resulting from construction activities will likely be noticeable along KY 1545 and Abrell Road. Additional congestion may occur if freight trucks travel along these roads and other roads surrounding the Project because they are narrow and not able to handle two-way traffic.

⁸¹ *Id.* at 9.

⁸² Id.

⁸³ Id.

⁸⁴ Id.

⁸⁵ Harvey Economics Report at II-5.

Besides US 127 and KY 76, the roads in this area are narrow and vehicles sometimes need to pull half-off the road to pass oncoming traffic.⁸⁶ Harvey Economics also finds that road degradation may occur during construction, citing that the delivery of the main transformer is heavy enough to potentially cause degradation for every road utilized by the Project.⁸⁷

During the operation of the Mt Olive Creek facility, on-site employees will not be required for regular operation. Approximately two employees may visit the site up to a few times a month for inspections and to perform or coordinate maintenance. Additional employee or contractor trips may occur during the vegetative growing season for activities such as grass cutting.⁸⁸ With only a few occasional employee trips per month, operation of the facility is not anticipated to adversely impact area traffic.⁸⁹ Neither Harvey Economics nor the Siting Board has any mitigation measures or conditions to control traffic during the operations phase of the Project.

The Harvey Economics Report recommends the following mitigation measures to ensure that impacts to roadways will be kept to a minimum:

1. The Applicant should work with the Kentucky road authorities and the Russell County Road Department (RCRD) to perform road surveys before and after construction activities on all roads to be used by construction vehicles.

⁸⁶ Id.

⁸⁷ Id.

⁸⁹ Id.

⁸⁸ Application, SAR, Attachment F Noise and Traffic Study at 9.

2. The Applicant will consult with the KYTC regarding truck and other construction traffic and obtain necessary permits from the KYTC.

3. The Applicant will consult with the RCRD regarding truck and other construction traffic and obtain necessary permits from the RCRD.

4. The Applicant should develop special plans and obtain necessary permits before bringing the very heavy loads, especially the substation transformer, onto State or County roads.

5. The Applicant will comply with any road use agreement executed with the RCRD. Such an agreement will include special considerations for overweight loads, routes utilized by heavy trucks, road weight limits and bridge weight limits.

6. The Applicant should fix or fully compensate the appropriate transportation authorities for any damage or degradation to roads that it causes or to which it materially contributes to, regardless of its status as a KY route or local road. For damage resulting from vehicle transport in accordance with all permits, those permits will be controlling.

7. The Applicant should develop and follow a traffic management plan to minimize the impacts of any traffic increases and keep traffic and people safe.

8. The Applicant will comply with all laws and regulations regarding the use of roadways.

Having reviewed the records of the proceedings, the Siting Board finds that traffic impacts will require mitigation during construction of the solar facility and will be minimal during its operation. Mitigation measures required for the project, including those related to Mt Olive Creek's obligations regarding traffic and road degradation, as well as related permits, are necessary based on the concerns and evidence provided by the SAR and

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Harvey Economics Report. As such, Mitigation measures related to traffic and roads are outlined in Appendix A, and in particular, mitigation measures 15 through 22.

With respect to fugitive dust impacts, Mt Olive Creek has stated it will make reasonably available control measures to mitigate fugitive dust emissions and that it will develop a fugitive dust control plan and follow best practices to suppress fugitive dust emissions. Those best practices include identifying and monitoring each day's expected weather conditions to anticipate daily dust control measures, minimizing disturbance areas to the greatest extent feasible, as well as covering open piles during construction. Additionally, the project plans to construct and upgrade internal roads and driveways with compacted gravel when needed to control dust; vehicles will be required to travel slowly along site roads (typically 10 mph, but up to 25 mph as long as visible dust emissions are not created) with speed limits posted and enforced. Construction vehicles such as opened bodied trucks shall be covered while in motion, and soil loads shall be kept below the freeboard of the trucks. Water will be applied in accordance with industry best practices to control dust along site roadways and clean equipment and vehicles when reasonably needed to control fugitive dust.

Harvey Economics finds that fugitive dust should not be an issue given the Applicant's proposed best practices for construction and operational activities.

The Harvey Economics Report recommends the following mitigation measures to ensure that fugitive dust impacts will be kept to a minimum.⁹⁰

1. The Applicant will develop a fugitive dust control plan and follow best practices to suppress fugitive dust emissions. The Applicant will monitor dust emissions

⁹⁰ Harvey Economics Report at V-33.

occurring during construction or operations and adjust activities, if necessary, to minimize dust emissions.

The Siting Board also believes that fugitive dust should not be an issue given the Applicant's proposed best practices for construction and operational activities. To ensure fugitive dust meets the expectation of not being an issue during the construction phase or operational phase of the solar project, the Siting Board will require Mt Olive Creek to implement mitigation measure 23 outlined in Appendix A to this Order.

Anticipated Noise Level

Mt Olive Creek's Noise and Traffic Study indicates that the project area can be defined as agricultural, residential, or agricultural/residential area with residential neighborhoods.⁹¹ There are 17 non-project landowners, residences within 300 feet of the project boundary.⁹² Mt Olive Creek has committed to keeping solar panels and equipment a distance of at least 150 feet from residences that are otherwise closer than 150 feet from the Project Footprint.⁹³

Mt Olive Creek provides that construction of the facility is expected to commence in February of 2023 and be completed in December of 2023.⁹⁴ The loudest source from construction is anticipated to be pile driving equipment used to install solar panel support

⁹¹ Application, SAR, Attachment F Noise and Traffic Study at 2.

⁹² Id.

⁹³ Id.

⁹⁴ Mt Olive Creek's Response to Siting Boards Initial Requests for Information (filed July 7, 2021), Item 7.

posts. The anticipated noise produced by pile driving equipment will be approximately 91.0 dBA at residences located 150 feet from the closest solar panel.⁹⁵

Mt Olive Creek asserts that construction work is expected to progress across the site such that equipment and activities would only be in a single area for a short period and the noise from the construction activities results only in short-term impacts to sound levels.⁹⁶ Mt Olive Creek proposes to mitigate the effect of construction noise on nearby residence by limiting construction to 7 am to 9 pm, daily.⁹⁷ Further, Mt Olive Creek proposed to restrict construction activities on Sundays. On Sundays, no construction is proposed to occur one hour prior to worship activities and will not resume until one hour after the conclusion of worship activities.⁹⁸

According to Mt Olive Creek, the nearest noise receptor will be at minimum 450 feet from the nearest central inverter.⁹⁹ Mt Olive Creek provides that the nearest noise receptor to the substation will be located at minimum distance of 1,545 feet.¹⁰⁰

According to Mt Olive Creek, when the solar facility is operating, there will be noise associated with the solar equipment, intermittent noise from single-axis tracking motors, a nearly constant noise from inverters, and the substation. The tracking motors will operate no more than one-minute out of every 15-minute period and produce sound

⁹⁵ Application, SAR, Attachment F Noise and Traffic Study.

⁹⁶ Harvey Economics Report at V-23.

⁹⁷ Application, SAR, Section 4. Anticipated Noise Levels at Property Boundary at 9.

⁹⁸ Mt Olive Creek's Responses to Siting Boards Second Request for Information (filed Aug. 3, 2021), Item 3.a.

⁹⁹ Mt Olive Creek's Response to Siting Boards First Request for Information (filed July 7, 2021), Item 10.

¹⁰⁰ *Id.*, Item 8.

during daylight hours only. The sound level produced by tracking motors is anticipated to be 40.0 dBA at 10 feet, which will not increase the ambient sound level of the local environment.¹⁰¹ Sound from inverters is described as a hum and roughly the same output as a household air-conditioning unit. The sound level produced by inverters is anticipated to be 45.1 dBA at a distance of 400 feet from the source.¹⁰² Sound from the substation is described as a low frequency hum, the sound level produced is anticipated to be 22.5 dBA at 800 feet away.¹⁰³ Mt Olive Creek Solar's Noise and Traffic Study stated that it found no relevant county noise ordinance.¹⁰⁴

The Harvey Economics Report likewise notes that noise issues stem from construction activities and operational components of the solar facility. During construction, noise will include pile drivers, chainsaws, bulldozers, dump trucks and other equipment.¹⁰⁵ The Harvey Economics Report findings conclude that the application submitted is substantially in compliance with the intent of the Kentucky Revised Statutes.¹⁰⁶ During operation of the proposed solar facility, noise will be emitted from inverters, substation transformers and the tracking motors which rotate the panels to track the sun. Harvey Economics concludes that the anticipated noise from construction will

- ¹⁰⁴ *Id.* at 1.
- ¹⁰⁵ Harvey Economics Report at V-17.
- ¹⁰⁶ *Id*.

¹⁰¹ Application, SAR, Section 4. Anticipated Noise Levels at Property Boundary at 7.

¹⁰² *Id.*, Table 3 at 4.

¹⁰³ *Id.*, Table 6 at 5.

be intermittent and will not be permanently impactful to nearby residence. The noise from operational components should not annoy any residents.¹⁰⁷

The Harvey Economics Report recommends the following mitigation measures to address any potential noise impacts:

1. The Applicant should notify residents and businesses within 2,400 feet of the Project boundary about the construction plan, the noise potential, and the mitigation plans at least one month prior to the start of construction.

2. The Applicant should 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. If the noise levels are unduly high or annoying, the Applicant should mitigate those effects as needed.

3. If pile driving activity occurs within 1,500 feet of a noise sensitive receptor, the Applicant should implement a construction method that will suppress the noise generated during the pile driving process (i.e., semi-tractor and canvas method; sound blankets on fencing surrounding the Project site; or any other comparable method).

4. Pile driving activities should cease by 6 p.m. each day, except for pile driving locations within 1,500 of noise receptors, in which case, pile driving should cease at 5 p.m. Since the area is largely rural, a constant pounding during evening hours has the potential to upset the natural tranquility of the area and severely annoy residents.

5. The Applicant should limit the construction activity, process, and deliveries to the hours of 8 a.m. to 6 p.m., Monday through Saturday. No construction work should

¹⁰⁷ *Id.* at V-22.

be conducted on Sundays. These hours represent a reasonable timeframe to ensure that nearby property owners are not unduly impacted by construction activities.

The Siting Board finds noise from construction will be intermittent and temporary, and as provided by both the Applicant and Harvey Economics that construction noise will be loudest during the pile driving portion of the construction process. Accordingly, the construction noise will not be permanently impactful to nearby residences, while the operational noise from the Project components should have little effect on nearby residents. Nevertheless, the impact of construction noise on nearby residents will be significant, albeit transitory. To ensure the impact of construction noise does not unduly impact nearby residents the Siting Board will require Mt Olive Creek to implement mitigation measures designed to limit the impact of construction noise by controlling the hours of construction in general, as well as the time and manner in which pile driving activities can occur. Further, the Siting Board will mandate that noise suppression measures be utilized by Mt Olive Creek during the pile driving process, similar to those required by other recent applicants for construction certificates. These mitigation measures are outlined in Appendix A to this Order, and in particular, mitigation measures 24 through 28.

Mitigation Measures Proposed by Mt Olive Creek

Mt Olive Creek's SAR contained the following mitigation measures that it plans to implement:

1. Setbacks for solar equipment from roads and property lines, with increased setbacks for certain equipment, and additional setbacks from four non-participating

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residential homes that are located relatively close to property lines. Applicant proposes

the following setbacks for solar equipment:

- 50 feet from adjacent roadways
- 25 feet from non-participating adjoining parcels
- 150 feet from non-participating residences

Applicant proposes the following additional setbacks for central inverters, if used, and energy storage systems:

- 150 feet from property boundaries
- 300 feet from non-participating residences

The security fencing, vegetative buffer and pollinator plantings shall not be subject to these setback restrictions.

2. Planting of native evergreen species as a visual buffer to mitigate viewshed impacts; see the site development plan in Attachment A for proposed planting areas, and Section 1 of the Application for the proposed specifications of the vegetative buffer. Also, see Section 2 for information about the proposed placement of the vegetative buffers.

3. Cultivation of at least two acres of native pollinator-friendly species onsite; see the site development plan in Attachment A for the anticipated pollinator area, and Section 1 of the Application for information about pollinators and solar.

4. Placing safety warning signs along the perimeter of the facility fence in accordance with the guidelines of the NESC and American National Standards Institute (ANSI) Z535 Safety Sign Standards for Electric Utility Power Plants and Substations.

5. Leaving existing vegetation between solar equipment and neighboring residences in place, to the extent practicable, to help screen the Project and reduce visual impacts.

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6. If Mt Olive Creek proposes to retrofit the current proposed facility, it shall demonstrate to the Siting Board that the retrofit facility will not result in a material change in the pattern or magnitude of impacts compared to the original project. Otherwise, a new Site Assessment Report will be submitted for Siting Board review. Mt Olive Creek shall also prepare a new Site Assessment Report for Siting Board review if Mt Olive Creek intends to retire the currently proposed facility and employ a different technology.

Construction activity, process and deliveries shall be limited to the hours of
7am and 9pm daily, as described in Section 4.

8. Notices to neighbors regarding potential construction and operation noises, as described in Section 4.

9. The Project will obtain and comply with permits regarding impacts to wetlands, waters of the US, and storm water.

10. The Project has completed an assessment of the current and historical uses of the Project site, and will comply with its recommendations where they apply to the solar facility.

11. Mt Olive Creek, its successors or assigns, shall decommission the entire site if the Project ceases producing electricity for a period of more than 12 months. Decommissioning shall involve the removal of all solar panels, racking, and equipment including concrete pads and trenched electrical wiring. Fencing and internal access roads shall also be removed, unless the landowner states in writing that they prefer fencing and internal roads to remain in place.

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12. Mt Olive Creek or its contractors will 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.

II. Requirements under KRS 278.710(1)

In addition to the evaluation of the factors contained in the SAR, KRS 278.710(1) directs the Siting Board to consider the following additional criteria in rendering its decision:

- Economic impact on the affected region and state;
- Existence of other generation facilities;
- Local planning and zoning requirements;
- Potential impact on the electricity transmission system;
- Compliance with statutory setback requirements; and
- History of environmental compliance.

Economic Impact on Affected Region and the State

According to Mt Olive Creek's economic impact report, the proposed solar facility will generate lasting and significant positive economic and fiscal impacts on the entire affected region and the state. Such impacts includes the creation of hundreds of construction jobs, expansion of the local tax base, and the benefits of having a long-term employer and corporate citizen in the region that has a strong commitment to investing in the communities it serves. Mt Olive Creek states that it and the county government have negotiated an Industrial Revenue Bond and a financial agreement where it will make annual PILOT to local government jurisdictions. The project will pay approximately \$1.62

million in PILOT payments over the 40-year life of the proposed solar facility.¹⁰⁸ The estimated capital cost of the facility is approximately \$90-120 million.¹⁰⁹

During the project construction phase, Mt Olive Creek estimates that up to 150 workers will be hired over the 8–12 month construction period with a direct payroll of \$7.5 million.¹¹⁰ The total economic impact is estimated to be 199 total full-time equivalent jobs in the County with a new payroll of \$9.70 million.¹¹¹ The initial analysis focused on Russell County only. An updated analysis showed that the estimated total employment impact from the perspective of the entire state is 235 jobs.¹¹² The vast majority of these jobs will be filled by craft workers and contractors. The 199 jobs translate to a projected injection of approximately \$9.70 million in new wages into the local economy, which will help support local businesses.¹¹³ The ongoing economic impact from the project's operational phase is estimated to be very small relative to the one-time impacts from the construction phase. The ongoing operational phase of the project is expected to support two to three jobs.¹¹⁴

Harvey Economics evaluated the economic impact of the project. The Harvey Economics Report found that the economic benefits to Russell County focused on labor

¹¹¹ *Id*. at 4.

¹¹⁴ *Id*.

¹⁰⁸ Application Attachment I Economic Report at 1 and 5. The Pilot agreement calls for payments of \$1,000 per MW of stated capacity for the first 20 years and then \$350 per MW for the next 20 years.

¹⁰⁹ *Id.* at 1.

¹¹⁰ *Id.* at 2.

¹¹² Mt. Olive Creek's Response to Siting Board's Initial Request for Information (filed July 7, 2021), Item 1b.

¹¹³ Application, Attachment I Economic Report at 4.

activities as most of the capital expenditures would likely occur out of state. Harvey Economics agreed that during the construction phase, the impact of local labor would be temporary and that the number of local hires would depend on the number of qualified available persons.¹¹⁵ Harvey Economics agreed that the impact during the operational phase would be minimal and that any economic benefit would be derived from employee earnings and the PILOT payments.¹¹⁶ In addition, the PILOT payments, though relatively modest, represent additional revenues that the recipients would otherwise not have received. Finally, although landowner leases were not discussed in the application, the landowners are receiving additional economic benefits as well.¹¹⁷

Having reviewed the record, the Siting Board finds that the Mt Olive Creek facility will have a positive economic impact on the region.

Existence of Other Generating Facilities

Mt Olive Creek states that it is rare for utility-scale solar projects to be co-located with existing electricity generating infrastructure, such as a coal or natural gas fired power plant. Efforts were made to site the Project where there is existing electricity transmission infrastructure.¹¹⁸ The project will interconnect to an on-site, existing transmission line owned by EKPC. At the Project's expense, EKPC will build a new tap line to interconnect the Project.¹¹⁹

¹¹⁹ *Id*.

¹¹⁵ Harvey Economics Report at V-36.

¹¹⁶ *Id.* at V-37.

¹¹⁷ Id.

¹¹⁸ Application, Section 7. Efforts to locate near Existing Electric Generation at 11.
KRS 278.710(1)(d) provides that the Siting Board must consider whether a merchant plant is proposed for a site upon which facilities capable of generating 10 MW or more of electricity are currently located. Although the site upon which the Mt Olive Creek solar facility will be located does not contain any other generating facilities, the Siting Board notes the selected site will encompass an existing transmission line and Mt Olive Creek will be able to directly interconnect its solar facility to that of the existing transmission line without the need for any additional land.¹²⁰ Also, as previously determined, the generally passive characteristics of the solar facility will be compatible with the surrounding area.

Local Planning and Zoning Requirements

Mt Olive Creek states that the proposed solar facility will be located entirely in Russell County, and that there are no setback requirements established by a planning and zoning commission for the location of the project, and no noise ordinance that applies to the Project.¹²¹ Mt Olive Creek certifies that the Project will follow any applicable local ordinances and regulations concerning noise control, and with any applicable local planning and zoning ordinances.¹²²

The Siting Board finds that Mt Olive Creek's certification that the proposed solar facility will meet all local planning and zoning requirements that existed on the date the application was filed satisfies the requirements of KRS 278.710(1)(e).

¹²⁰ *Id*.

 ¹²¹ Application, Section 4. Compliance with Local Ordinances and Regulations at 5.
¹²² *Id*.

Impact on Transmission System

Mt Olive Creek states the Project is located within the territory of PJM Interconnection LLC (PJM).¹²³ PJM is the Regional Transmission Organization for 13 states including parts of Kentucky, and is managing the interconnection of the Project in coordination with EKPC, which owns the transmission infrastructure to which the project is proposing to interconnect.¹²⁴ The interconnection study process in PJM involves three study phases: Feasibility Study, System Impact Study, and Facilities Study.¹²⁵

The purpose of the feasibility study is to determine a plan, with ballpark cost and construction time estimates, to connect the proposed Mt Olive Creek solar facility to the PJM network at a location specified by Mt Olive Creek.¹²⁶ Mt Olive Creek made an interconnection application to PJM in June 2019 to interconnect the Project on the Sewellton Jct–Webbs Crossroads 69 kV transmission line.¹²⁷ Following the application, a kickoff call with PJM and EKPC was held to begin the three-step study process, and the Feasibility Study was completed in January of 2020.¹²⁸ The Feasibility Study Report was provided to the Siting Board with the application.¹²⁹ The Feasibility Study Report

- ¹²⁸ *Id*.
- ¹²⁹ *Id*.

¹²³ Application, Section 9. Effect on Kentucky Electricity Generation System at 13.

¹²⁴ *Id*.

¹²⁶ Application, Attachment G PJM Interconnection Feasibility Study Report at 4.

¹²⁷ Application Section 9. Effect on Kentucky Electricity Generation System at 13.

facilities, a direct connection network upgrade, and a non-direct connection network upgrade, for a total cost of approximately \$3,620,000.¹³⁰

The objective of the System Impact Study is to determine budgetary cost estimates and approximate construction timelines for identified transmission facilities required to connect the proposed Mt Olive Creek solar facility to the PJM network at a location specified by Mt Olive Creek.¹³¹ To determine these cost estimates and approximate construction timelines the System Impact Study must first determine the potential impacts to the regional electric grid and the need for any network upgrades to mitigate potential impacts.¹³² During the System Impact Study, the Project was reviewed for the potential to impact adjoining utilities' transmission systems outside of PJM; PJM has confirmed that there are no utilities outside of PJM that have the potential to be affected by the Project or that require affected systems studies.¹³³ The System Impact Study Report for the Project was issued in August 2020, and it too was provided to the Siting Board with the application.¹³⁴ The System Impact Study determined that Mt Olive Creek will be responsible for total interconnection costs, the same as noted in the Facilities Study, of approximately \$3,260,000 for upgrades to interconnection facilities and network facilities. 135

- ¹³¹ Application, Attachment H PJM Interconnection System Impact Study Report at 5.
- ¹³² Application, Section 9. Effect on Kentucky Electricity Generation System at 13.
- ¹³³ *Id*.
- ¹³⁴ Application, Section 9. Effect on Kentucky Electricity Generation System at 13.
- ¹³⁵ Application, Attachment H PJM Interconnection System Impact Study Report at 6.

¹³⁰ Application, Attachment G PJM Interconnection Feasibility Study Report at 6.

The third and final step is completion of the Facilities Study. In its application, Mt Olive Creek states that the Facilities Study is currently underway and expected to be issued in mid-2021.¹³⁶

A key purpose of the PJM and EKPC study process is to estimate the costs of any required upgrades, both at the Project site as well as elsewhere within the PJM transmission system, which the Project would require or contribute to, and to allocate such costs to the Project. The Project will be required to pay for any identified costs in order to interconnect and deliver electricity into the PJM and EKPC transmission system. In addition, the Applicant has paid PJM for the costs of the study process.¹³⁷

KRS 278.710(f) provides that the Siting Board should consider whether the additional load imposed upon the electricity transmission system, by use of the Mt Olive Creek facility, will adversely affect the reliability of service for retail customers of electric utilities regulated by the Public Service Commission (PSC). Having reviewed the record, the Siting Board finds that the proposed solar facility will not adversely impact the reliability of service provided by retail electric utilities under the PSC's jurisdiction. This determination is based upon Mt Olive Creek's commitment to the interconnection process and protocols and its acceptance of any cost obligations resulting from the interconnection process and protocols consistent with the requirements under KRS 278.212. The Siting Board finds that Mt Olive Creek has satisfied the requirements of KRS 278.710(f).

 ¹³⁶ Application, Section 9. Effect on Kentucky Electricity Generation System at 13.
¹³⁷ *Id.* at 14.

Compliance with Setback Requirements

Mt Olive Creek's application acknowledges that KRS 278.706(2)(e) requires all proposed structures or facilities used for generation of electricity to be at least 2,000 feet from any residential neighborhood, school, hospital, or nursing home facility subject to a certain exception that is not applicable in this instance. KRS 278.700(6) defines "residential neighborhood" as a populated area of five or more acres containing at least one residential structure per acre. In its application Mt Olive Creek states that there are six residential neighborhoods (Neighborhoods A-F) near the Project.¹³⁸ Mt Olive Creek filed a motion, pursuant to KRS 278.704(4), seeking a deviation from the 2,000 foot setback requirement, and is seeking approval for a 150-foot setback from six residential neighborhoods that lie within 2,000 feet of the Project site.¹³⁹ Without a deviation, all proposed structures or facilities used for generation of electricity must be located more than 2,000 feet from any residential neighborhood.¹⁴⁰ Pursuant to KRS 278.704(4), the Board may grant a deviation from the 2,000-foot setback requirements if it is determined that the proposed facility as designed and as located would meet the goals of in KRS 224.10-280 (Cumulative Environmental Assessment), KRS 278.010 (definitions), KRS 278.212 (costs of upgrading existing grid), KRS 278.214 (curtailment of service), KRS 278.216 (site assessment report), KRS 278.218 (transfer of ownership), and KRS 278.700 to KRS 278.716 (Siting Board requirements) at a distance closer than the required 2,000 feet.

¹³⁸ Application, Section 5. Setback Requirements at 6 and Motion for Deviation from Setback Requirements at 3.

¹³⁹ Motion for Deviation from Setback Requirements at 1.

¹⁴⁰ *Id.* at 2.

KRS 224.10-280 provides that no person shall commence to construct a facility to be used for the generation of electricity unless that person has submitted a cumulative environmental assessment (CEA) to the Energy and Environment Cabinet (Cabinet). In its motion Mt Olive Creek proffers that the Project is designed and located to meet the goals of KRS 224.10-280, advising that its CEA provides an in-depth analysis of the potential air which contains a description and analysis of anticipated air pollutants, water pollutants, wastes, and water withdrawal needs.¹⁴¹ Based on the CEA, even under unusually adverse conditions, the emissions during construction will have a minor transient impact on off-site air quality and will be well below the applicable ambient air quality standards.¹⁴² The effects to air quality from construction-associated activities will be temporary and localized, and the potential impacts to air quality from constructionrelated activities for the project will be minor.¹⁴³ During operation, the solar facility will only generate air emissions from worker vehicles and equipment for maintenance activities, such as mowers to control growth of vegetation, and both will occur only minimally as the Project will be monitored offsite 24/7.144

Mt Olive Creek intends to comply with the Kentucky Division of Water (KDOW) Construction Storm Water Discharge General Permit.¹⁴⁵ Mt Olive Creek will submit a Notice of Intent to KDOW at least seven days prior to the commencement of construction and KDOW will review the notice of intent and provide notification of authorization to

- ¹⁴³ *Id*.
- ¹⁴⁴ *Id*.

¹⁴¹ *Id.* at 9.

¹⁴² *Id.*, Exhibit 5 at 4.

¹⁴⁵ *Id.,* Exhibit 5 at 5.

discharge, and Mt Olive Creek will provide a notice of termination upon completion when construction is completed.¹⁴⁶ Additionally, a site-specific stormwater pollution prevention plan will be prepared and a copy will be kept available on site.¹⁴⁷ Lastly, disturbed areas will be seeded after construction using a mixture of certified weed-free, low-growing grass and herbaceous plant seed obtained from a reputable seed dealer.¹⁴⁸ Erosion control measures will be inspected and maintained until vegetation in the disturbed areas has returned to the preconstruction conditions or the Project Site is stable.¹⁴⁹ Just as with air emissions the operations and maintenance of the solar facility will have little impact on surface water.¹⁵⁰ Regarding groundwater, no direct adverse impacts to groundwater will be anticipated as a result of the Project.¹⁵¹ The PV panels will have a relatively minor effect on groundwater infiltration and surface water runoff because the panels will not include a runoff collection system.¹⁵² The use of a spill prevention, control and countermeasure plan will reduce leaks and spills and minimize the potential for adverse impacts to groundwater from any hazardous materials that could potentially contaminate

- ¹⁴⁶ *Id*.
- ¹⁴⁷ *Id*.
- ¹⁴⁸ *Id*.
- ¹⁴⁹ *Id*.
- ¹⁵⁰ *Id*.
- ¹⁵¹ *Id.,* Exhibit 5 at 6.
- ¹⁵² *Id*.

groundwater will be stored on the Project Site during construction.¹⁵³ Ultimately, no direct adverse impacts are anticipated as a result of project development.¹⁵⁴

With respect to waste evaluation, the CEA notes that construction activities will generate solid waste consisting of construction debris and general trash, such as wooden crates, pallets, flattened cardboard module boxes, plastic packaging, and excess electrical wiring.¹⁵⁵ Disposal containers such as dumpsters or roll-off containers will be obtained from a proper waste disposal contractor and will be located in the on-site staging area or other areas, as appropriate, and records of the amounts generated will be maintained by Mt Olive Creek.¹⁵⁶ Waste generation during operation will be minimal and will mainly result from the maintenance and/or replacement of worn or broken equipment and defective or broken electrical materials.¹⁵⁷ All wastes will be managed by a designated waste management company or companies and disposed of in accordance with applicable federal and state requirements to minimize health and safety effects.¹⁵⁸ Based on a review of Project waste generation activities, no adverse effects from waste are anticipated.¹⁵⁹

Regarding water withdrawal, the Project anticipates using existing wells to provide water needed during construction and may either use these existing wells for the

¹⁵⁵ *Id*.

- ¹⁵⁷ *Id.,* Exhibit 5 at 7.
- ¹⁵⁸ *Id*.
- ¹⁵⁹ *Id*.

¹⁵³ *Id*.

¹⁵⁴ *Id*.

¹⁵⁶ *Id.,* Exhibit 5 at 6–7.

construction manager trailer or develop a new water well.¹⁶⁰ Construction-related water use will support site preparation (including dust control) and grading activities, and the expected water volume needed for construction activities is not expected to adversely affect local or regional groundwater resources.¹⁶¹ The internal access roads will not be heavily traveled during normal operation, and consequently, water use for dust control is not expected.¹⁶² Similar to other solar facilities, the Mt Olive Creek Project is not water intensive during the operational phase.¹⁶³

Mt Olive Creek states that the Project is designed and located to meet the goals of KRS 224.10-280, and based upon the CEA submitted to the Cabinet, the goals of the requirements of KRS 224.10-280 have been met.¹⁶⁴

With respect to KRS 278.010, Mt Olive Creek states that this statutory provision sets forth the definitions to be used in conjunction with KRS 278.010 to KRS 278.450, KRS 278.541 to KRS 278.544, KRS 278.546 to KRS 278.5462, and KRS 278.990.¹⁶⁵ Mt Olive Creek asserts that the Siting Board's authority begins with KRS 278.700 and extends through KRS 278.716, and any applicable provision of KRS 278.990.¹⁶⁶ Mt Olive Creek contends that in filing a complete application pursuant to the applicable statutes in

¹⁶² *Id*.

¹⁶³ *Id*.

- ¹⁶⁴ Motion for Deviation from Setback Requirements at 9.
- ¹⁶⁵ *Id.* at 12.

¹⁶⁶ *Id*.

¹⁶⁰ *Id.,* Exhibit 5 at 8.

¹⁶¹ *Id*.

this proceeding, the company has satisfied the goal of providing the required information utilizing the definition of any applicable term defined in KRS 278.010.¹⁶⁷

KRS 278.212 requires the filing of plans and specifications for electrical interconnection with merchant electric generating facility and imposes the obligation upon a merchant electric generating developer for any costs or expenses associated with upgrading the existing electricity transmission grid because of the additional load caused by a merchant electric generating facility. Mt Olive Creek avers that it has met the goals of KRS 278.212 because Mt Olive Creek will comply with all applicable conditions relating to electrical interconnection with utilities by following the PJM interconnection process.¹⁶⁸ Additionally, Mt Olive Creek states that it is committed to comply with KRS 278.212, the proposed facility has been designed and located to meet the goals of KRS 278.212.¹⁶⁹

KRS 278.214 governs the curtailment of service and establishes the progression of entities whose service may be interrupted or curtailed pursuant to an emergency or other event. Mt Olive Creek states that it will abide by the requirements of this provision to the extent that these requirements are applicable, and has met the goals of the statute.¹⁷⁰

KRS 278.216 requires a jurisdictional utility, as defined by KRS 278.010(3), to obtain a site compatibility certificate and to submit a site assessment report before beginning construction of an electric generating facility. An application for a site

¹⁶⁷ Id.

¹⁶⁸ *Id*.

¹⁶⁹ *Id*.

¹⁷⁰ Id. at 13.

compatibility certificate should include the submission of a site assessment report as prescribed in the applicable Siting Board statutes.¹⁷¹ Mt Olive Creek states that it is not a utility governed by KRS 278.216, but that it has nonetheless met the requirements of KRS 278.216 by complying with the requirements of KRS 278.700 *et seq.* and has met the goals of KRS 278.216.¹⁷²

KRS 278.218 provides that no transfer of utility assets having an original book value of \$1 million or more without prior approval of the Kentucky PSC if the assets are to be transferred by reasons other than obsolescence or the assets will continue to be used to provide the same or similar service to the utility or its customers. Mt Olive Creek states that it is not a utility as that term is defined in KRS 278.010(3), but to the extent Siting Board approval may at some time be required for change of ownership or control of assets owned by Mt Olive Creek, Mt Olive Creek states that it will abide by the applicable rules and regulations which govern its operation.¹⁷³

Mt Olive Creek contends that it has met the goals set forth in these provisions as evidenced by the application in its entirety and that it has provided a comprehensive application with a detailed discussion of all criteria applicable to its proposed facility under KRS 278.700–278.716.¹⁷⁴

Having reviewed the record and being otherwise sufficiently advised, the Siting Board finds that Mt Olive Creek has demonstrated the proposed facility as designed and

¹⁷² Id.

¹⁷¹ *Id*.

¹⁷³ *Id.* at 13-14.

¹⁷⁴ Motion for Deviation from Setback Requirements at 14.

as located would meet the goals of the various statutes set forth in KRS 278.704(4) at a distance closer than the required 2,000 feet and is therefore permitted to a deviation from the 2,000 foot setback requirement, contingent on Mt Olive Creek maintaining its proposal to place generating equipment no closer than 150 feet from any home in the six neighborhoods at issue. The Siting Board notes that the mitigation requirements imposed in the Compatibility with Scenic Surroundings and Noise and Anticipated Noise Level sections will also provide some level of protection for persons occupying a property adjacent to the proposed solar facility with respect to noise, obstruction of views, and traffic. Further, additional mitigation measures outlined in Appendix A will further serve to provide protection for residents of the general area.

History of Environmental Compliance

Mt Olive Creek states that after being transferred to ENGIE North America from Carolina Solar, it remains in compliance with KRS 278.710(1)(i), and that neither it, nor any entity with ownership interest in the Project, has violated any state or federal environmental laws or regulations, and that there are no pending actions against Mt Olive Creek, nor any entity with ownership interest in the Project.¹⁷⁵

KRS 278.710(1)(i) directs the Siting Board to consider whether the applicant has a good environmental compliance history. In light of Mt Olive Creek's verified statement and no evidence to the contrary, the Siting Board finds that Mt Olive Creek has satisfied the requirements of KRS 278.710(1)(i). Nevertheless, the Applicant shall seek approval for any change in control or ownership so the Siting Board can ensure ongoing

¹⁷⁵ Mt. Olive Creek's Response to Siting Board's Post-Hearing Request for Information (filed Aug. 3, 2021), Item 3.

compliance with the law that no entity with a proposed ownership interest in the Project, has violated any state or federal environmental laws or regulations, and that there are no pending actions against any entity with a proposed ownership interest in the Project.

Decommissioning

The proposed solar facility would have an expected useful life of 40 years.¹⁷⁶ Lease agreements with participating landowners include commitments regarding infrastructure removal and land restoration. Additionally, the Applicant has prepared a formal decommissioning plan, which commits to the removal of all Project components which include: modules, racking system, inverters, transformers, concrete pads, all electrical equipment, roads, parking areas, fencing, and other components.¹⁷⁷ The term "other components" is defined in the decommissioning plan as (but not limited to) surface drains, access road cross-culverts, and fencing.¹⁷⁸ Regarding these other components anything deemed usable shall be recovered and reused elsewhere, while all other remaining components will be considered as waste and managed according to local, state, and federal laws.¹⁷⁹ Lastly, for safety and security, the security fence will be dismantled and removed from the site after all major components, PV modules, tracker system and foundations have been removed.¹⁸⁰ Site restoration will include site cleanup, re-grading, restoration of surface drainage, filling of trenches, tilling of compacted ground

- ¹⁷⁹ *Id*.
- ¹⁸⁰ *Id*.

¹⁷⁶ Harvey Economics Report at II-5.

¹⁷⁷ Mt Olive Creek's Decommissioning Plan at unnumbered 1-3 *See also* Harvey Economics Report at II-5.

¹⁷⁸ Mt Olive Creek's Decommissioning Plan at unnumbered 3.

and topsoil spreading and reseeding.¹⁸¹ Decommissioning commitments apply to all properties within the Project site, including both leased and purchased properties.¹⁸² The Applicant will provide a decommissioning security, equal to the estimated amount of the decommissioning cost less the facility salvage value, naming Russell County the secondary beneficiary.¹⁸³

The Harvey Economics Report recommends the following mitigation measures to ensure the commitments to decommissioning are met.

1. The Applicant, its successors, or assigns shall decommission the entire site if the Project ceases producing electricity for a period of more than 12 months. Decommissioning shall involve the removal of all solar panels, racking, and equipment including concrete pads and trenched electrical wiring. Fencing and internal access roads shall also be removed unless the landowner states in writing that they prefer fencing and internal roads to remain in place.

2. The Applicant will abide by its developed Decommissioning Plan, which commits to removing all facility components from the Project site and Russell County at the cessation of operations, except for specific landowner requests for fencing or internal roadways to remain in place.

3. Any change to the Decommissioning Plan will be submitted to the Siting Board. The Siting Board will determine whether any changes in decommissioning activities are acceptable.

¹⁸¹ Harvey Economics Report at II-5.

¹⁸² *Id.* at II-6.

¹⁸³ *Id*.

4. The Applicant's Decommissioning Plan, including all decommissioning activities, conditions, and requirements, shall apply to all properties within the Project site, including both leased properties and purchased properties.

5. The Applicant will provide Decommissioning Security equal to the amount necessary to complete site decommissioning activities, naming Russell County as the Secondary Beneficiary of that Security.

6. The Decommissioning Cost Estimate should be updated every five years at the expense of the Applicant and the amount of the Decommissioning Security should be adjusted at the same time.

7. If the Applicant proposes to retrofit the current proposed facility, it shall demonstrate to the Siting Board that the retrofit facility will not result in a material change in the pattern or magnitude of impacts compared to the original project. Otherwise, a new Site Assessment Report will be submitted for Siting Board review.

8. The Applicant shall also prepare a new Site Assessment Report for Siting Board review if the Applicant intends to retire the currently proposed facility and employ a different technology.

The Siting Board finds mitigation measures beyond what are recommended by the consultant are necessary to ensure that all parties are protected from potential nonperformance of the decommissioning obligation. The Siting Board will require Mt Olive Creek to implement mitigation measures that require Mt Olive Creek and its successors and assigns to meet all land restoration requirements in the leases with participating landowners, as well as mitigation measures that require a decommissioning

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plan specific to the Mt Olive Creek Project. These mitigation measures are outlined in Appendix A to this Order.

CONCLUSION

After carefully considering the criteria outlined in KRS Chapter 278, the Siting Board finds that Mt Olive Creek has presented sufficient evidence to support the issuance of a deviation from the setback requirements of KRS 278.704(2) and a Certificate to Construct the proposed merchant solar facility. The Siting Board conditions its approval upon the full implementation of all mitigation measures described herein and listed in Appendix A to this Order. A map showing the location of the proposed solar generating facility is attached hereto as Appendix B.

IT IS THEREFORE ORDERED that:

1. Mt Olive Creek's application for a Certificate to Construct an approximately 60 MWac merchant solar electric generating facility in Russell County, Kentucky, is conditionally granted subject to full compliance with the mitigation measures and condition prescribed in Appendix A.

2. Mt Olive Creek's motion for deviation from the 2,000 foot setback requirement is granted in part, such that a 150-foot setback requirement shall apply to each of the six neighborhoods that lie within 2,000 feet of the Project site: Neighborhood A at 150 feet from the Project, Neighborhood B at 160 feet from the Project, Neighborhood C at 550 feet from the Project, Neighborhood D at 720 feet from the Project, Neighborhood E at 180 feet from the Project, and Neighborhood F at 1,030 feet from the Project. In addition, the setbacks and requirements listed in Appendix A, mitigation measure 28 apply.

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3. Mt Olive Creek shall fully comply with the mitigation measures and conditions prescribed in Appendix A.

4. In the event mitigation measures within the body of this Order conflict with those prescribed in Appendix A, the measures in Appendix A shall control.

5. This case is closed and removed from the commission's docket.

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By the Kentucky State Board on Electric Generation and Transmission Siting



ATTEST:

4. G. Bridnell

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

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE NO. 2020-00226 DATED NOV 03 2021

MITIGATION MEASURES AND CONDITIONS IMPOSED

The following mitigation measures and conditions are hereby imposed on Mt Olive Creek Solar LLC (Mt Olive Creek) to ensure that the facilities proposed in this proceeding are constructed as ordered.

1. A final site layout plan shall be submitted to the Siting Board upon completion of the final site design. Deviations from the preliminary site layout provided in in the Responses to the Post-Hearing Request for Information should be clearly indicated on the revised graphic. Those changes could include, but are not limited to, location of solar panels, inverters, transformers, substation, operation and maintenance building or other Project facilities and infrastructure.

2. Any change in the Project boundaries from the information which formed this evaluation shall be submitted to the Siting Board for review.

3. The Siting Board will determine if any deviation in the boundaries or site layout plan is likely to create a materially different pattern or magnitude of impacts. If not, no further action is required, but if yes, the application will support the Siting Board's effort to revise its assessment of impact and mitigation requirements.

4. A final, Project specific, construction schedule, including revised estimates of on-site workers and commuter vehicle traffic, shall be submitted to the Siting Board. Deviations from the preliminary construction schedule provided in this matter should be clearly indicated.

5. The Board will determine if any deviation to the construction schedule or workforce estimates is likely to create a materially different pattern or magnitude of impacts. If not, no further action is required, but if yes, the Applicant will support the Siting Board's effort to revise its assessment of impacts and mitigation requirements.

6. The Applicant or its contractor will control access to the site during construction and operation. All construction entrances will be gated and locked when not in use.

7. The Applicant's access control strategy shall also include appropriate signage to warn potential trespassers. The Applicant must ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the public, local residents, and business owners.

8. According to National Electric Code regulations, the security fence must be installed prior to any electrical installation work. The substation shall have its own separate security fence and locked access installed.

9. Existing vegetation between solar arrays and nearby roadways and homes shall be left in place to the extent feasible to help minimize visual impacts and screen the project from nearby homeowners and travelers.

10. Mt Olive Creek shall implement planting of native evergreen species as a visual buffer to mitigate viewshed impacts, particularly in areas directly adjacent to the Project without existing vegetation.

11. Mt Olive Creek shall carry out visual screening consistent with the plans proposed in its application, Site Assessment Report, and the maps included as attachments to Mt. Olive Creek's responses to Post-Hearing Data Request, Item 2, and ensure proposed new vegetative buffers are successfully stablished and develop as expected over time. Should vegetation used as buffers die over time, Mt Olive Creek shall replace them as appropriate.

12. The Applicant shall provide a visual buffer between Project infrastructure and residences or other occupied structures with a line of sight to the facility to the reasonable satisfaction of the affected adjacent property owners. If vegetation is used, plantings should reach eight feet high within four years. To the extent that an affected adjacent property owner indicates to the Applicant that such a buffer is not necessary, Mt Olive Creek will obtain that property owner's written consent and submit such consent in writing to the Siting Board.

13. Mt Olive Creek shall cultivate at least two acres of native pollinator-friendly species onsite.

14. Mt Olive Creek will not remove any existing vegetation except to the extent it must remove such vegetation for the construction and operation of Project components.

15. Mt Olive Creek shall fix or pay for damage resulting from any vehicle transport to the project site. For damage resulting from vehicle transport in accordance with all permits, those permits will be controlling.

16. Mt Olive Creek shall comply with all laws and regulations regarding the use of roadways.

17. Mt Olive Creek shall implement ridesharing between construction workers when feasible, use appropriate traffic controls or allow flexible working hours outside of peak hours to minimize any potential delays during AM and PM peak hours.

18. The Applicant shall consult with the Kentucky Transportation Cabinet (KYTC) regarding truck and other construction traffic and obtain necessary permits from the KYTC.

19. The Applicant shall consult with the Russell County Road Department (RCRD) regarding truck and other construction traffic and obtain necessary permits from the RCRD.

20. The Applicant shall develop special plans and obtain necessary permits before transporting heavy loads, especially the substation transformer, onto state or county roads.

21. Mt Olive Creek shall comply with any road use agreement executed with RCRD. Such an agreement might consider special considerations for overweight loads, routes utilized by heavy trucks, road weight limits, and bridge weight limits.

22. Mt Olive Creek shall develop and implement a traffic management plan to minimize the impacts on traffic flow and keep traffic safe. Any such traffic management plan shall also identify any noise concerns during the construction phase and develop measures that would address those noise concerns.

23. Mt Olive Creek shall properly maintain construction equipment and follow best management practices related to fugitive dust throughout the construction process. Dust impacts shall be kept at a minimal level. The Siting Board expects the Applicant's compliance with 401 KAR 63:010.

24. Mt Olive Creek is required to limit the construction activity, process, and deliveries to the hours between 8 a.m. and 6 p.m. Monday through Saturday. Non-noise-causing and non-construction activities can take place on the site between 7 a.m. and

10 p.m., Monday through Sunday, including field visits, arrival, departure, planning meetings, mowing, surveying, etc.

25. Mt Olive Creek shall notify residents and businesses within 2,400 feet of the project boundary about the construction plan, the noise potential and mitigation plans one month prior to the start of construction.

26. If the pile driving activity occurs within 1,500 feet of a noise sensitive receptor, Mt Olive Creek shall implement a construction method that will suppress the noise generated during the pile driving process (i.e., semi-tractor and canvas method; sound blankets on fencing surrounding the solar site; or any other comparable method).

27. Mt Olive Creek shall implement a Customer Resolution Program to address any complaints from surrounding landowners. Mt Olive Creek shall also submit annually a status report associated with its Customer Resolution Program, providing, among other things, the individual complaints, how Mt Olive Creek addressed those complaints, and the ultimate resolution of those complaints identifying whether or not the resolution was to the complainant's satisfaction.

28. Mt Olive Creek shall place panels, inverters and substation equipment consistent with the distances to noise receptors indicated in Mt Olive Creek's noise and traffic study and with its proposed setbacks, as amended herein. Nevertheless, Mt Olive Creek shall not place solar panels or string inverters, if used, closer than 150 feet from a residence, church or school, 25 feet from non-participating adjoining parcels, and 50 feet from adjacent roadways. Mt Olive Creek shall not place a central inverter, and if used, energy storage systems closer than 450 feet from a residence, church or school. These setbacks shall not be required for residences owned by landowners involved in the project

that explicitly agree to lesser setbacks and have done so in writing. All agreements by participating landowners to lesser setbacks must include language advising the participating landowners of what the standard setback required by the order is. All agreements by participating landowners to lesser setbacks must be filed with the Siting Board prior to commencement of construction of the Project.

29. As applicable to individual lease agreements, Mt Olive Creek, its successors, or assigns will abide by the specific land restoration commitments agreed to by individual property owners, as described in each executed lease agreement.

30. Mt Olive Creek shall file a full and explicit decommissioning plan with the Siting Board upon completion. This plan shall commit Mt Olive Creek to removing all facility components, above-ground and below-ground, regardless of depth, from the project site. Upon its completion, this plan shall be filed with the Siting Board or its successors. The decommissioning plan shall be completed at least one month prior to construction of the Project.

31. Mt Olive Creek shall be required to file a bond with the Russell County Fiscal Court, equal to the amount necessary to effectuate the explicit or formal decommissioning plan naming Russell County as an oblige or third-party (or secondary, in addition to individual landowners) beneficiary, in addition to the lessors of the subject property insofar as the leases contain a decommissioning bonding requirement, so that Russell County will have the authority to draw upon the bond to effectuate the decommissioning plan. For land in which there is no bonding requirement otherwise, Russell County shall be the primary beneficiary of the decommissioning bond for that portion of the project. The bond(s) shall be filed with the Russell County Treasurer or with a bank, title company, or

financial institution reasonably acceptable to the county. The acceptance of the county of allowing the filing the bond(s) with an entity other than the fiscal court, through the County Treasurer, can be evidenced by a letter from the Judge-Executive, the fiscal court, or the County Attorney. The bond(s) shall be in place at the time of commencement of operation of the Project. The bond amount shall be reviewed every five years at Mt Olive Creek's expense to determine and update the cost of removal amount. This review shall be conducted by an individual or firm with experience or expertise in the costs of removal or decommissioning of electric generating facilities. Certification of this review shall be provided to the Siting Board or its successors and the Russell County Fiscal Court. Such certification shall be by letter and shall include the current amount of the anticipated bond and any change in the costs of removal or decommissioning.

32. If any person shall acquire or transfer ownership of, or control, or the right to control the Project, by sale of assets, transfer of stock, or otherwise, or abandon the same, Mt Olive Creek or its successors or assigns shall request explicit approval from the Siting Board with notice of the request provided to the Russell County Fiscal Court. In any application requesting such abandonment, sale or change of control, the Applicant shall certify its compliance with KRS 278.710(1)(i).

33. Mt Olive Creek or its assigns must provide notice to the Siting Board if during any two-year (730 days) period, it replaces more than 20 percent of its facilities. Mt Olive Creek shall commit to removing the debris and replaced facility components from the Project site and Russell County upon replacement. If the replaced facility components are properly disposed of at a permitted facility, they do not have to be physically removed from Russell County. However, if the replaced facility components remain in Russell County, Mt Olive Creek must inform the Siting Board of where the replaced facility are being disposing of.

34. Any disposal or recycling of Project equipment, during operations or decommissioning of the Project, shall be done in accordance with applicable laws and requirements.

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE NO. 2020-00226 DATED NOV 03 2021

ONE PAGE TO FOLLOW



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