#### COMMONWEALTH OF KENTUCKY

# BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

ELECTRONIC APPLICATION OF LOST CITY	)	
RENEWABLES LLC FOR A CERTIFICATE OF	)	
CONSTRUCTION FOR AN APPROXIMATELY	)	CASE NO.
250 MEGAWATT MERCHANT ELECTRIC SOLAR	)	2024-00406
GENERATING FACILITY IN MUHLENBERG	)	
COUNTY, KENTUCKY PURSUANT TO	)	
KRS 278.710 AND 807 KAR 5:110	)	

#### ORDER

On January 29, 2025, Lost City Renewables LLC (Lost City Renewables) filed an application with the Kentucky State Board on Electric Generation and Transmission Siting (Siting Board) seeking a Construction Certificate to construct an approximately 250-megawatt ground-mounted solar photovoltaic electric generating facility (Project) comprising approximately 1,413 acres of land in Muhlenberg County, Kentucky.

On February 20, 2025, 12 local landowners (Intervenors) in Muhlenberg County jointly filed a motion requesting intervention through counsel.<sup>1</sup> On March 3, 2025, Intervenors filed an amended motion adding six additional landowners, bringing the total to 18.<sup>2</sup> The landowners were granted intervention by the Siting Board on April 1, 2025.<sup>3</sup> Pursuant to a procedural schedule established on February 12, 2025, Lost City Renewables responded to two rounds of discovery. A site visit was held on March 24,

<sup>&</sup>lt;sup>1</sup> Motion to Intervene (filed Feb. 20, 2025).

<sup>&</sup>lt;sup>2</sup> Amended Motion to Intervene (filed Mar. 3, 2025).

<sup>&</sup>lt;sup>3</sup> Order (Ky. PSC Apr. 1, 2025).

2025. Siting Board consultant, Elliot Engineering, Inc. (Elliot), filed its report on May 12, 2025 (Report). Lost City Renewables submitted its response to the Report on May 26, 2025. A formal hearing was held on June 13, 2025. Lost City Renewables filed its responses to post-hearing requests for information on June 27, 2025. Lost City Renewables and Intervenors filed post hearing briefs on June 27, 2025. Both parties filed replies on July 3, 2025. The matter now stands submitted for a decision.

#### LEGAL STANDARD

The filing requirements and standard of review for requests to construct a merchant generating facility are set forth in KRS 278.700–.718. KRS 278.704(1) requires that an application be approved by the Siting Board before the construction of a merchant electric generating facility can commence. KRS 278.706 requires that the application include evidence of public notice and compliance with local planning and zoning ordinances.

KRS 278.708(2) requires Lost City Renewables to prepare a site assessment report (SAR) that includes (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 site; (4) evaluation of anticipated peak and 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 suggested by Lost City Renewables to minimize or avoid adverse effects identified in the SAR.

KRS 278.710(1) delineates the criteria on which the Siting Board will grant or deny the certificate, which include (1) impact on scenic surroundings, property values, and surrounding roads; (2) anticipated noise levels during construction and operation of the facility; (3) economic impact on the region and state; (4) whether the proposed facility meets all local planning and zoning requirements existing on the date the application was filed; (5) impact of the additional load on the reliability of jurisdictional utilities; (6) setback requirements; (7) efficacy of mitigation measures proposed by Lost City Renewables; and (8) whether the applicant has a good environmental compliance history.

#### PROPOSED FACILITY

The Project will be located on 1,413 acres in Muhlenberg County, Kentucky and includes approximately 400,000 photovoltaic solar panels, associated ground-mounted racking, inverters, and a main transformer that, in a separate administrative matter, is proposed to connect to the Tennessee Valley Authority Substation (TVA Substation) at 2557 Lost City Road, Lewisburg, Ky, via a 10.8-mile, 161 kilovolt transmission line.<sup>4</sup>

#### DISCUSSION AND FINDINGS

## I. KRS 278.708: SAR Filing Requirements and Mitigation Measures

Mitigation Measures Proposed by Lost City Renewables and Siting Board Consultant

As required by KRS 278.708(4), Lost City Renewables proposed various mitigation measures consistent with the statutes regarding traffic, noise, roadway preservation, permitting, setbacks, public safety, scenic preservation, and decommissioning.

<sup>&</sup>lt;sup>4</sup> Application (filed Jan. 29, 2025) at 2 and 11.

In accordance with KRS 278.708(5), Elliot recommended mitigation measures in the following areas: site development, compatibility with scenic surroundings, fugitive dust plans, and notice and communication with adjacent landowners.<sup>5</sup> Lost City Renewables generally agreed with the mitigation measures recommended in the Elliot Report.<sup>6</sup>

The Siting Board has reviewed the mitigation measures proposed by Lost City Renewables and Elliot, and finds that, in addition to those Lost City Renewables has initially proposed, the mitigation measures set forth in Appendix A to this Order and discussed throughout this Order are appropriate and reasonable because they achieve the statutory purpose of mitigating the adverse effects identified in the SAR and the Report in accordance with KRS 278.708.

#### **Detailed Site Description**

KRS 278.708(3)(a)(1–6) requires that the detailed site description in the SAR include a description of (1) surrounding land uses for residential, commercial, agricultural, and recreational purposes; (2) the legal boundaries of the proposed site; (3) proposed access control to the site; (4) the location of facility buildings, transmission lines, and other structures; (5) location and use of access ways, internal roads, and railways; and (6) existing or proposed utilities to service the facility.

Lost City Solar submitted the required SAR with its application.<sup>7</sup> The application contained a preliminary site plan,<sup>8</sup> which was updated during the pendency of the

<sup>&</sup>lt;sup>5</sup> Elliot Engineering Solar Generation Siting Final Report – Lost City Solar (Elliot Report) (filed May 12, 2025), Section 4 at 50.

<sup>&</sup>lt;sup>6</sup> Lost City Renewables Response to the Consultant's Report (filed May 26, 2025) at 1-2.

<sup>&</sup>lt;sup>7</sup> Application, Site Assessment Report (SAR).

<sup>&</sup>lt;sup>8</sup> SAR, Appendix B.

proceedings.<sup>9</sup> The site plan included the Project boundary, existing roads, proposed access roads, proposed solar array areas, proposed substation location, proposed gentie line, proposed inverter locations, proposed MV cables, proposed fence line, proposed setbacks/easements, wetland features, and existing structures.<sup>10</sup> An abandoned railroad grade located within the Project area measures approximately 1,840 feet and is oriented northwest to southeast and parallels US 431. The proposed Project would have no effect on this abandoned rail line, nor would the Project utilize a railroad for deliveries.<sup>11</sup> Lost City anticipates an unoccupied residential building, three abandoned barns, sheds in disrepair, two grain bins, and several other outbuildings would be demolished during the construction phase of the Project.<sup>12</sup> A 69kV Pennyrile Rural Electric Cooperative Corporation (PRECC) transmission line intersects the Project and has an easement of 200 feet.<sup>13</sup> A 10-inch natural gas transmission pipeline owned by Boardwalk Pipelines Holding Company intersects the Project and has an easement of 50 feet.<sup>14</sup> The legal boundaries of the proposed site are contained in the application.<sup>15</sup>

In total, the Project Site includes approximately 833 forested acres. <sup>16</sup> The Applicant intends to provide a 25-foot buffer around jurisdictional streams and wetlands

<sup>&</sup>lt;sup>9</sup> Lost City Renewable's Response to Siting Board Staff's First Request for Information (Staff's First Request) (filed Mar. 21, 2025), Item 46.

<sup>&</sup>lt;sup>10</sup> Lost City Renewable's Response to Staff's First Request, Item 46.

<sup>&</sup>lt;sup>11</sup> SAR at 9.

<sup>&</sup>lt;sup>12</sup> Lost City Renewable's Response to Staff's First Request, Item 53.

<sup>&</sup>lt;sup>13</sup> Lost City Renewable's Response to Staff's First Request, Item 33.

<sup>&</sup>lt;sup>14</sup> Lost City Renewable's Response to Staff's First Request, Item 34.

<sup>&</sup>lt;sup>15</sup> SAR, Appendix C.

<sup>&</sup>lt;sup>16</sup> Lost City Renewable's Response to Staff's First Request, Item 18.

where trees would not be cleared. 17 As a result, it is anticipated that approximately 609 acres of forestland would be cleared. 18 Another approximately 240 acres of farmland would be taken out of use. 19 The Applicant has prepared a map depicting planned areas of vegetation clearing.<sup>20</sup> As part of the Landscape Plan, the Applicant would be adding approximately 26 acres of trees and bushes as part of the screening buffer. The Applicant plans to provide 30,456 linear feet of vegetative screening consisting of 2,048 trees and 4,946 shrubs.<sup>21</sup> As the lead federal agency, TVA is responsible for ESA Section 107 consultation on projects involving a federal approval (NEPA review process).<sup>22</sup> As part of the NEPA process, consultation with the USFWS and KDFWR will occur.<sup>23</sup> Discussions concerning a tree-clearing strategy would occur at that time.<sup>24</sup> Lost City Renewables has stated that solar equipment and the security fence would not be located within the FEMA Special Flood Hazard Area, also referred to as the 100-year floodplain.<sup>25</sup> Lost City Renewables indicated it would implement Best Management Practices (BMPs), including vegetative filter strips, sediment traps and basins, silt fence, rock check dams, and temporary and permanent vegetation to combat possible erosion

<sup>&</sup>lt;sup>17</sup> Lost City Renewable's Response to Staff's First Request, Item 18.

<sup>&</sup>lt;sup>18</sup> Lost City Renewable's Response to Staff's First Request, Item 18.

<sup>&</sup>lt;sup>19</sup> Lost City Renewable's Response to Staff's First Request, Item 18.

<sup>&</sup>lt;sup>20</sup> Lost City Renewable's Response to Staff's First Request, Item 23.

<sup>&</sup>lt;sup>21</sup> Lost City Renewable's Response to Staff's First Request, Item 32.

<sup>&</sup>lt;sup>22</sup> Lost City Renewable's Response to Staff's First Request, Item 21.

<sup>&</sup>lt;sup>23</sup> Lost City Renewable's Response to Staff's First Request, Item 21.

<sup>&</sup>lt;sup>24</sup> Lost City Renewable's Response to Staff's First Request, Item 21.

<sup>&</sup>lt;sup>25</sup> Lost City Renewable's Response to Staff's First Request, Item 25.

during construction.<sup>26</sup>

A fence meeting the National Electrical Safety Code (NESC) requirements, typically a six-foot fence with three strings of barbed wire at the top, will enclose the solar panels and associated infrastructure.<sup>27</sup> A separate fence will enclose the substation.<sup>28</sup> The Project will comply with the NESC and American National Standards Institute (ANSI) Z535 Safety Sign Standards for Electric Utility Power Plants and Substations to guide the placement of safety signage around the facility.<sup>29</sup> In addition, Lost City Renewables 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.<sup>30</sup> Approximately 117,400 linear feet of cabling would be used in the Project's collection system.<sup>31</sup> The Project includes approximately 400,000 photovoltaic solar panels, associated racking, inverters, overhead and underground electrical conveyance lines, and a utility substation transformer that will interconnect via an overhead gen tie line, approximately 10.8 miles to a Tennessee Valley Authority (TVA) substation.<sup>32</sup> If the Project requires auxiliary electrical service, it will be acquired from TVA and delivered to the Project substation.<sup>33</sup> At this time, no utility water/sewage lines are expected to be built or used for the

<sup>&</sup>lt;sup>26</sup> Lost City Renewable's Response to Staff's First Request, Item 29.

<sup>&</sup>lt;sup>27</sup> SAR at 2.

<sup>&</sup>lt;sup>28</sup> SAR at 2.

<sup>&</sup>lt;sup>29</sup> SAR at 2.

<sup>&</sup>lt;sup>30</sup> SAR at 2.

<sup>&</sup>lt;sup>31</sup> Lost City Renewable's Response to Staff's First Request, Item 39.

<sup>&</sup>lt;sup>32</sup> Application at 2.

<sup>&</sup>lt;sup>33</sup> SAR at 3.

Project.<sup>34</sup> Any water needs would be provided either via proposed on-site groundwater wells or by delivery via water trucks.<sup>35</sup>

The Project site is currently used as agricultural land for corn, soybeans, hay, poultry, cattle, sheep, and goats as well as forested areas.<sup>36</sup> The surrounding areas are agricultural, rural residential, and forested.<sup>37</sup> The property is located to the east of US-431 and south of KY-949. Free Lane is the main site access road from KY-949. A few gravel or unpaved access drives are located on the property. No other publicly owned roads are located on the property.<sup>38</sup> There are eight churches or other religious facilities within a two-mile radius of the Project, with the closest being 2276.53 feet from the Project boundary.<sup>39</sup> Two private cemeteries are located within the Project boundaries and design plans include a 50-foot buffer around each of the cemeteries.<sup>40</sup> There are no schools or healthcare facilities within two miles of the Project's radius.<sup>41</sup> Lost City Renewables asserted that there were no residential neighborhoods found within 2,000 feet of the Project boundary.<sup>42</sup>

<sup>&</sup>lt;sup>34</sup> SAR at 3.

<sup>&</sup>lt;sup>35</sup> SAR at 3.

<sup>&</sup>lt;sup>36</sup> SAR at 4.

<sup>&</sup>lt;sup>37</sup> SAR at 4.

<sup>&</sup>lt;sup>38</sup> SAR, Appendix L, Phase I Environmental Site Assessment, page 6.

<sup>&</sup>lt;sup>39</sup> Lost City Renewable's Response to Staff's First Request, Item 43.

<sup>&</sup>lt;sup>40</sup> Lost City Renewable's Response to Staff's First Request, Item 45.

<sup>&</sup>lt;sup>41</sup> Application at 2.

<sup>&</sup>lt;sup>42</sup> Application at 2.

## Compatibility with Scenic Surroundings

Lost City Renewables indicated that the Project site and surrounding terrain is primarily agricultural, rural residential, and forested.<sup>43</sup> Lost City Renewables stated that it will mitigate the visual impact of the facility by installing vegetative buffers where there is not adequate existing vegetation.<sup>44</sup> Vegetative buffers would be comprised of native vegetation 40-feet thick and at least six feet at maturity in four years.<sup>45</sup> The thickest vegetative screening would be between Project infrastructure and residences, or other occupied structures, with a line of sight to the facility.<sup>46</sup> Elliot reviewed and evaluated the SAR and stated that data and conclusions contained in the SAR complied with the statutory requirements for compatibility with scenic surroundings required by KRS 278.708.<sup>47</sup>

Having reviewed the record, the Siting Board finds that, while there will always be an impact on the scenery of neighboring properties, the impact of this Project will be minimal with the limits and mitigation measures discussed herein. The proposed vegetative buffer, along with other mitigation measures proposed by Lost City Renewables and Elliot, will minimize the majority of the effect that the proposed facility will have on the scenic surroundings of the site. However, the Siting Board finds that additional mitigation measures should be required in addition to those proposed by Lost

<sup>43</sup> SAR at 4.

<sup>&</sup>lt;sup>44</sup> SAR at 4.

<sup>&</sup>lt;sup>45</sup> SAR at 4.

<sup>&</sup>lt;sup>46</sup> SAR at 4.

<sup>&</sup>lt;sup>47</sup> Elliot Report, Attachment A at 6.

City Renewables. Those additional mitigation measures are set forth in Appendix A to this Order.

### Impact on Property Values

Lost City Renewables submitted a property value impact report prepared by Kirkland Appraisals, LLC (Kirkland Report), a certified real estate appraiser.<sup>48</sup> The Kirkland Report found that there was no impact on property value for property adjoining a solar farm with proper setbacks and landscaped buffer.<sup>49</sup> The Kirkland Report analyzed 47 properties adjoining solar farms in and around Kentucky using a matched pair analysis.<sup>50</sup>

The Elliot Report provided a review and analysis by Clark Toleman, MAI, on the Kirkland Report and its findings.<sup>51</sup> Mr. Toleman analyzed the paired sales analysis prepared by the Kirkland Report and determined that there is a strong indicator that proximity to a solar facility has a neutral impact on adjoining property values with proper setbacks and landscaped buffers.<sup>52</sup> Mr. Toleman further stated that the actual setback distances of this Project are greater than the sales data applied in the Kirkland Report's analysis.<sup>53</sup>

Having reviewed the record, the Siting Board finds sufficient evidence to conclude that the proposed Lost City Renewables facility will not have any significant adverse

<sup>&</sup>lt;sup>48</sup> SAR, Appendix A at 1-2.

<sup>&</sup>lt;sup>49</sup> SAR, Appendix A at 1.

<sup>&</sup>lt;sup>50</sup> SAR, Appendix A at 126.

<sup>&</sup>lt;sup>51</sup> Elliot Report, Attachment B.

<sup>&</sup>lt;sup>52</sup> Elliot Report, Attachment B at 10.

<sup>&</sup>lt;sup>53</sup> Elliot Report, Attachment B at 10.

impact on nearby property values so long as proper mitigation measures are implemented. The characteristics of the solar facility's operations are passive, and the facility will be temporary, with the land returned to its natural state after a few decades of operation. Pursuant to the case record, the facility does not produce any air, noise, waste, or water pollution, nor does it create any traffic issues during operation.

#### Anticipated Noise Level

Lost City Renewables' Noise Analysis Report was completed by Copperhead Environmental Consulting (Copperhead).<sup>54</sup> Copperhead used representative noise levels from the U.S. Department of Transportation Federal Highway Administration model.<sup>55</sup> Copperhead stated the estimated maximum noise levels during construction will occur during pile driving, and estimated that at the closest receiver, 340 feet from the closest panel, would have noise levels during pile driving of 67.4 decibels A-weighted scale (dBA).<sup>56</sup> Construction related activity is limited to 7 a.m. to 7 p.m. from Monday through Saturday, with construction activity of a higher noise level, such as pile-driving, limited to 8 a.m. to 5 p.m. Monday through Friday.<sup>57</sup>

Copperhead found operational noise will emanate from inverters and transformers.<sup>58</sup> Based on Copperhead's operational sound modeling the highest sound level at nearby sensitive receptors was 40.9 dBA.<sup>59</sup> Copperhead stated that the Project's

<sup>&</sup>lt;sup>54</sup> Application, Tab 3, Appendix D, Noise Analysis Report.

<sup>&</sup>lt;sup>55</sup> Application, Tab 3, Appendix D, Noise Analysis Report at 10.

<sup>&</sup>lt;sup>56</sup> Application, Tab 3, Appendix D, Noise Analysis Report at 11.

<sup>&</sup>lt;sup>57</sup> Application, Tab 3, Appendix D, Noise Analysis Report at 17.

<sup>&</sup>lt;sup>58</sup> Application, Tab 3, Appendix D, Noise Analysis Report at 14-17.

<sup>&</sup>lt;sup>59</sup> Application, Tab 3, Appendix D, Noise Analysis Report at 15.

generated noise levels for daytime and nighttime operation are estimated to be below the USEPA's recommended protective noise level of 48.6 dBA for 24-hour operation.<sup>60</sup> Copperhead concluded that no one Noise Sensitive Area will be exposed to the same sound levels over an extended period of time, as construction progresses through the site.<sup>61</sup>

Cloverlake Consulting Services (Cloverlake) evaluated the Noise Analysis Report conducted by Copperhead on behalf of the Siting Board and concluded that the Project's construction phase will produce the highest noise levels especially during pile-driving activity.<sup>62</sup> Cloverlake found that the worst-case noise level expected to occur at the nearest receptor during construction, 340 feet away from the closest panel, is 67.4 dBA.<sup>63</sup>

In its SAR, Lost City Renewables detailed various noise mitigation measures, such as limiting construction activity to specific times, noise suppression techniques during construction, and notification of nearby residents concerning the construction schedule, with a clearly outlined complaint resolution process.<sup>64</sup>

The Siting Board finds that noise from the construction phase will be intermittent and temporary but will be significant to the nearest residences. As indicated by Copperhead and Cloverlake the noise will be loudest during the construction phase but temporary. The Siting Board further finds that the operational noise from inverters and

<sup>&</sup>lt;sup>60</sup> Application, Tab 3, Appendix D, Noise Analysis Report at 7.

<sup>&</sup>lt;sup>61</sup> Application, Tab 3, Appendix D, Noise Analysis Report at 18.

<sup>&</sup>lt;sup>62</sup> Cloverlake Consulting Services Environmental Assessment Report (Cloverlake Report) (filed May 12, 2025) at 8.

<sup>63</sup> Cloverlake Report at 8.

<sup>&</sup>lt;sup>64</sup> Application, Tab 3, Appendix D, Noise Analysis Report at 17-18.

the main transformer should have little to no effect on residences in the area. Based on the case record, the Siting Board finds that Lost City Renewables' application is in compliance with the statutory requirements for disclosing noise levels. However, the Siting Board further finds that, based on the entire record, to ensure the impact of construction noise does not unduly impact nearby residents, Lost City Renewables will be required to implement specific mitigation measures to ensure the impact of construction noise does not unduly impact nearby residents. The additional mitigation measures are designed to limit the effects of construction noise by controlling the hours of construction in general, as well as the time and manner pile driving can occur. The Siting Board finds that Lost City Renewables should implement additional measures to mitigate construction noise up to 1,500 feet from noise receptors to ensure the surrounding community is not negatively impacted by the construction noise. Lost City Renewables may forego the additional noise suppression mitigation measures if it employs a panel installation method that does not involve pile driving, so long as the method does not produce noise levels similar to pile driving. These mitigation measures are outlined in Appendix A to this Order, specifically mitigation measures 13 through 15.

# Impact on Roads, Railways, and Fugitive Dust

Construction is anticipated to take 12 to 18 months to complete. 65 The Project will include two access points from KY 949, one from US 431, one from Forgy Mill Road, and one from Mason-Poyner Road. 66 Copperhead stated that access to the Project will be

<sup>65</sup> SAR, Appendix G, Traffic Impact Study at 3.

<sup>&</sup>lt;sup>66</sup> SAR, Appendix G, Traffic Impact Study at 1-2.

primarily via US 431 and KY 949.<sup>67</sup> During peak construction periods, approximately 300-400 workers will access the site via the five available Project entrances.<sup>68</sup> Free Lane will not be used for construction, delivery, or commuting to the Project site.<sup>69</sup> Free Lane will remain for agricultural activities.<sup>70</sup> In order to reduce congestion during peak construction hours, Copperhead proposed utilizing a road use agreement with Muhlenberg County, with special consideration for overweight loads.<sup>71</sup> It may also include use of a flag worker during heavy commuting periods, prioritizing access for local residents.<sup>72</sup> No significant damage to existing roadway infrastructure is expected.<sup>73</sup>

The Siting Board finds that traffic and road congestion issues can be addressed with Lost City Renewables' mitigation measures and mitigation measures set forth in Appendix A to this Order and in particular, mitigation measures 20 through 26.

The Siting Board anticipates some fugitive dust from the construction phase. Copperhead proposed a number of mitigation measures for dust from the construction phase by utilizing best management practices that include applying water to internal roads and planting vegetative buffers along fencerows and property boundaries.<sup>74</sup> Dust will not

<sup>&</sup>lt;sup>67</sup> SAR, Appendix G, Traffic Impact Study at 3.

<sup>&</sup>lt;sup>68</sup> SAR, Appendix G, Traffic Impact Study at 3.

<sup>&</sup>lt;sup>69</sup> SAR, Appendix G, Traffic Impact Study at 4.

<sup>&</sup>lt;sup>70</sup> SAR, Appendix G, Traffic Impact Study at 4.

<sup>&</sup>lt;sup>71</sup> SAR, Appendix G, Traffic Impact Study at 4.

<sup>&</sup>lt;sup>72</sup> SAR, Appendix G, Traffic Impact Study at 4.

<sup>&</sup>lt;sup>73</sup> SAR, Appendix G, Traffic Impact Study at 6.

<sup>&</sup>lt;sup>74</sup> SAR, Appendix G, Traffic Impact Study at 5.

be a factor during the operations phase. The Project will not use railways during construction or operation.<sup>75</sup>

The Siting Board finds that additional mitigation measures are necessary to reduce any potentially harmful effects on the area, which are outlined in Appendix A to this Order. Additionally, to ensure appropriate monitoring of the proposed project the Siting Board finds that Lost City Renewables should inform the Siting Board and the Energy and Environment Cabinet (EEC) of the date construction will commence, 30 days prior, to ensure the proper permits have been obtained and whether proper steps have been taken to comply with the mitigation measures set forth in Appendix A to this Order.

#### II. KRS 278.710(1) Criteria

In addition to the evaluation of the factors addressed in the SAR, the Siting Board considered the below described factors set forth in KRS 278.710(1) in rendering its decision.

#### Economic Impact on Affected Region and the State

Lost City Renewables contracted Consulting Economist Dr. Paul Coomes, Emeritus Professor of Economics from the University of Louisville, to estimate the economic and fiscal impacts of the Lost City Renewables solar project.<sup>76</sup> The developer is expecting to invest nearly \$300 million in the Project.<sup>77</sup> The economic analysis estimates there will be a total of 739 new construction jobs in the county in year one, with

<sup>&</sup>lt;sup>75</sup> SAR, Appendix G, Traffic Impact Study at 7.

<sup>&</sup>lt;sup>76</sup> Application, Attachment G, Economic Analysis at 1.

<sup>&</sup>lt;sup>77</sup> Application, Attachment G, Economic Analysis at 1.

new labor income around \$41 million.<sup>78</sup> The ongoing annual economic impacts from operating the solar farm include several operational and maintenance jobs plus the new lease payments to owners of the land.<sup>79</sup> Additionally, Lost City Renewables anticipates that the Industrial Revenue Bond (IRB) and Payment in Lieu of Taxes (PILOT) agreement would generate payments to the County of approximately \$250,000 - \$300,000 annually over the life of the Project.<sup>80</sup> According to the 2023 property tax bills for the five land parcels at the site, the total real estate property tax payments were \$14,500.<sup>81</sup>

Lost City Renewables estimated that the land use is 59 percent woods and that 350 acres of current agricultural activity is expected to be displaced.<sup>82</sup> The annual economic benefits from the solar farm operation are estimated to more than offset the annual economic losses from reduced agricultural activity in the county.<sup>83</sup> However, the conversion of agricultural land to a solar farm involves some negative economic effects on the regional economy, including the reduction in farming activity, and the effect that has on local suppliers of seed, feed, and fertilizer.<sup>84</sup> Since farming is a seasonal activity historical data reveal that net farm income is negative in many years.<sup>85</sup>

<sup>&</sup>lt;sup>78</sup> Application, Attachment G, Economic Analysis at 1.

<sup>&</sup>lt;sup>79</sup> Application, Attachment G, Economic Analysis at 1.

<sup>80</sup> Application, Attachment G, Economic Analysis at 2.

<sup>81</sup> Application, Attachment G, Economic Analysis at 1.

<sup>82</sup> Application, Attachment G, Economic Analysis at 2.

<sup>83</sup> Application, Attachment G, Economic Analysis at 12.

<sup>84</sup> Application, Attachment G, Economic Analysis at 16.

<sup>85</sup> Application, Attachment G, Economic Analysis at 16.

The analysis in the Application states that land purchased and leased for the site would generate more in property taxes than under its current use.<sup>86</sup> It is estimated that over 40 years the state of Kentucky would receive \$10.2 million in tax revenue and local jurisdictions would receive \$11.7 million.<sup>87</sup>

Muhlenberg County's population has fluctuated around 31,000 for the past three decades with a surge in population in the 1970s due to the local coal industry.<sup>88</sup> Coal mining accounted for 54 percent of all labor in 1975 and fell to around 6 percent in 2022.<sup>89</sup> Almost all the materials used to assemble a solar farm are made outside the county; thus there is little impact locally in manufacturing.<sup>90</sup> Jobs created in the first year of the Project include occupations such as construction managers, earth grader operators, panel installers, electricians, and fencers.<sup>91</sup> The national average annual wage in 2022 for "Solar Photovoltaic Installer" was \$47,970.<sup>92</sup> Assuming an average of \$50,000 per construction job over a year leads to a direct payroll of \$30 million to the county.<sup>93</sup> Lost City Renewables expects operations to support several ongoing jobs.<sup>94</sup> A California study found a ratio of 31.3 MW per permanent operations job.<sup>95</sup> Applied to the Muhlenberg

<sup>&</sup>lt;sup>86</sup> Application, Attachment G, Economic Analysis at 13.

<sup>&</sup>lt;sup>87</sup> Application, Attachment G, Economic Analysis at 13.

<sup>&</sup>lt;sup>88</sup> Application, Attachment G, Economic Analysis at 3.

<sup>89</sup> Application, Attachment G, Economic Analysis at 5.

<sup>&</sup>lt;sup>90</sup> Application, Attachment G, Economic Analysis at 7.

<sup>&</sup>lt;sup>91</sup> Application, Attachment G, Economic Analysis at 9.

<sup>&</sup>lt;sup>92</sup> Application, Attachment G, Economic Analysis at 9.

<sup>93</sup> Application, Attachment G, Economic Analysis at 10.

<sup>&</sup>lt;sup>94</sup> Application, Attachment G, Economic Analysis at 1.

<sup>95</sup> Application, Attachment G, Economic Analysis at 12.

County Project, this results in an estimate of eight permanent operational jobs at the site.<sup>96</sup> Looking out over three decades, and including the impacts of construction, there is a net gain of 839 job years and \$44.9 million in labor income to the county.<sup>97</sup>

Mark Watters of Watters Unclaimed Property Consulting LLC, as contracted by Elliot Engineering, evaluated the economic impact of the Project. Watters concluded that, based upon the information presented by the economic analysis, the Project will provide a positive, significant, economic impact for the Commonwealth of Kentucky and Muhlenberg County. 99

The Siting Board finds that the proposed Project has a net positive economic impact on the affected region and the state.

#### **Existence of Other Generating Facilities**

Lost City Renewables stated that it could not feasibly co-locate with existing generating facilities.<sup>100</sup> Lost City Renewables will instead interconnect to an existing substation and transmission line owned by TVA.<sup>101</sup> The transmission line application is being addressed in a separate administrative case.<sup>102</sup>

<sup>&</sup>lt;sup>96</sup> Application, Attachment G, Economic Analysis at 12.

<sup>&</sup>lt;sup>97</sup> Application, Attachment G, Economic Analysis at 24.

<sup>98</sup> Elliot Report, Attachment C, Economic Impact Assessment.

<sup>99</sup> Elliot Report, Attachment C, Economic Impact Assessment at 2.

<sup>&</sup>lt;sup>100</sup> Application at 9.

<sup>&</sup>lt;sup>101</sup> Application at 9.

<sup>&</sup>lt;sup>102</sup> Case No. 2025-00030, Electronic Application of Lost City Renewables LLC for a Certificate of Construction for a 161 kV Nonregulated Electric Transmission Line up to Approximately 10.5 miles in Length in Muhlenberg and Logan Counties, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110.

#### Local Planning and Zoning Requirements

Muhlenberg County has a planning and zoning commission but does not have any regulations applicable to the Project location. The statutory requirements of KRS 278.704(2) apply unless a deviation is applied for and granted by the Siting Board. KRS 278.704(2) requires that all proposed structures or facilities used for generation of electricity must be 2,000 feet from any residential neighborhood, school, hospital, or nursing home facility. Lost City Renewables contends that the Project in this case will not be closer than 2,000 feet to any residential neighborhood, school, hospital, or nursing home facility, and therefore, Lost City Renewables is not seeking a deviation from the setback requirements of KRS 278.704(2). 104

#### Impact on Transmission System

Lost City Renewables plans to connect to TVA's Lost City substation via a 10.8 mile, 161 kV transmission line. Lost City Renewables will construct an on-site transformer station that will step up the voltage of the power generated by the solar facility to 161 kV. Compliance with Setback Requirements

Muhlenberg County has a planning and zoning commission but does not have any regulations applicable to the Project location.<sup>107</sup> The statutory requirements of KRS 278.704(2) require that all proposed structures or facilities used for electric generation be setback by at least 2,000 feet from any residential neighborhood, school,

<sup>&</sup>lt;sup>103</sup> Application at 4.

<sup>&</sup>lt;sup>104</sup> Application at 5.

<sup>&</sup>lt;sup>105</sup> Application at 11.

<sup>&</sup>lt;sup>106</sup> Application at 11.

<sup>&</sup>lt;sup>107</sup> Application at 4.

hospital, or nursing home facility. 108 KRS 278.700(6) defines "residential neighborhood" as a populated area of five or more acres containing at least one residential structure per acre. 109 If requested, KRS 278.704(4) authorizes the Siting Board to grant a deviation from the setback requirements in KRS 278.704(2). 110 However, Lost City Renewables asserted that it is not proposing to build any Project components within 2,000 feet of any residential neighborhood, school, hospital, or nursing home facility so no deviation is required. 111

To support its residential neighborhood assertion, Lost City Renewables relies on a "parcel standard" in analyzing whether there are residential neighborhoods near the Project site. Using this method, Lost City Renewables identified contiguous parcels with residential structures, added up the acreage of the relevant parcels, and then compared the number of residential structures to the total acreage to determine whether there is at least one residential structure per acre on five or more acres. In their post hearing brief, Intervenors argued that Lost City Renewables' reliance on "parcels" is not supported by the statutory language and unfairly prejudices rural areas that have lower population density.

<sup>&</sup>lt;sup>108</sup> KRS 278.704(2).

<sup>109</sup> KRS 278.700(6).

<sup>&</sup>lt;sup>110</sup> KRS 278.704(4).

<sup>&</sup>lt;sup>111</sup> Application at 5.

<sup>&</sup>lt;sup>112</sup> Lost City Renewable's Response to Siting Board Staff's Second Request for Information (Staff's Second Request) (filed Apr. 28, 2025), Item 19.

<sup>&</sup>lt;sup>113</sup> Lost City Renewable's Response to Staff's Second Request, Item 19.

<sup>&</sup>lt;sup>114</sup> Post Hearing Brief of Intervenors (filed June 27, 2025) at 8.

any five-acre area, not just those limited by parcels.<sup>115</sup> In support of their brief, Intervenors filed map images of nine neighborhoods identified based on areas that did not strictly adhere to parcel boundaries.<sup>116</sup>

Lost City Renewables argued that the Intervenors' standard can be arbitrarily applied and is easily manipulated to create desired outcomes. In analyzing the residential neighborhoods identified by the Intervenors, Lost City Renewables stated that Intervenors exclude the entirety of some lots, narrowing and expanding as necessary to capture residential structures in a way that is not logical or consistent. Lost City Renewables therefore requests that the Siting Board apply a standard based on the entire parcel of the relevant properties. In the alternative, if the Siting Board identifies additional neighborhoods within 2,000 feet of the Project site, Lost City Renewables requests a deviation from the statutory setback requirement as authorized by KRS 278.704(4).

In interpreting statutes, the goal is to carry out the intent of the legislature.<sup>119</sup> Statutes are to be given a literal interpretation unless they are ambiguous.<sup>120</sup> We should look to "the common meaning of the particular words chosen, which meaning is often determined by reference to dictionary definitions."<sup>121</sup> However, dictionary definitions are

<sup>&</sup>lt;sup>115</sup> Post Hearing Brief of Intervenors at 8.

<sup>&</sup>lt;sup>116</sup> Post Hearing Brief of Intervenors, Attachment 1.

<sup>&</sup>lt;sup>117</sup> Post Hearing Reply Brief of Lost City Renewables (filed July 3, 2025) at 9.

<sup>&</sup>lt;sup>118</sup> Post Hearing Reply Brief of Lost City Renewables at 10.

<sup>&</sup>lt;sup>119</sup> Mr. Roof of Louisville, LLC, 681 S.W.3d at 121 (Ky. 2023); Commonwealth v. Plowman, 86 S.W.3d 47, 49 (Ky. 2002); see also KRS 446.080(1)("All statutes of this state shall be liberally construed with a view to promote their objects and carry out the intent of the legislature.").

<sup>&</sup>lt;sup>120</sup> Commonwealth v. Plowman, 86 S.W.3d at 49.

<sup>&</sup>lt;sup>121</sup> Jefferson Cnty. Bd. of Educ. v. Fell, 391 S.W.3d 713, 719 (Ky. 2012) citing KRS 446.080(4).

not necessarily conclusive and legislative intent is the guiding principle.<sup>122</sup> Further, "technical words and phrases, and such others as may have acquired a peculiar and appropriate meaning in the law, shall be construed according to such meaning." KRS 446.080(4). A particular word, sentence, or subsection under review should be viewed in context with the legislative act when determining the legislative intent.<sup>123</sup>

Here, the relevant statutory language defines a "residential neighborhood" as "a populated area of five or more acres containing at least one residential structure per acre." As indicated above, the dispute between Lost City Renewables and Intervenors arises from different interpretations of the phrase "a populated area" as used in the statute to define residential neighborhoods. Lost City Renewables indicates, in relevant part, that the "populated area" must be based on the entirety of the size of any parcel on which a residential structure is located. Conversely, Intervenors interpret the relevant language as encompassing any area of five acres or more, regardless of parcel boundaries, with at least one residential structure per acre. However, the crux of the dispute between Lost City Renewables and Intervenors is whether the Siting Board must include all property within the boundaries of a parcel on which a residential structure is located when determining the scope of "a populated area" used to identify a "residential neighborhood." For the reasons discussed below, the Sitting Board finds that KRS 278.700(6) does not require the use of parcel boundaries in that way.

As an initial matter, the Siting Board finds that the phrase "a populated area," as used in the definition of "residential neighborhood," is ambiguous. A "populated area" is

<sup>&</sup>lt;sup>122</sup> Commonwealth v. Plowman, 86 S.W.3d at 49.

<sup>&</sup>lt;sup>123</sup> See Jefferson Cnty. Bd. of Educ. v. Fell, 391 S.W.3d at 719.

not defined in KRS 278.700 or in related statutes, and it is not a technical word or phrase. Area is defined in dictionaries as "any particular extent of space or surface;" "the surface included within a set of lines;" and "a particular part of a place, piece of land, or country." "124 "Populated" is defined as "(of a place) having people living there;" and "inhabited by the people or in the manner mentioned." Those definitions provide a broad common meaning that can accommodate either Lost City Renewables' or Intervenors' definition of "a populated area." However, looking at the definition and use of residential neighborhoods within the broader context of KRS 278.700, et. seq., it does not appear that the legislature intended for "a populated area" making up a neighborhood to be defined as proposed by Applicants.

First, there are instances in KRS 278.700, *et. seq.*, in which the legislature did use property boundaries when establishing or discussing setback requirements, <sup>126</sup> which would tend to indicate that the legislature's decision not to use property boundaries when defining residential neighborhoods was intentional. Further, the 2,000-foot setback applicable to residential neighborhoods also applies to other items for which the distance would not be measured based on property lines, including "any . . . school, hospital, or nursing home facility," which raises questions regarding why the distance to a

<sup>&</sup>lt;sup>124</sup> *Area*, Merriam-Webster < <u>AREA Definition & Meaning - Merriam-Webster</u>> (Accessed July 25, 2025); *Area*, Cambridge Dictionary < <u>AREA | English meaning - Cambridge Dictionary</u>> (Accessed July 25, 2025); and *Area*, Dictionary.com < <u>AREA Definition & Meaning | Dictionary.com</u>> (Accessed July 25, 2025).

Populated, Cambridge Dictionary <a href="https://dictionary.cambridge.org/us/dictionary/english/">https://dictionary.cambridge.org/us/dictionary/english/</a> populated> (Accessed July 24, 2025); Populated, Collins Dictionary <a href="https://www.collinsdictionary.com/us/dictionary/english/">https://www.collinsdictionary/english/</a> /us/dictionary/english/populated (Accessed July 24, 2025).

<sup>&</sup>lt;sup>126</sup> See e.g., KRS 278.704(2) (requires "the exhaust stack of the proposed facility and any wind turbine is at least one thousand (1,000) feet from the property boundary of any adjoining property owner").

<sup>&</sup>lt;sup>127</sup> KRS 278.704(2).

residential neighborhood would be based on property boundaries. Most importantly though, the Siting Board finds that the overall purpose and intent of KRS 278.700, *et. seq.*, weighs against Applicant's interpretation of the definition of residential neighborhoods.

KRS 278.700(6) provides a definition of "residential neighborhood" applicable in interpreting the phrase in KRS 278.700 through KRS 278.716. KRS 278.704 establishes decommissioning practices and setback requirements for merchant electric generating facilities, including the 2,000-foot setback from residential neighborhoods found in KRS 278.704(2). KRS 278.710 establishes the factors the Siting Board is to consider in granting or denying an application for a construction certificate. Among the considerations are "the impact of the facility on scenic surroundings, property values, the pattern and type of development of adjacent property, and surrounding roads," and whether the applicant complies with all applicable local ordinances concerning setback requirements, or the statutory setback requirements found in KRS 278.704 where there are no superseding local ordinances. 128 Based on those and other provisions of KRS 278.700, et. seq., the Siting Board finds the primary purpose or intent of the legislature in adopting this regulatory scheme was to protect property owners from potentially negative effects of electric generation siting, including scenic surroundings and property values, and that the statutory definitions at issue should be liberally construed to effectuate this intent.

Strict adherence to property boundaries as proposed by Applicant could achieve absurd results that would not be consistent with the intent of the legislature in adopting

<sup>&</sup>lt;sup>128</sup> KRS 278.710(1)(a) and (1)(g).

this regulatory scheme. For example, tight clusters of homes that would meet the commonly understood meaning of neighborhood may be excluded from the statutory definition if one or more of the parcels included acreage extending away from an otherwise densely populated area. Further, while the Sitting Board acknowledges that there is a risk of absurd results by not relying on property boundaries, as alleged by Applicants, the Sitting Board finds that such absurd results can be avoided through a fact specific analysis of a designated area to determine whether it is reasonable, including consideration of parcel boundaries, the character of the parcels and area, and other relevant factors. Thus, the Sitting Board finds that the legislature did not intend for the definition of "residential neighborhoods" to be based on parcel boundaries, but rather, finds that the legislature intended to protect any populated areas, which may include any contiguous area so long as it is reasonable in shape.

In the instant case, Lost City Renewables' application of a "parcel standard" is so limited that it appears to undermine the statutory intent of the chapter, and in contrast, Intervenors' more liberal construction appears to effectuate the statutory intent, with some exceptions. Specifically, in analyzing residential neighborhoods proposed by Intervenors, the Siting Board finds that Image 9 in the Attachment to Intervenors' brief depicts an area that is unreasonably disparate and spread out to meet the definition of a "residential neighborhood," though parts included in other images discussed below do meet the definition as well as parts that are in a residential neighborhood identified by applicants. 129

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<sup>&</sup>lt;sup>129</sup> Post Hearing Brief of Intervenors, Attachment 1. Notably, the part on the far left of this image is a relatively large residential neighborhood identified by Lost City Renewables. Intervenors extended off that to connect with over areas with more densely populated houses that are not reasonably connected to those in the neighborhood identified by Lost City Renewables.

Similarly, Image 8 includes relevant portions of Image 4 and 6, and is therefore not a 'residential neighborhood,' but rather, a combination of component neighborhoods. 130 The Siting Board finds that the statutory setback applicable to residential neighborhoods found in KRS 278.704(2) is not applicable to the areas identified in Images 8 and 9. Each of the remaining neighborhoods identified by Intervenors has sufficient proximity and density, whether clustered or linear, to meet a standard of 'neighborhood' as identified above. Image 5, for example, shows a number of residential structures clustered in a manner that would indicate a common populated area and neighborhood under any common understanding. However, to the extent that any of the images actually include a residence of a participating landowner, that particular residential structure shall be granted a full deviation from the statutory requirements, and any applicable neighborhood setback shall be applied to the nearest residential structure of a non-participating landowner. The remaining Images 1-7 are found to be 'residential neighborhoods' based on the statutory definition found in KRS 278.700(6), and therefore the statutory setback of 2,000-feet is applicable.

However, while arguing that the areas identified by Intervenors were not residential neighborhoods, Lost City Renewables requested in the alternative that the Sitting Board grant it deviations from the setback requirements pursuant to KRS 278.704(4) if the Board found that the areas were neighborhoods. KRS 278.704(4) allows the Board to grant a deviation on a finding that the proposed facility is designed to and as located, would meet the goals of KRS 224.10-280, 278.010, 278.212, 278.214, 278.216, 278.218, and

<sup>130</sup> Post Hearing Brief of Intervenors, Attachment 1.

278.700 to 278.716 at a distance closer than those provided in subsection (2) of this section.

Notably, KRS 278.010 is the general definitions statute for KRS Chapter 278, KRS 278.212 pertains to the allocation of costs for transmission upgrades for interconnection by merchant generators, and KRS 278.218 governs transfers in utility property, such that the setback requirements would have limited effect on the goals of those statutes. Conversely, the goals of KRS 224.10-280, KRS 278.216, and KRS 278.700 to 278.716, which, as discussed above, look at the effects of the generation on nearby properties and the environmental effect of the generation, are the most relevant to this determination. KRS 278.214 governs the order in which service should be interrupted in the event of an emergency and generally requires that service be interrupted to customers outside of a utility's certified territory before it is interrupted inside a utility's certified territory, such that its application would not generally be affected by setback requirements for a merchant generator.

For the reasons discussed in more detail above, the Siting Board finds that Lost City Renewables motion for a deviation should be granted, in part, and denied in part, thus granting a partial deviation from the statutory setback requirements for the additional residential neighborhoods identified herein pursuant to KRS 278.704(4). Specifically, the Board finds that no electric generating facilities shall be within 1,000 feet of the identified neighborhoods, as measured by distance from the nearest non-participating residential structure within that neighborhood to any generating equipment, unless the owner of a residential structure otherwise agrees to closer placement, in which case such placement would be permitted, subject to any other commitments or mitigation measures herein.

Lost City Renewables has stated that the nearest solar panel to a residential structure is 339 feet, <sup>131</sup> the nearest residential structure to the Project boundary is 64 feet, the nearest residential structure to an inverter is 659 feet, and the nearest residential structure to the substation is 1,356 feet. <sup>132</sup> The Siting Board's Consultant recommended at least a 100 feet setback from all occupied structures, 25 feet from non-participating parcels, 450 feet from central inverters to all occupied structures, and 50 feet from edge of road pavement. <sup>133</sup> Considering Lost City Renewables' planned setbacks and setbacks recommended by Elliot, the Siting Board finds that no solar panel or string inverter, if used, shall be within 100 feet from a residential structure, 25 feet from non-participating adjoining parcels, and 50 feet from adjacent roadways. Lost City Renewables shall not place a central inverter and, if used, energy storage systems, closer than 450 feet from any adjacent residences, church, or school. Exceptions to these setbacks for participating landowners are included in Appendix A.

The Siting Board finds, given the totality of the mitigation measures proposed by Lost City Renewables, the nature of the surrounding property, and the mitigation measures the Siting Board has imposed in Appendix A, the statutory purposes are met by the Project.

### History of Environmental Compliance

In its application, Lost City Renewables states that neither it, nor anyone with an ownership interest in it, has violated any environmental laws, rules, or administrative

<sup>&</sup>lt;sup>131</sup> Post Hearing Brief of Lost City Renewables (filed Jun. 27, 2025) at 18

<sup>&</sup>lt;sup>132</sup> Lost City Renewable's Response to Staff's First Request, Item 35.

<sup>133</sup> Elliot Report at 47.

regulations that resulted in criminal confiscation, or a fine greater than \$5,000.<sup>134</sup> Further, Lost City Renewables is not the subject of any pending judicial or administrative actions.<sup>135</sup>

#### Decommissioning

Lost City Renewables submitted a decommissioning plan with the application.<sup>136</sup> The decommissioning plan includes provisions to remove all underground components, regardless of depth.<sup>137</sup> Lost City Renewables indicated it will secure a bond to assure financial performance of the decommissioning obligation.<sup>138</sup> The surety bond will be 100 percent of the net decommissioning cost.<sup>139</sup>

The Siting Board finds that Lost City Renewables must return the land to its original use, to the extent possible, at the end of the Project's life. Returning the land back to its original state and use after decades of operation is a material element of the Siting Board's finding regarding the impact of the facilities on scenic surroundings, property values, and the economy. The relatively "temporary" nature of the facilities compared to other types of more permanent development, such as thermal merchant generation facilities, industrial operations, or housing, is a prime consideration of the Siting Board in granting a certificate, with conditions, on this matter. An inability or unwillingness to return the land back to its prior state after the life of the facility, including leaving underground

<sup>&</sup>lt;sup>134</sup> Application at 13.

<sup>&</sup>lt;sup>135</sup> Application at 13.

<sup>&</sup>lt;sup>136</sup> Application, Attachment H, Decommissioning Plan.

<sup>&</sup>lt;sup>137</sup> Application, Attachment H, Decommissioning Plan at 4.

<sup>&</sup>lt;sup>138</sup> Application, Attachment H, Decommissioning Plan at 10.

<sup>&</sup>lt;sup>139</sup> Application, Attachment H, Decommissioning Plan at 10.

facilities in excess of three feet, increases the permanence of the facility. As such, the Siting Board finds that Lost City Renewables should remove all facility components, both above and below ground, and regrade and recompact the soil in a manner appropriate for agricultural use. Removal of all underground components and regrading or recompacting the soil for agricultural use will mitigate any damage to the land, thus returning the land to a state that provides at least as great of an economic impact as it does today. The Siting Board finds that Lost City Renewables should also implement additional mitigation measures related to decommissioning, which are outlined in Appendix A to this Order, mitigation measures 30 through 34.

#### **CONCLUSION**

After carefully considering the criteria outlined in KRS Chapter 278, the Siting Board finds that Lost City Renewables has presented sufficient evidence to support the issuance of a Construction Certificate to construct the proposed merchant solar facility. The Siting Board conditions its approval upon the full implementation of all mitigation measures and other requirements 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. Lost City Renewables' application for a Construction Certificate to construct an approximately 250 MW merchant solar electric generating facility in Muhlenberg County, Kentucky, is conditionally granted subject to full compliance with this Order, including the mitigation measures and conditions prescribed in Appendix A.
  - 2. Lost City Renewables' motion for a deviation from KRS 278.704(2),

concerning setbacks from residential neighborhoods, is granted in part and denied in part. Specifically, a deviation is granted from KRS 278.704(2) for any additional residential neighborhood identified herein allowing the placement of electric generating equipment within 1,000 feet of any residential structure within any residential neighborhood identified in this Order and allowing closer placement to any residential structure of a participating land owner and, subject to any other commitments or mitigations measures herein, upon agreement of the owner of the residential structure.

- 3. Lost City Renewables shall fully comply with the mitigation measures and conditions prescribed in Appendix A to this Order.
- 4. In the event mitigation measures within the body of this Order conflict with those prescribed in Appendix A to this Order, the measures in Appendix A shall control.
  - 5. This case is closed and removed from the commission's docket.

	KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING
	Chairman, Public Service Commission
	Commissioner, Public Service Commission
	Commissioner Public Service Commission
	Secretary, Energy and Environment Cabinet, or her designee
10 25 in	Secretary, Cabinet for Economic Development, or his designee
y Con	Judge Executive of Muhlenberg County Mack McGehee, ad hoc member

ATTEST:

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

ENTERED

JUL 28 2028

jdc

KENTUCKY PUBLIC
SERVICE COMMISSION

#### APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE NO. 2024-00406 DATED JUL 28 2025

#### MITIGATION MEASURES AND CONDITIONS IMPOSED

The following mitigation measures and conditions are hereby imposed on Lost City Renewables LLC (Lost City Renewables) 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 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, transmission line route, or other Project facilities and infrastructure.
- 2. Any change in the Project boundaries from the information that formed this evaluation shall be submitted to the Siting Board for review.
- 3. The Siting Board will determine whether any deviation in the boundaries or site layout plan is likely to create a materially different pattern or magnitude of impacts.
- 4. Prior to construction, Lost City Renewables shall provide a finalized Emergency Response Plan to the local fire district, first responders, and any county emergency management agency. Lost City Renewables shall provide site-specific training for local emergency responders at their request. Access for fire and emergency units shall be set up after consultation with local authorities.

- 5. Lost City Renewables 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.
- 6. Lost City Renewables' access control strategy shall also include appropriate signage to warn potential trespassers. Lost City Renewables must ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the public, local residents, and business owners.
- 7. The security fence must be installed prior to activation of any electrical installation work in accordance with National Electrical Safety Code (NESC) standards. The substation shall have its own separate security fence and locked access installed in accordance with NESC standards.
- 8. 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. Lost City Renewables will not remove any existing vegetation except to the extent it must remove such vegetation for the construction and operation of Project components.
- 9. Lost City Renewables shall implement planting of native evergreen species as a visual buffer to mitigate visual viewshed impacts, in areas where those viewshed impacts occur from residences or roadways directly adjacent to the Project and there is not adequate existing vegetation. If it is not adequate, then vegetation ten feet thick reaching six feet at maturity (in four years) will be added by Lost City Renewables 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. Planting of vegetative buffers may be done over the construction period; however, Lost City Renewables should prioritize vegetative planting at all periods of construction to reduce viewshed impacts. All planting shall be done prior to the operation of the facility.

- 10. Lost City Renewables shall cultivate at least two acres of native, pollinator-friendly species onsite.
- 11. Lost City Renewables shall carry out visual screening consistent with the plan proposed in its application, SAR, and the maps included, and ensure that the proposed new vegetative buffers are successfully established and developed as expected over time. Should vegetation used as buffers die over time, Lost City Renewables shall replace plantings as necessary.
- 12. To the extent that an affected adjacent property owner indicates to Lost City Renewables that a visual buffer is not necessary, Lost City Renewables will obtain that property owner's written consent and submit such consent in writing to the Siting Board.
- 13. Lost City Renewables is required to limit construction activity, process, and deliveries to the hours between 8 a.m. and 6 p.m. local time, Monday through Saturday. The Siting Board directs that construction activities that create a higher level of noise, such as pile-driving, will be limited to 9 a.m. to 5 p.m. local time, Monday through Friday. Non-noise causing and non-construction activities can take place on the site between 7 a.m. and 10 p.m. local time, Monday through Sunday, including field visits, arrival, departure, planning, meetings, mowing, surveying, etc.
- 14. If the pile-driving activity occurs within 1,500 feet of a noise-sensitive receptor, Lost City Renewables 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). Lost City Renewables can forego using noise suppression measures if it employs a panel installation method that does not use pile driving, so long as that method does not create noise levels similar to pile driving.

- 15. Lost City Renewables shall notify residents and businesses within 2,400 feet of the Project boundary about the construction plan, the noise potential, any mitigation plans, and its Complaint Resolution Program referred to in Item 32 of this Appendix, at least one month prior to the start of construction.
- 16. Lost City Renewables shall place panels, inverters, and substation equipment consistent with the distances to noise receptors to which it has committed in its maps and site plans. The Siting Board finds it necessary to implement a setback from residences of 100 feet from any panel or string inverter. The Siting Board also approves a distance of 1,000 feet between any solar panel or string inverter and any residential neighborhood and 25 feet from any exterior property line. Lost City Renewables shall apply the requisite setbacks from residential neighborhoods identified in this Order. Nevertheless, Lost City Renewables 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, or 50 feet from adjacent roadways. Lost City Renewables shall not place a central inverter, and if used, energy storage systems, closer than 450 feet from any adjacent residences, church, or school. These further 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 the setbacks otherwise required herein. All agreements by participating landowners to lesser setbacks must be filed with the Siting Board prior to commencement of the Project.

- 17. Lost City Renewables shall fix or pay for repairs for damage to roads and bridges resulting from any vehicle transport to the site. For damage resulting from vehicle transport in accordance with all permits, those permits will control.
- 18. Lost City Renewables shall comply with all laws and regulations regarding the use of roadways.
- 19. Lost City Renewables 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 traffic delays during AM and PM peak hours.
- 20. Lost City Renewables shall consult with the Kentucky Transportation Cabinet (KYTC) regarding truck and other construction traffic and obtain necessary permits from the KYTC.
- 21. Lost City Renewables shall consult with the Muhlenberg County Road Department (Muhlenberg Road Department) regarding truck and other construction traffic and obtain any necessary permits from the Muhlenberg Road Department.
- 22. Lost City Renewables shall develop special plans and obtain necessary permits before transporting heavy loads, especially the substation transformer, onto state or county roads.

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23. Lost City Renewables shall comply with any road use agreement executed with the Muhlenberg Road Department. Such an agreement might include special considerations for overweight loads, routes utilized by heavy trucks, road weight limits,

and bridge weight limits.

- 24. Lost City Renewables shall develop and implement a traffic management plan to minimize the impact on traffic flow and keep traffic safe. Any such traffic management plan shall also identify any traffic-related noise concerns during the construction phase and develop measures that would address those noise concerns.
- 25. Lost City Renewables shall properly maintain construction equipment and follow best management practices related to fugitive dust throughout the construction process, including the use of water trucks. Dust impacts shall be kept at a minimal level. The Siting Board requires Lost City Renewables' compliance with 401 KAR 63:010.
- 26. 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, Lost City Renewables or its successors or assigns shall request explicit approval from the Siting Board with notice of the request provided to the Muhlenberg County Fiscal Court. In any application requesting such abandonment, sale, or change of control, Lost City Renewables shall certify its compliance with KRS 278.710(1)(i).
- 27. As applicable to individual lease agreements, Lost City Renewables, 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.
- 28. Lost City Renewables shall file a complete and explicit decommissioning plan with the Siting Board. This plan shall commit Lost City Renewables to remove 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 before the construction of the Project.

29. Lost City Renewables shall file a bond with the Muhlenberg County Fiscal Court, equal to the amount necessary to effectuate the explicit or formal decommissioning plan naming Muhlenberg County as a third-party oblique (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 Muhlenberg County will have the authority to draw upon the bond to effectuate the decommissioning plan. For land with no bonding requirement otherwise, Muhlenberg County shall be the primary beneficiary of the decommissioning bond for that portion of the Project. The bond shall be filed with the Muhlenberg 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 with an entity other than the Fiscal Court, through the Muhlenberg 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 Lost City Renewables' 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 Muhlenberg County Fiscal Court. Such certificate shall be by letter and shall

include the current amount of the anticipated bond and any change in the costs of removal or decommissioning.

- 30. Lost City Renewables or its assigns shall provide notice to the Siting Board, if, during any two-year (730 days) period, it replaces more than 20 percent of its facilities. Lost City Renewables shall commit to removing the debris and replaced facility components from the Project site and from Muhlenberg County upon replacement. If the replaced components are properly disposed of at a permitted facility, they do not have to be physically removed from Muhlenberg County. However, if the replaced facility components remain in the County, Lost City Renewables must inform the Siting Board of the location where the components are being disposed.
- 31. Any disposal or recycling of Project equipment, during operations or decommissioning, shall be done in accordance with applicable laws and requirements.
- 32. Lost City Renewables shall initiate and maintain the Complaint Resolution Program provided to the Siting Board in the case record to address any complaints from community members. Lost City Renewables shall also submit annually a status report associated with its Complaint Resolution Program, providing, among other things, the individual complaints, how Lost City Renewables addressed those complaints, and the ultimate resolution of those complaints identifying whether the resolution was to the complainant's satisfaction.
- 33. Lost City Renewables shall provide the Muhlenberg County Planning & Development Commission contact information for individuals within the company that can be contacted with concerns. This shall include contact information for the general public

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to reach individuals that can address their concerns. Lost City Renewables shall update this contact information yearly, or within 30 days of any change in contact information.

34. Within 30 days of service of this Order, Lost City Renewables shall send a copy of this Order to all the adjoining landowners who previously were required to receive notice of this Project.

## APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE NO. 2024-00406 DATED JUL 28 2025

NINE PAGES TO FOLLOW

## ATTACHMENT 1

lmage #1



Image #2



## Image #3



Image #4

Image #5

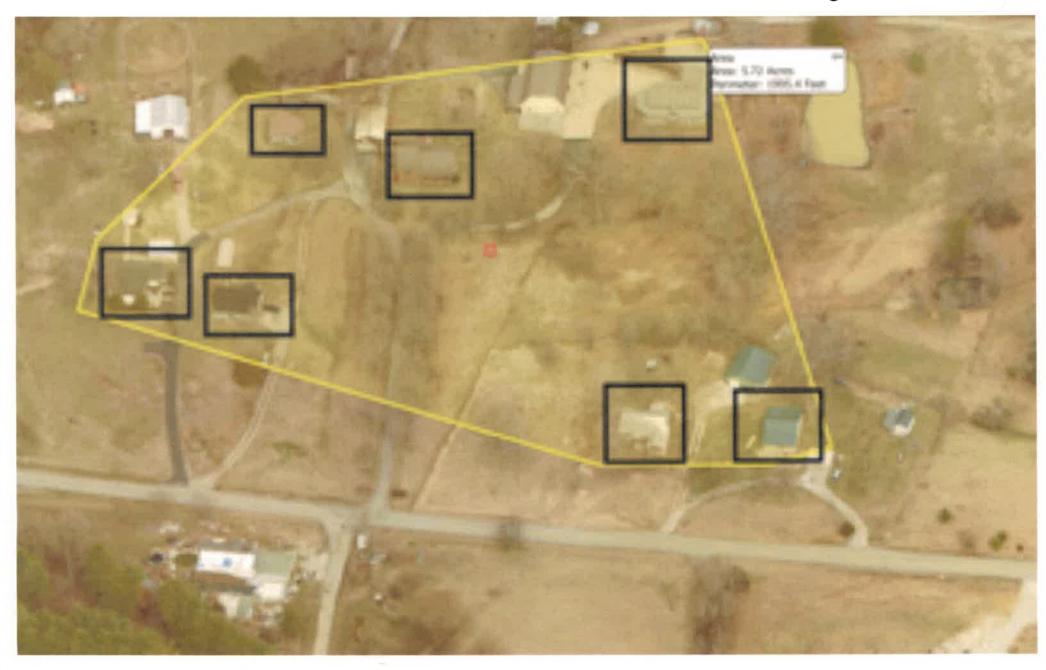


Image #6



Image #7

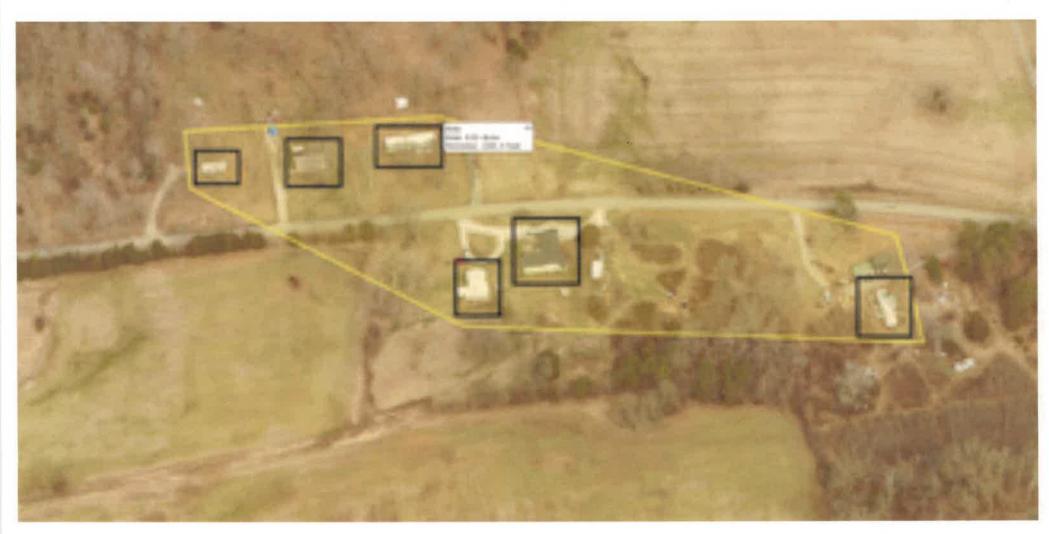




Image #9



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