## COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

# In the Matter of:

ELECTRONIC APPLICATION OF EAST	)	
KENTUCKY POWER COOPERATIVE, INC. FOR A	)	
CERTIFICATES OF PUBLIC CONVENIENCE AND	)	
NECESSITY AND SITE COMPATIBILITY	)	
CERTIFICATES FOR THE CONSTRUCTION OF A	)	
96 MW (NOMINAL) SOLAR FACILITY IN MARION	)	CASE NO.
COUNTY, KENTUCKY, AND A 40 MW (NOMINAL)	)	2024-00129
SOLAR FACILITY IN FAYETTE COUNTY,	)	
KENTUCKY AND APPROVAL OF CERTAIN	)	
ASSUMPTIONS OF EVIDENCES OF	)	
INDEBTEDNESS RELATED TO THE SOLAR	)	
FACILITIES AND OTHER RELIEF	)	

# <u>ORDER</u>

On April 26, 2024, East Kentucky Power Cooperative, Inc. (EKPC) filed an application seeking (1) two Certificates of Public Convenience and Necessity (CPCNs) for construction of two separate solar power facilities pursuant to KRS 278.020, (2) approval of assumption of leases for the property on which one of the solar facilities is planned to be built pursuant to KRS 278.300, and (3) two Site Compatibility Certificates (SCCs) for siting of the two proposed facilities pursuant to KRS 278.216.

The Commission granted intervention to Lexington-Fayette Urban County Government (LFUCG) and Fayette Alliance, Inc. (Fayette Alliance).<sup>1</sup> EKPC responded to three data requests from Commission Staff and two each from LFUCG and Fayette

<sup>&</sup>lt;sup>1</sup> Order (Ky. PSC May 28, 2024) at 3, Order (Ky. PSC June 6, 2024) at 3.

Alliance.<sup>2</sup> Neither LFUCG nor Fayette Alliance filed any testimony. LFUCG and Fayette Alliance filed a joint motion for a hearing which was granted by Order issued September 10, 2024. A public hearing was held on October 29, 2024. At the public hearing, LFUCG made an oral motion to hold the case in abeyance, which was denied.<sup>3</sup> Multiple public comments were received concerning the proposed facilities during and prior to the public hearing, and the majority of comments were regarding the proposed facility in Fayette County.<sup>4</sup> EKPC responded to post-hearing data requests submitted by Commission Staff.<sup>5</sup> All three of the parties filed briefs and reply briefs.<sup>6</sup>

#### LEGAL STANDARD

No utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission.<sup>7</sup> To obtain a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication.<sup>8</sup>

"Need" requires:

<sup>&</sup>lt;sup>2</sup> EKPC's Response to Commission Staff's First Request for Information (Staff's First Request) (filed June 12, 2024); EKPC's Response to Commission Staff's Second Request for Information (Staff's Third Request for Information (Staff's Third Request) (filed August 16, 2024); EKPC's Response to LFUCG's First Request for Information (LFUCG's First Request) (filed June 12, 2024); EKPC's Response to LFUCG's Second Request for Information (LFUCG's Second Request) (filed July 19, 2024); EKPC's Response to Fayette Alliance's First Request for Information (Fayette Alliance's First Request) (filed June 18, 2024); EKPC's Response to Fayette Alliance's Second Request for Information (Fayette Alliance's Second Request) (filed July 19, 2024).

<sup>&</sup>lt;sup>3</sup> Hearing Video Transcript (HVT) at 09:39 (Oct. 29, 2024).

<sup>&</sup>lt;sup>4</sup> The Public Comments for this case are available at psc.ky.gov. HVT at 09:05 (Oct. 29, 2024).

<sup>&</sup>lt;sup>5</sup> EKPC's Response to Commission Staff's Post-Hearing Request for Information (Staff's Post-Hearing Request) (filed Nov. 15, 2024).

<sup>&</sup>lt;sup>6</sup> EKPC's Post-Hearing Brief (filed Nov. 27, 2024); LFUCG's Post-hearing Brief (filed Nov. 27, 2024); Fayette Alliance's Post-Hearing Brief (filed Nov. 27, 2024).

<sup>&</sup>lt;sup>7</sup> KRS 278.020(1). Although the statute exempts certain types of projects from the requirement to obtain a CPCN, the exemptions are not applicable.

<sup>&</sup>lt;sup>8</sup> Kentucky Utilities Co. v. Pub. Serv. Comm 'n, 252 S.W.2d 885 (Ky. 1952).

[A] showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated.

[T]he inadequacy must be due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management, or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service.<sup>9</sup>

"Wasteful duplication" is defined as "an excess of capacity over need" and "an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties." To demonstrate that a proposed facility does not result in wasteful duplication, the Commission has held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed. The fundamental principle of reasonable, least-cost alternative is embedded in such an analysis. Although cost is a factor, selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication. All relevant factors must be balanced.

<sup>&</sup>lt;sup>9</sup> Kentucky Utilities Co., 252 S.W.2d at 890.

<sup>&</sup>lt;sup>10</sup> Kentucky Utilities Co., 252 S.W.2d at 890.

<sup>&</sup>lt;sup>11</sup> Case No. 2005-00142, Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky (Ky. PSC Sept. 8, 2005), Order at 11.

<sup>&</sup>lt;sup>12</sup> See Kentucky Utilities Co. v. Pub. Serv. Comm'n, 390 S.W.2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for the Construction of a 138 kV Electric Transmission Line in Rowan County, Kentucky (Ky. PSC Aug. 19, 2005), final Order.

<sup>&</sup>lt;sup>13</sup> Case No. 2005-00089, *East Kentucky Power Cooperative, Inc.* (Ky. PSC Aug. 19, 2005), final Order at 6.

In addition, no utility may assume any obligation or liability without Commission approval pursuant to KRS 278.300(1). The utility must establish that the obligation or liability:

[I]s for some lawful object within the corporate purposes of the utility, is necessary or appropriate for or consistent with the proper performance by the utility of its service to the public and will not impair its ability to perform that service, and is reasonably necessary and appropriate for such purpose.<sup>14</sup>

Commission regulation 807 KAR 5:001, Section 18, also requires applications seeking approval of evidences of indebtedness to meet certain requirements. Applicable to the lease assumptions would be the requirements that the agreement include a map and property description, cost, and a financial exhibit.<sup>15</sup>

KRS 278.216(1) states that no utility shall begin the construction of a facility for the generation of electricity capable of generating in aggregate more than ten megawatts (10 MW) without having first obtained an SCC from the Commission. KRS 278.216(3) states that the Commission may deny an application for a SCC or require reasonable mitigation of impacts disclosed in the site assessment report (SAR) but the Commission shall, in no event, order relocation of the facility.

KRS 278.216(2) states that:

An application for a site compatibility certificate shall include the submission of a site assessment report [SAR] as prescribed in KRS 278.708(3) and (4), except that a utility which proposes to construct a facility on a site that already contains facilities capable of generating ten megawatts (10MW) or more of electricity shall not be required to comply with setback requirements established pursuant to KRS 278.704(3).

<sup>&</sup>lt;sup>14</sup> KRS 278.300(3).

<sup>&</sup>lt;sup>15</sup> 807 KAR 5:001, Section 18(1)(b), (2)(a) and (c).

The requirement that a utility file an SAR, like those filed before the Kentucky State Board on Electric Generation and Transmission Siting (Siting Board) when a merchant generator seeks to obtain a construction certificate, indicates that the legislature intended for the Commission to consider the factors discussed in the SAR when determining whether to approve a SCC or impose mitigation measures. However, KRS 278.216(2) also states that "[a] utility may submit and the commission may accept documentation of compliance with the National Environmental Policy Act (NEPA) rather than a site assessment report," which indicates that the Commission is able to consider compliance with NEPA in lieu of certain factors in the SAR.

KRS 278.708(3) and (4), which are written in reference to merchant generating facilities as opposed to utility owned facilities, state that the SAR shall include (1) a detailed description of the proposed site, including surrounding land uses, compliance with applicable setback requirements as provided under KRS 278.704(2), (3), (4), or (5), and evaluation of the noise levels expected to be produced by the facility; (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

<sup>&</sup>lt;sup>16</sup> See Case No. 2023-00361, Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for a Site Compatibility Certificate for the Construction of a Solar Facility in Mercer County, Kentucky (Ky. PSC July 12, 2024), Order at 23-24, citing Case No. 2014-00133, Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Site Compatibility Certificates for the Construction of a Combined Cycle Combustion Turbine at the Green River Generating Station and a Solar Photovoltaic Facility at the E.W. Brown Generating Station (Ky. PSC Dec. 19, 2014), Order at 2–3, applying factors required to be discussed in the SAR when granting the site compatibility certificate for a solar facility.

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 EKPC to minimize or avoid adverse effects identified in the SAR.

# KRS 278.704(2) states that:

For purposes of applications for site compatibility certificates pursuant to KRS 278.216, only . . . the proposed structure or facility to be actually used for solar or wind generation shall be required to be at least one thousand (1,000) feet from the property boundary of any adjoining property owner and two thousand (2,000) feet from any residential neighborhood, school, hospital, or nursing home facility.

Notably, the reference to SCCs required pursuant to KRS 278.216, which are only required for utilities as defined by KRS 278.010, indicates that the legislature intended for KRS 278.704(2) to establish explicit setback requirements for utilities that must be met in order to obtain an SCC. However, KRS 278.216(4) allows the Commission to:

[G]rant a deviation from any applicable setback requirements on a finding that the proposed facility is designed and located to meet the goals of this section and KRS 224.10-280 [cumulative environmental assessment], 278.010 [definitions statute], 278.212 [cost of transmission upgrades for interconnection by merchant generators], 278.214 [governing interruption of service], 278.218 [ownership change statute], and 278.700 to 278.716 [siting board statutes] at a distance closer than those provided by the applicable setback requirements.

Thus, while KRS 278.216 generally allows other factors included in the SAR to be weighed to determine whether to grant a site compatibility certificate, KRS 278.704(2) establishes explicit setback requirements that must be met for a utility to obtain a site

compatibility certificate, unless the utility can establish that it is entitled to a deviation pursuant KRS 278.216(4).

KRS 278.704(3) states that local planning and zoning commissions may establish setback requirements from a property boundary, residential neighborhood, school, hospital, or nursing home facility, which shall have primacy over statutory setback requirements, "[i]f the merchant electric generating facility is proposed to be located in a county or a municipality with a planning and zoning commission." However, KRS 100.324 generally provides that "public utilities operating under the jurisdiction of the Public Service Commission . . . shall not be required to receive the approval of the planning unit for the location or relocation of any of their service facilities," which the Kentucky Court of Appeals has interpreted as exempting utility service facilities from the jurisdiction of local planning and zoning commissions. KRS 278.216(5) also states that "nothing in this section shall be construed to limit a utility's exemption provided under KRS 100.324."

# <u>BACKGROUND</u>

# Proposed projects

EKPC proposed to construct a solar power facility in Marion County, Kentucky, on over 635 acres located north of Lebanon, consisting of approximately 181,000 single axis tracking photovoltaic (PV) modules, with a total capacity of 96 MW, and a total estimated construction cost of \$233,640,000 (the Northern Bobwhite Facility).<sup>19</sup> EKPC plans to

<sup>&</sup>lt;sup>17</sup> KRS 100.324(1).

<sup>&</sup>lt;sup>18</sup> Oldham County Planning and Zoning Com'n v. Courier Communications Corp., 722 S.W.2d 904, 906 (Ky. App. 1987).

<sup>&</sup>lt;sup>19</sup> See Application, Exhibit 2, Direct Testimony of Julia J. Tucker (Tucker Direct Testimony) at 19; EKPC's Response to Staff's Post-Hearing Request, Item 1(a), 20241114\_Solar\_Proforma\_2024.xlsx.

depreciate the facility over 30 years,<sup>20</sup> resulting in an annual depreciation expense of \$4,672,800.00.<sup>21</sup> EKPC estimated that the annual O&M expense would be \$3,037,080.<sup>22</sup> EKPC stated that the expected annual expense for debt interest would be \$3,850,701.<sup>23</sup> Based on these three expenses, EKPC indicated that the total annual cost of the Northern Bobwhite facility would be \$11,560,580.82.<sup>24</sup>

EKPC also proposed to construct a solar power facility in Fayette County, Kentucky, on over 388 acres located east of downtown Lexington, consisting of approximately 88,000 single axis tracking PV modules, with a total capacity of 40 MW, and a total estimated construction cost of \$101,744,634 (the Bluegrass Plains Facility). EKPC plans to depreciate the facility over 30 years, resulting in an annual depreciation expense of \$2,034,892.68. EKPC estimated that the annual O&M expense would be \$809,200. EKPC stated that the expected annual expense for debt interest would be

<sup>&</sup>lt;sup>20</sup> EKPC's Response to Staff's Post-Hearing Request, Item 1(b).

<sup>&</sup>lt;sup>21</sup> EKPC's Response to Staff's Post-Hearing Request, Item 1(a). Note that EKPC calculated the depreciation expense using the effective capital cost after application of the investment tax credit it expects to receive.

<sup>&</sup>lt;sup>22</sup> EKPC's Response to Staff's Post-Hearing Request, Item 1(a).

<sup>&</sup>lt;sup>23</sup> EKPC's Response to Staff's Post-Hearing Request, Item 1(a), indicating a loan on 30-year term at 4.50% interest on the Effective Capital Cost.

<sup>&</sup>lt;sup>24</sup> EKPC's Response to Staff's Post-Hearing Request, Item 1(a), 20241114\_Solar\_Proforma\_2024.xlsx.

<sup>&</sup>lt;sup>25</sup> Tucker Direct Testimony at 19.

<sup>&</sup>lt;sup>26</sup> EKPC's Response to Staff's Post-Hearing Request, Item 1(a). Note that EKPC calculated the depreciation expense using the effective capital cost after application of the investment tax credit it expects to receive.

\$1,676,888.<sup>27</sup> Based on these three expenses, EKPC indicated that the total annual cost of the Bluegrass Plains facility would be \$4,520,980.83.

Need and lack of wasteful duplication

EKPC stated that in planning for its customers' future power supply needs that it strives to anticipate the challenges it may face over both the near- and long-term.<sup>28</sup> EKPC indicated that its current strategic objectives include actively managing its current and future asset portfolio to safely deliver reliable and sustainable energy from appropriately diversified resources at competitive prices; working with federal and state stakeholders to ensure high reliability and economic viability while mitigating evolving regulatory challenges including possible carbon emissions reduction mandates and penalties; and ensuring reliability and rate competitiveness of electric service while supporting beneficial electrification and responding to growing pressures to decarbonize.<sup>29</sup> EKPC also noted that there is increased interest in renewable energy from EKPC's industrial and commercial customers, regarding both existing and new economic development projects.<sup>30</sup>

EKPC indicated that it seeks to achieve its strategic objectives by actively managing its current and future asset portfolio to maintain high reliability of electric service to its owner-members and economically diversify its energy resources with market purchases, fossil fuels, renewables, storage, demand management and energy efficiency

<sup>&</sup>lt;sup>27</sup> EKPC's Response to Staff's Post-Hearing Request, Item 1(a), indicating a loan on 30-year term at 4.50% interest on the Effective Capital Cost.

<sup>&</sup>lt;sup>28</sup> Tucker Direct Testimony at 4.

<sup>&</sup>lt;sup>29</sup> Tucker Direct Testimony at 5.

<sup>&</sup>lt;sup>30</sup> Tucker Direct Testimony at 11.

programs, and partnering opportunities.<sup>31</sup> EKPC also indicated that it seeks to work with state, federal, regional, and PJM stakeholders to respond to the legal, regulatory, and industry pressures to decarbonize the fleet through solutions based on science, engineering and economics that ensure electric service continues to be highly reliable and available at an acceptable cost to the public.<sup>32</sup> EKPC asserted that the proposed solar facilities are consistent with its 2022 Integrated Resource Plan (IRP) and will help create more diversity within EKPC's generation portfolio and advance its strategic objectives discussed above;<sup>33</sup> and will enhance its ability to satisfy growing demands by existing and new commercial and industrial customers for renewable resources,<sup>34</sup> while reducing overall costs to customers.<sup>35</sup>

EKPC acknowledged that it has sufficient capacity resources to meet its forecasted load peaks for several years, but asserted that the proposed solar projects provide additional economically advantageous energy which improves the overall EKPC power supply portfolio.<sup>36</sup> Specifically, EKPC indicated that its current generation portfolio is dependent on reliable and proven fuel resources such as coal and natural gas, and while it indicated that it has no plans to retire existing units, it indicated that adding the proposed

<sup>&</sup>lt;sup>31</sup> Tucker Direct Testimony at 5.

<sup>&</sup>lt;sup>32</sup> Tucker Direct Testimony at 5.

<sup>&</sup>lt;sup>33</sup> Tucker Direct Testimony at 5–6.

<sup>&</sup>lt;sup>34</sup> Tucker Direct Testimony at 11.

<sup>&</sup>lt;sup>35</sup> EKPC's Response to Staff's Second Request, Item 3.

<sup>&</sup>lt;sup>36</sup> Tucker Direct Testimony at 7; see also Hearing Testimony of Julia J. Tucker (Tucker Hearing Testimony), HVT at 11:15 (Oct. 29, 2024) (testifying that the proposed solar projects were not being built for capacity value and noting that PJM Interconnection, LLC (PJM) provides no winter capacity accreditation for solar power).

solar facilities would provide some marginal diversification to its portfolio.<sup>37</sup> Notably, EKPC also presented evidence indicating that it expects the per megawatt hour (MWh) cost of the proposed projects to be lower than energy prices in the PJM market such that EKPC's customers will benefit from energy savings due to the construction of the facilities.<sup>38</sup>

EKPC indicated that it considered several options to procure solar power. EKPC indicated that it evaluated the cost of entering into solar power purchase agreements (PPAs). EKPC stated that it issued a request for proposals (RFP) for PPAs in 2020 and began negotiations to execute a PPA with the offeror of the lowest offer, but this process did not culminate in an agreement.<sup>39</sup> EKPC indicated that it issued a second RFP for PPAs in 2021 but that the cost of PPAs had risen dramatically from the first RFP.<sup>40</sup>

In 2022, EKPC's rationale for entering into a solar PPA was also altered by the passage of the Inflation Reduction Act (IRA), which provided investment tax credits for beginning construction of solar facilities prior to the later of 2034 or a later date to be determined based on emissions reductions,<sup>41</sup> and low-interest loans contingent on placing facilities into service at an earlier date.<sup>42</sup> EKPC asserted that it could significantly

<sup>&</sup>lt;sup>37</sup> Tucker Direct Testimony at 11.

<sup>&</sup>lt;sup>38</sup> See EKPC's Response to Staff's Second Request, Item 3 (claiming savings from energy purchases and providing a \$55.00 MW/h estimate of energy market prices); see also EKPC's Response to Staff's Post-Hearing Request, Item 1(a), 20241114\_Solar\_Proforma\_2024.xlsx (reflecting an expected per MW/h price for both proposed facilities below EKPC's estimated \$55.00 MW/h estimate for energy market prices).

<sup>&</sup>lt;sup>39</sup> Tucker Direct Testimony at 12.

<sup>&</sup>lt;sup>40</sup> Tucker Direct Testimony, Exhibit JJT-1 (filed confidentially) at 3.

<sup>&</sup>lt;sup>41</sup> 26 U.S.C. § 48E(e)(2)(B).

<sup>&</sup>lt;sup>42</sup> Tucker Hearing Testimony, HVT at 11:22. Ms. Tucker was unsure if the deadline was 2031 or 2032. This appears to reference 7 U.S.C. § 8103(j), applicable to loans to rural cooperatives for renewable

reduce the cost of obtaining solar power if it could take advantage of these incentives.<sup>43</sup> However, EKPC indicated that proposing a completely new site and entering the PJM transmission queue was not a practical method of acquiring solar generation and taking advantage of the IRA incentives because it takes approximately four years to complete new applications due to the PJM transmission study backlog.<sup>44</sup> Therefore, EKPC issued a self-build RFP in 2022<sup>45</sup> that sought projects that had already entered the PJM transmission queue but had not begun construction, had sufficient transmission capacity availability, and allowed EKPC to complete construction and begin operation on or before the IRA deadlines.<sup>46</sup>

Three developers responded with offers to sell facilities that met EKPC's needs.<sup>47</sup> EKPC ultimately discovered that the cheapest self-build option involved additional costs due to necessary transmission upgrades, and instead entered into a contract to buy the next cheapest facility, the Bluegrass Plains Facility.<sup>48</sup> EKPC also was still in discussions with PPA offerors, and the owner of the Northern Bobwhite Facility, the lowest PPA offeror as of 2023, indicated that it was willing to sell its facility.<sup>49</sup> EKPC entered into a contract

energy systems, which requires disbursement by September 30, 2031 and involves a limited sum of funds (\$9.7 billion) available to all applicants in aggregate.

<sup>&</sup>lt;sup>43</sup> Tucker Hearing Testimony, HVT at 11:21.

<sup>&</sup>lt;sup>44</sup> Application, Exhibit 3, Direct Testimony of Patrick Bischoff (Bischoff Direct Testimony) at 5–6.

<sup>&</sup>lt;sup>45</sup> Tucker Direct Testimony, Exhibit JJT-1 at 7–8.

<sup>&</sup>lt;sup>46</sup> Tucker Hearing Testimony, HVT at 11:22.

<sup>&</sup>lt;sup>47</sup> Tucker Direct Testimony, Exhibit JJT-1 at 8.

<sup>&</sup>lt;sup>48</sup> EKPC's Response to Staff's Second Request, Item 2(c).

<sup>&</sup>lt;sup>49</sup> EKPC's Response to Staff's First Request, Item 5(a).

to purchase the Northern Bobwhite facility and to assume leases of the real property tied to the PJM queue application, contingent on Commission approval.<sup>50</sup>

EKPC provided a report documenting and evaluating the offers resulting from the various RFPs.<sup>51</sup> In this report, EKPC included the projected cost per MWh for each facility, not including additional transmission costs resulting from interconnection with transmission systems belonging to other utilities.<sup>52</sup> EKPC asserted that utilizing a different PJM-connected system would add significant cost and time, as another PJM transmission study would be required.<sup>53</sup> EKPC asserted that the proposed facilities are the most reasonable, least cost solar options available to it at this time.

EKPC explained that the siting of potential projects was affected by the suitability of real property. EKPC explained that the terrain in much of its service territory is not suitable for solar facilities, which is why many potentially available facilities were outside of its service territory.<sup>54</sup>

Northern Bobwhite Facility Site Compatibility Certificate

With its application, EKPC submitted an SAR for the Northern Bobwhite Solar facility.<sup>55</sup> Incorporated into the SAR, EKPC provided a Preliminary Site Development

<sup>&</sup>lt;sup>50</sup> Tucker Direct Testimony, Exhibit PB-2, Appendix C.

<sup>&</sup>lt;sup>51</sup> Tucker Direct Testimony, Exhibit JJT-1.

<sup>&</sup>lt;sup>52</sup> Tucker Direct Testimony, Exhibit JJT-1; See also EKPC's Response to Staff's Post-Hearing Request, Item 1(a) (showing calculation of updated estimated cost per MWh of the two selected projects including IRA savings).

<sup>&</sup>lt;sup>53</sup> EKPC's Response to Staff's First Request, Item 5(a).

<sup>&</sup>lt;sup>54</sup> Tucker Hearing Testimony, HVT at 11:24.

<sup>&</sup>lt;sup>55</sup> Bischoff Direct Testimony, Exhibit PB-2.

Plan,<sup>56</sup> Property Value Impact Report created by Kirkland Appraisals, LLC,<sup>57</sup> a Legal Property description,<sup>58</sup> Noise Analysis Report prepared by Stantec Consulting Services, Inc. (Stantec),<sup>59</sup> Traffic Impact Study prepared by Stantec,<sup>60</sup> Glare Analysis Report prepared by Capitol Airspace Group,<sup>61</sup> and a Phase I Environmental Site Assessment prepared by Stantec.<sup>62</sup>

EKPC provided the following description of the facility that included proposed site development plan as follows:

EKPC is developing a solar facility (Project). The proposed Project will be a 96-megawatt alternative Current ("MWax") photovoltaic ("PV") electric generating facility. The proposed Project is to be located in unincorporated Marion Count, KY, north of the City of Lebanon, KY, and east of Highway 55 at approximately 37°36′56.80″ N, -85°13′45.57″ W. The Project's footprint will encompass up to 640 acres, which has historically been used for agriculture and farming. Project components will include PV solar panels and the associated ground-mounting racking structure, access roads, inverters, medium voltage transformers, buried electrical collection cabling, a step-up substation, a short 161-Kilovold transmission line, security fencing, laydown areas, and an operations and maintenance ("O&M") building.<sup>63</sup>

<sup>&</sup>lt;sup>56</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix A.

<sup>&</sup>lt;sup>57</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B.

<sup>&</sup>lt;sup>58</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix C.

<sup>&</sup>lt;sup>59</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix D.

<sup>&</sup>lt;sup>60</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix E.

<sup>&</sup>lt;sup>61</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix F.

<sup>62</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix G.

<sup>63</sup> Bischoff Direct Testimony, Exhibit PB-2, at 2.

Regarding surrounding land use, EKPC provided a Property Value Impact Report drafted by Kirkland Appraisals, LLC.<sup>64</sup> The Property Value Impact Report outlined the surrounding land use, based on acreage, as 7.09 percent residential, 35.68 percent agricultural, 50.48 percent agricultural/residential, 0.95 percent airport, 0.026 percent utility, and 5.54 percent commercial.<sup>65</sup> EKPC stated that access to the site will be controlled by secure access points, and the facility being enclosed by a security fence.<sup>66</sup> EKPC stated it owns the 161 kV Marion County switching station located near the southwest corner of the proposed site, which will serve as the point of interconnection between the Northern Bobwhite facilities step-up station and the regional transmission system.<sup>67</sup> EKPC also noted that there is one residential neighborhood within 2,000 feet of the proposed facility.<sup>68</sup>

In drafting the SAR EKPC considered compatibility with scenic surroundings. The report concluded that "through the use of setbacks and vegetative screening, the siting and operation of the Project is in harmony with its rural, agricultural surroundings." EKPC noted a nearby airport (Arnolds Airport) as well as nearby residences and roadways, but that no glare occurrences for the airport's approaches are anticipated, and

<sup>&</sup>lt;sup>64</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B.

<sup>&</sup>lt;sup>65</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B, at 5.

<sup>&</sup>lt;sup>66</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 4.

<sup>&</sup>lt;sup>67</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 5.

<sup>&</sup>lt;sup>68</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 6.

<sup>&</sup>lt;sup>69</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 7.

posited that only one residence might receive glare that would be limited to an average of four minutes per day for less than three months.<sup>70</sup>

EKPC included a review of anticipated noise levels which concluded that during the operation phase of the project, the highest daytime sound level at a residence is estimated to be 33 dBA. The worst-case scenario during the construction phase would be that the nearest residence might receive from 64 to 87 dBA if multiple pieces of equipment were running simultaneously.<sup>71</sup> The SAR also noted that not all equipment would be operating at the same time, and that activities would be temporary and spread out through the area of the Northern Bobwhite facility.<sup>72</sup>

The Traffic Impact Study noted that the construction period of the project would not produce significant operational changes to existing roadways, and that although no adverse effects were anticipated during the construction or operation phase, certain mitigation measures could be implemented to minimize any traffic delays.<sup>73</sup>

The SAR provided a list of proposed mitigation measures to minimize or avoid any adverse effects. The SAR recommended a setback of 50 feet for solar generating equipment from the boundary of non-participating properties and 100 feet from roadways, and that inverters should be placed at least 300 feet from residences.<sup>74</sup> The SAR also recommended that construction activities will only occur between the hour of 7:00 AM

<sup>&</sup>lt;sup>70</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 7.

<sup>&</sup>lt;sup>71</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 9.

<sup>&</sup>lt;sup>72</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 9.

<sup>&</sup>lt;sup>73</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 10.

<sup>&</sup>lt;sup>74</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 11.

and 10:00 PM.<sup>75</sup> The SAR proposed installing and maintaining vegetative buffering, following Federal Aviation Administration guidelines regarding glare issues with the local airport, avoiding wetlands and jurisdictional waters during construction and operation, and protection of the habitat of Indiana and Northern long-eared bats.<sup>76</sup>

EKPC stated that it was willing to agree to the mitigation measures that were ordered in the Kentucky State Board on Electric Generation and Transmission case,<sup>77</sup> which, conditionally, granted the Northern Bobwhite facility a Certificate of Construction pursuant to KRS 278.700,<sup>78</sup> with a few exceptions, primarily based on the change of the layout of the project, and the fact that the previous case was for a merchant plant.<sup>79</sup> The mitigation measures in the final Order of the Siting Board case were more extensive then listed in the present case.<sup>80</sup>

Bluegrass Plains Facility Site Compatibility Certificate

<sup>&</sup>lt;sup>75</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 11.

<sup>&</sup>lt;sup>76</sup> Bischoff Direct Testimony, Exhibit PB-2, Appendix B., at 11.

<sup>&</sup>lt;sup>77</sup> EKPC's Response to Staff's Post-Hearing Request for Information, Item 3.

<sup>&</sup>lt;sup>78</sup> Case No. 2020-00208, Electronic Application of Norther Bobwhite Solar LLC for a Certificate of Construction for an Approximately 96 Megawatt Merchant Solar Electric Generating Facility in Marion County, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110.

<sup>&</sup>lt;sup>79</sup> EKPC's Response to Staff's Post-Hearing Request, Item 3.

<sup>80</sup> Case No. 2020-00208, Electronic Application of Norther Bobwhite Solar LLC for a Certificate of Construction for an Approximately 96 Megawatt Merchant Solar Electric Generating Facility in Marion County, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110, (Ky PSC June 18, 2021) Order. Case No. 2020-00208, Electronic Application of Norther Bobwhite Solar LLC for a Certificate of Construction for an Approximately 96 Megawatt Merchant Solar Electric Generating Facility in Marion County, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110, (Ky PSC June 18, 2021) Order. Case No. 2020-00208, Electronic Application of Norther Bobwhite Solar LLC for a Certificate of Construction for an Approximately 96 Megawatt Merchant Solar Electric Generating Facility in Marion County, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110, (Ky PSC July 19, 2021) Order. Case No. 2020-00208, Electronic Application of Norther Bobwhite Solar LLC for a Certificate of Construction for an Approximately 96 Megawatt Merchant Solar Electric Generating Facility in Marion County, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110, (Ky PSC September 27, 2021) Order.

Included with EKPC's application was an SAR for the Bluegrass Plains facility.<sup>81</sup> The SAR included a Preliminary Site Development Plan prepared by Tetra Tech,<sup>82</sup> a Property Value Impact Study prepared by Kirkland Appraisals, LLC,<sup>83</sup> the legal site boundaries,<sup>84</sup> an Acoustic Study prepared by Tetra Tech, <sup>85</sup> and a Traffic and Dust Study prepared by Tetra Tech.<sup>86</sup>

Tetra Tech provided a description of the facility as follows:

The proposed Project is located on approximately 386 acres of agricultural land on contiguous parcels in Fayette County, Kentucky between US Highway 60 (Winchester Road) along the properties southern border and Interstate 64 (I-64) along the property's northern border. The Project will include one (1) access road and a gate from US 60 and a network of internal roads and gates. The access road and internal roads will be approximately 20 feet in width. Project components will include photovoltaic (PV) solar modules mounted on a single axis tracker systems support by steel posts. Panels will move to track the sun over the course of the day. Other components of the PV system include inverters, medium voltage transformers, junction boxes, DC and AC electrical collection systems, and collection lines. The Project components will be connected to the existing EKPC owned substation located adjacent to the Project's southwest boundary line.87

<sup>&</sup>lt;sup>81</sup> Bischoff Direct Testimony, Exhibit PB-3.

<sup>82</sup> Bischoff Direct Testimony, Exhibit PB-3, Appendix A.

<sup>83</sup> Bischoff Direct Testimony, Exhibit PB-3, Appendix B.

<sup>84</sup> Bischoff Direct Testimony, Exhibit PB-3, Appendix C.

<sup>85</sup> Bischoff Direct Testimony, Exhibit PB-3, Appendix D.

<sup>86</sup> Bischoff Direct Testimony, Exhibit PB-3, Appendix E.

<sup>87</sup> Bischoff Direct Testimony, Exhibit PB-3, at 6

Tetra Tech stated that the surrounding land use, by acres, was 50.52 percent agricultural/residential, 32.31 percent residential, 15.19 percent agricultural, and 1.98 percent utility.88

Tetra Tech also provided a Site Plan, which provided for one gated access off of road U.S. 60; that the project will be surrounded by a security fence; and showed the proposed facility layout and existing features.<sup>89</sup> Tetra Tech also stated that the height of the PV panels would be approximately 15 feet from the ground at maximum tilt, and that the point of interconnection would be the existing Avon Substation owned by EKPC, located adjacent to the southwest boundary of the site.<sup>90</sup>

Tetra Tech stated that according to the Fayette County Property Value Administrator, one adjoining property is classified as "residential", and two residential neighborhoods meet the south and southwest property boundary. Tetra Tech provided the proposed setbacks from residential structures and neighborhoods as 300 feet from all residential structures for fencing and PV panels, 450 feet for all residential structures from central inverters, and 300 feet from all residential neighborhoods for fencing, PV panels, and central inverters. Tetra Tech noted that there are no schools, hospitals, or nursing home facilities in the vicinity of the Bluegrass Plains Solar Project. Tetra Tech

<sup>88</sup> Bischoff Direct Testimony, Exhibit PB-3, at 6

<sup>89</sup> Bischoff Direct Testimony, Exhibit PB-3, at 6, 7, and Appendix A.

<sup>90</sup> Bischoff Direct Testimony, Exhibit PB-3, at 7

<sup>91</sup> Bischoff Direct Testimony, Exhibit PB-3, at 8.

<sup>92</sup> Bischoff Direct Testimony, Exhibit PB-3, at 8.

<sup>93</sup> Bischoff Direct Testimony, Exhibit PB-3, at 8.

also stated that a 15-foot vegetative buffer will be installed where sufficient tree screening does not already exist.<sup>94</sup>

Regarding site compatibility with scenic surroundings, Tetra Tech stated that the facility is on generally low-rolling, open terrain and large portions of the site are not visible from surrounding roads or residential properties.<sup>95</sup> Most site boundaries have existing vegetation, and where tree screening is scant, a 15-foot vegetative buffer will be installed.<sup>96</sup> Tetra Tech stated that the facility will be visible to the public along U.S. 60 and I-64 and also at the intersection of U.S. 60 and Combs Ferry Road.<sup>97</sup> Tetra Tech also provided a Property Value Impact Study which concluded "that the solar farm proposed at the subject property will have no impact on the value of adjoining or abutting properties and that the proposed use is in harmony with the area in which it is located."<sup>98</sup>

Tetra Tech included an acoustic study as part of the SAR, which concluded that during the construction and operation phase of the project there would be minimal effect on noise-sensitive receptors in the vicinity.<sup>99</sup> Tetra Tech further noted that the noise during the construction phase would be intermittent and temporary but would be occasionally audible off-site.<sup>100</sup>

<sup>&</sup>lt;sup>94</sup> Bischoff Direct Testimony, Exhibit PB-3, at 8.

<sup>&</sup>lt;sup>95</sup> Bischoff Direct Testimony, Exhibit PB-3, at 9.

<sup>&</sup>lt;sup>96</sup> Bischoff Direct Testimony, Exhibit PB-3, at 9.

<sup>&</sup>lt;sup>97</sup> Bischoff Direct Testimony, Exhibit PB-3, at 9.

<sup>98</sup> Bischoff Direct Testimony, Exhibit PB-3, Appendix, at 3.

<sup>99</sup> Bischoff Direct Testimony, Exhibit PB-3, at 12.

<sup>&</sup>lt;sup>100</sup> Bischoff Direct Testimony, Exhibit PB-3, at 12.

A Traffic Study was performed by Tetra Tech as part of the SAR. It found that the site will only be accessible through U.S. 60, and that even during peak construction U.S. 60 has ample capacity and that the traffic during the operation phase will be less than the construction phase.<sup>101</sup>

Regarding fugitive dust levels, Tetra Tech stated that fugitive dust levels were expected to be minimal even during peak construction, but that dust will be monitored, and when needed, water will be applied to reduce the fugitive dust, and that other measures will be taken to mitigate dust.<sup>102</sup> Tetra Tech also stated that once a contractor is selected they "will apply for a general Kentucky pollutant Discharge Elimination System Permit from the Kentucky Division of Water (DOW), which will require the development and implementation of a Stormwater Pollution Prevention Plan.<sup>103</sup>

The SAR concluded with proposed mitigation measures which include:

- 1. Mitigating the viewshed impact.
- 2. Completing a wetland survey and avoiding wetlands during design and construction.
  - 3. Completing a threatened and endangered species assessment.
- 4. Taking steps to monitor and repair roadway degradation resulting from the project, seeking appropriate permits, scheduling construction work during certain hours and days of the week.
  - 5. Mitigating potential noise impacts.

<sup>&</sup>lt;sup>101</sup> Bischoff Direct Testimony, Exhibit PB-3, at 12

<sup>&</sup>lt;sup>102</sup> Bischoff Direct Testimony, Exhibit PB-3, at 13

<sup>&</sup>lt;sup>103</sup> Bischoff Direct Testimony, Exhibit PB-3, at 13.

6. Addressing public concerns in a timely manner. 104

Setback Deviations

EKPC also sought a deviation of the setback requirements found in KRS 278.708(3)(a)(7) and KRS 278.70(2).<sup>105</sup> EKPC stated that it was requesting a deviation of the setback requirements for the Bluegrass Plains facility of 300 feet from all residential structures for fencing and PV panels, 450 feet from residential structures for central inverters, <sup>106</sup> and 300 feet from all residential neighborhoods.<sup>107</sup> EKPC stated it was seeking a setback deviation for the Northern Bobwhite facility of 300 feet from all residential structures for inverters, and 625 feet from residential neighborhoods for fencing, <sup>108</sup> PV panels, and central inverters.<sup>109</sup> Regarding the Norther Bobwhite facility, this request was also made and approved in Case No. 2020-00208.<sup>110</sup>

Regarding the projects' compliance with KRS 278.214, EKPC stated that adding the solar facilities would not change the current curtailment procedures used. 

\*\*Index of the current curtailment procedures used.\*\*

\*\*Index of the cur

<sup>&</sup>lt;sup>104</sup> Bischoff Direct Testimony, Exhibit PB-3, at 14 and 15.

<sup>&</sup>lt;sup>105</sup> Application at 7.

<sup>&</sup>lt;sup>106</sup> EKPC's Response to Staff's Post-Hearing Request, Item 4.

<sup>&</sup>lt;sup>107</sup> EKPC's Response to Staff's Post-Hearing Request, Item 5.

<sup>&</sup>lt;sup>108</sup> EKPC's Response to Staff's Post-Hearing Request, Item 6.

<sup>&</sup>lt;sup>109</sup> EKPC's Response to Staff's Post-Hearing Request, Item 7.

<sup>110</sup> Case No. 2020-00208, Electronic Application of Norther Bobwhite Solar LLC for a Certificate of Construction for an Approximately 96 Megawatt Merchant Solar Electric Generating Facility in Marion County, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110. (Filed Dec. 22, 2020) Motion for Deviation. Case No. 2020-00208, Electronic Application of Norther Bobwhite Solar LLC for a Certificate of Construction for an Approximately 96 Megawatt Merchant Solar Electric Generating Facility in Marion County, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110. (Ky. PSC June 18, 2021) final Order.

<sup>&</sup>lt;sup>111</sup> EKPC's Response to Staff's Post-Hearing Request, Item 8.

LFUCG did not present testimony in this case but tendered a post-hearing brief of November 27, 2024.<sup>112</sup> LFUCG argued that EKPC had failed to satisfy KRS 270.020(1), because the Bluegrass Plains Facility fails to satisfy need or avoid wasteful duplication, and also stated the case should be dismissed or held in abeyance until LFUCG provides the Commission with LFUCG's position on its solar zoning ordinances.<sup>113</sup> LFUCG also stated the application should be denied because it is unnecessary and imprudent.<sup>114</sup> Fayette Alliance Post Hearing Brief

Fayette Alliance did not present testimony in this case but tendered a post-hearing brief on November 27, 2024. Fayette Alliance argued that EKPC had failed to establish need for the project, that the PJM study queue is irrelevant to the analysis of the proposed facility, that the proposed Bluegrass Plains Facility provides essentially no benefit to Fayette County, and that the proposed Bluegrass Plains Facility does not comply with the statutory requirements for Kentucky Scenic Byways.<sup>115</sup>

## **DISCUSSION AND FINDINGS**

**CPCNs** 

New generation resources are generally required if a utility is experiencing load growth that prevents it from providing adequate service with existing resources or if existing resources are being taken out of service. However, the Commission has

<sup>&</sup>lt;sup>112</sup> The mayor also provided public comments at the evidentiary hearing, which the Commission considered when making the decision in this matter.

<sup>&</sup>lt;sup>113</sup> LFUCG's Post Hearing Brief (filed on Nov. 27, 2024).

<sup>&</sup>lt;sup>114</sup> LFUCG's Post Hearing Brief (filed on Nov. 27, 2024).

<sup>&</sup>lt;sup>115</sup> Fayette Alliance's Post Hearing Brief (filed on Nov. 27, 2024).

<sup>&</sup>lt;sup>116</sup> Case No. 2022-00402, Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility

previously found that proposed solar facilities and PPAs may be justified, at least in part, if necessary to attract or retain customers in a utility's service territory, and to diversify a utility's portfolio to hedge against regulatory risks and energy price risks, especially when such facilities and PPAs are projected to result in cost savings to customers. In fact, in Case No. 2014-00002, the Commission recognized the importance of a utility diversifying its portfolio to hedge against environmental compliance risks even if the resource may result in a slightly higher cost.

Here, EKPC indicated that it does expect some load growth in the coming years. However, while EKPC indicated that the addition of the solar facilities is consistent with the analysis in its 2022 IRP and generally indicated that the proposed solar facilities will help with future load growth, EKPC acknowledged that the facilities are not being proposed to address its capacity needs, i.e. its projected peak loads. Rather, EKPC primarily indicated that the proposed solar facilities will help diversify its generation portfolio, hedge against future regulatory risks and energy price risks, satisfy the demands of existing commercial and industrial customers and of potential economic development candidates, and reduce costs for current customers. The Commission finds that those

Certificates and Approval of a Demand Side Management Plan and Approval of Fossil Fuel-Fired Generating Unit Retirements (Ky. PSC Nov. 6, 2023), Order at 61.

<sup>&</sup>lt;sup>117</sup> Case No. 2022-00402, (Ky. PSC Nov. 6, 2023), Order at 90–91.

<sup>&</sup>lt;sup>118</sup> See Case No. 2014-00002, *Joint Application of Louisville Gas & Electric Company and Kentucky Utilities Company for Certificates of Public Convenience and Necessity for the Construction of a Combined Cycle Combustion Turbine at the Green River Generating Station and a Solar Photovoltaic Facility at the E.W. Brown Generating Station* (Ky. PSC Dec. 19, 2014), Order at 10–13.

<sup>&</sup>lt;sup>119</sup> Tucker Direct Testimony at 6-7.

<sup>&</sup>lt;sup>120</sup> EKPC's Response to Staff's Second Request, Item 3.

needs, taken together, justify EKPC's construction of the proposed solar facilities under the circumstances presented.

First, EKPC's current generation portfolio includes approximately 2,963 MW of net summer generating capacity and 3,265 MW of net winter generating capacity, including about 1,687 MW of coal-fired generating capacity and about 1,254 MW of summer natural gas-fired generating capacity and about 1,556 MW of winter natural gas-fired generating capacity. Conversely, EKPC only currently operates about 8.5 MW of solar generation and 13 MW of landfill gas generation, and purchases about 170 MW of hydropower. While EKPC does not plan to retire its coal or natural gas-fired units, and certain environmental regulations may be successfully opposed, there is relatively significant regulatory risk associated with its coal or natural gas-fired units, which could present reliability and energy price risks to EKPC and its customers given EKPC's current generation portfolio. The proposed solar units, which will make up only a small percentage of EKPC's overall generation portfolio, will provide a modest hedge against the regulatory risks to EKPC's current portfolio and against associated price risks in energy markets.

<sup>&</sup>lt;sup>121</sup> Tucker Direct Testimony at 3–4.

<sup>122</sup> Tucker Direct Testimony at 4

<sup>&</sup>lt;sup>123</sup> See Tucker Direct Testimony at 8-10.

<sup>124</sup> As discussed in more detail below, EKPC sells all of its energy into the PJM market and must purchase all of its energy from the PJM market. To the extent that it has its own generating capacity, it is able to hedge against price risks in the market for energy it purchases for its customers and is able to sell excess energy into the market for use by other load serving entities to the extent it is economic to do so. Even if EPKC does not retire units, the market price is likely to increase as other generators retire units due to regulatory risks or other issues, e.g. aging infrastructure, such that EKPC could be exposed to higher market prices if it is unable to hedge to the extent of its load. Conversely, if EKPC has excess energy that it can produce at below market prices, its customers will receive savings or an offset on other energy costs.

EKPC also indicated that the addition of the proposed solar units will satisfy, at least in part, the demands of current and potential new commercial and industrial customers for access to a diverse portfolio of energy resources that includes solar or other renewable generation. EKPC's assertions on this point are credible because a number of utilities have sought and obtained authority to pursue solar generation either to secure a new, large economic development customer or to meet the needs of current commercial and industrial customers, which often have sustainability targets that they consider along with other factors when determining whether to locate or continue investing resources in a utility's service territory. While the extent to which such a need could justify resource decisions has its limits, the Commission finds that the proposed projects will assist EKPC in meeting the demands of commercial and industrial customers given EKPC's current generation mix and the relatively limited nature of EKPC's proposed additions.

Finally, EKPC presented evidence indicating that the expected cost per MWh of generating energy with the proposed solar facilities will be lower than market prices. Specifically, EKPC presented a breakdown of the costs of the facilities and the expected energy production from the facilities that indicated that the Bluegrass Plains Facility would generate energy at \$53.38 per MWh and the Northern Bobwhite Facility would generate energy at \$53.67 per MWh.<sup>126</sup> Conversely, EKPC estimated that the market price when

<sup>&</sup>lt;sup>125</sup> See Case No. 2020-00183, Electronic Application of Big Rivers Electric Corporation for Approval of Solar Power Contracts (Ky. PSC Sept. 28, 2020), Order; see also Case No. 2020-00016, Electronic Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Approval of a Solar Power Contract and Two Renewable Power Agreements to Satisfy Customer Requests for a Renewable Energy Source Under Green Tariff Option #3 (Ky. PSC May 8, 2020), Order at 2.

<sup>&</sup>lt;sup>126</sup> EKPC's Response to Staff's Post-Hearing Request, Item 1(a), 20241114\_Solar\_Proforma\_2024.xlsx.

the solar facilities go into service will be about \$55.00 per MWh. Based on EKPC's projections of the energy the solar facilities will produce annually, the estimated market price would generate about \$424,378.36 per year in energy cost savings or offsets from revenues from energy sales less the cost of operating the proposed solar facilities.<sup>127</sup>

EKPC acknowledged that its cost estimates for the proposed solar facilities are contingent on it receiving rather substantial investment tax credits and other benefits authorized by the IRA. However, while there is a risk that the IRA could be repealed, as discussed below in more detail, EKPC is working to place the facilities in service by December 2025, which should partially mitigate that risk. In fact, as discussed below with respect to wasteful duplication, the risk that the IRA may be repealed supports moving forward with the proposed solar projects now to address the needs described above with the expected cost savings. Further, while there are other upside and downside risks to EKPC's cost and energy price estimates, as there is with all projections of future costs and prices, they are not significant enough or are balanced by opposing risks such that they would not likely affect the cost analysis, <sup>128</sup> and even if they did marginally affect the analysis, EKPC will have been able to hedge regulatory risk and satisfy the demands of

<sup>&</sup>lt;sup>127</sup> EKPC indicated that the Bluegrass Plains Facility and Northern Bobwhite Facility will generate about 84,701 MWh and 215,407 MWh of energy per year, respectfully. By multiplying the expected energy generation by the expected market price of energy, it is possible to determine the revenue EKPC can expect from selling energy produced by the solar facilities into the market. Since EKPC sells all energy that it produces into the PJM market and purchases all energy its customers consume from the PJM market, like all PJM members, the difference between the annual cost to produce the energy and the revenue from energy sales represents the saving or offset EKPC will achieve from the solar facilities.

<sup>128</sup> For instance, even if EKPC's capital cost estimates are low, the costs should be dictated by the market such that other new solar generators would be similarly affected, which would likely effect the market price of energy during periods when solar units are operating. Further, EKPC based its analysis of savings on the estimated market price when the units will be placed in service. Given expected retirements in the PJM market as a whole over the next decade, the market price may increase significantly whereas the cost of EKPC's solar facilities, which is mostly in the initial capital investment, will largely remain the same over the life of the facilities.

larger customers, assisting in attracting new development opportunities and retaining current customers, at only a slight marginal cost. Thus, having reviewed the record and being otherwise sufficiently advised, the Commission finds that EKPC established a need for the proposed solar facilities.

Regarding the absence of wasteful duplication, EKPC used a competitive process to identify the most reasonable, least-cost option for a solar facility. EKPC responded to solar PPA market price increases by determining that self-build was the more cost-effective option. Although EKPC asserted that the proposed projects are economically viable without federal incentives, 129 the Commission is unable to make such a finding based upon the current record. Based on the cost analysis spreadsheet provided by EKPC, 130 eliminating the 40 percent tax credits would increase the energy cost from \$53.67 per MWh to \$68.13 for Northern Bobwhite and from \$53.38 per MWh to \$69.39 per MWh for Bluegrass Plains. This would greatly exceed the \$55 per MWh estimated future cost of energy purchased or sold in the PJM energy market and would be closer to the cost of solar PPAs rejected by EKPC as excessive. EKPC needs the tax credits for these projects to achieve the most reasonable rates for its customers, and specifically constrained its facility selection process to allow it to take advantage of the credits while they are still available. 131

As an alternative to EKPC purchasing the Bluegrass Plains facility, Fayette Alliance asserted that the full IRA incentives will be available for projects beginning

<sup>129</sup> EKPC's Post-hearing Brief at 20.

<sup>&</sup>lt;sup>130</sup> EKPC's Response to Staff's Post-Hearing Request, Item 1(a).

<sup>&</sup>lt;sup>131</sup> Tucker Hearing Testimony, HVT at 11:21.

construction before 2034,<sup>132</sup> which potentially would allow a broader range of options for selecting facilities or EKPC developing its own project to enter into the PJM transmission queue at a cheaper cost while still receiving tax credits.

Fayette Alliance was correct that full investment tax credits require that project construction must be commenced before 2034,<sup>133</sup> although additional time may be available depending on the timing of certain levels of greenhouse gas emissions reductions.<sup>134</sup> Although this means EKPC ostensibly has ten years to start construction on the facilities to take full advantage of the investment tax credits, Julia J. Tucker expressed concern that credits might not be available under a potential new Presidential administration.<sup>135</sup>

No investment tax credits may be claimed until a facility is placed into service. The anticipated service date of the two facilities was stated by EKPC to be December 31, 2025, which if accomplished would mitigate the possibility of repeal of the IRA investment tax credits affecting the projects, as the earliest tax year that could be affected by repeal would 2026. Further, since a limited amount of loan funding is available under the IRA, EKPC's best chance to maximize its savings is to build the facilities as soon as

<sup>&</sup>lt;sup>132</sup> Fayette Alliance's Post-Hearing Brief at 6.

<sup>&</sup>lt;sup>133</sup> Construction must be commenced before the later of 2034 or a date to be determined based on emission reductions. 26 U.S.C. § 48E(e)(2)(B).

<sup>134 26</sup> U.S.C. § 48E(e)(2)(B) states that a phase out of investment tax credits starts for projects staring construction "during the second calendar year following the applicable year," after which EKPC may only claim 75 percent of the credits. 26 U.S.C. § 48E(e)(3) states that applicable year has the same meaning as in 26 U.S.C. § 45Y(d)(3), which defines it as the later of 2032 or a date to be determined based on greenhouse gas reduction. The second calendar year after 2032 is 2034.

<sup>&</sup>lt;sup>135</sup> Tucker Hearing Testimony, HVT at 11:21.

<sup>&</sup>lt;sup>136</sup> 26 U.S.C. § 48E(b)(1)(A).

<sup>&</sup>lt;sup>137</sup> Tucker Direct Testimony, Exhibit JJT-1 at 2 and 8.

possible. Waiting could result in loss of tax credits if the IRA were repealed before the projects are placed into service, as well as loss of low-interest IRA loans.

The record does not contain data regarding the difference in estimated cost of the proposed projects compared to the self-developed option suggested by Fayette Alliance. For the Bluegrass Plains Facility, the cost of land acquisition only consists of two percent of the total capital cost of the project. The Commission concludes that even if the record showed that EKPC developing its own solar sites were the least-cost option (assuming application of investment tax credits), the minimal cost of the premium paid for the land because of its spot in the PJM transmission queue is worth paying to mitigate the risk that the tax credits will not be available if EKPC waits or that IRA loan funding will be exhausted before EKPC can secure funding for self-developed projects. The Commission finds that waiting to develop its own property would not be a reasonable option to secure the savings EKPC customers are expected to realize over thirty years. Thus, having reviewed the record and being otherwise sufficiently advised, the Commission finds that EKPC established that the proposed solar projects will not result in wasteful duplication.

Having met its burden to establish need and lack of wasteful duplication, EKPC is granted CPCNs approving construction of the Northern Bobwhite and Bluegrass Plains projects as described in EKPC's application. However, this approval is contingent on the continued availability of the IRA tax credits at the 40 percent level relied upon by EKPC,

<sup>&</sup>lt;sup>138</sup> EKPC's Response to Lexington Fayette Urban County Government's (LFUCG's) First Request for Information (filed June 12, 2024), Item 46 (filed confidentially); EKPC's Response to Commission Staff's Post-Hearing Request for Information (Staff's Post-Hearing Request) (filed Nov. 15, 2024), Item 1(a).

<sup>&</sup>lt;sup>139</sup> The record also does not include data regarding the present value of savings starting sooner compared to later.

as the projects are not economically beneficial without these full credits. If EKPC has reason to believe the expected investment tax credits will be unavailable in whole or in part, it should immediately notify the Commission.

## Northern Bobwhite lease assumptions

The KRS 278.300 requirements for utilities incurring debt applies to leases<sup>140</sup> and therefore a lease or lease assumption agreement must be approved by the Commission. Under KRS 278.300(3), debt must (1) be incurred for some lawful object within the corporate purposes of the utility, (2) be necessary or appropriate for or consistent with the proper performance by the utility of its service to the public (3) not impair its ability to perform that service, and (4) be reasonably necessary and appropriate for such purpose.

One of the purposes of EKPC is to generate electricity at the cheapest rate possible for its customers. The leases for the Northern Bobwhite facility real property are necessary to achieve this goal, promote this purpose, and are consistent with proper performance of EKPC's service. Assumption of the leases does not impair EKPC's ability to perform that service. The lease assumptions also comply with the requirements of 807 KAR 5:001, Section 18.<sup>141</sup> Therefore, the Commission approves the lease assumptions.

## Site Compatibility Certificates

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that EKPC satisfied the requirements of KRS 278.216 for both the

<sup>&</sup>lt;sup>140</sup> Case No. 2022-00252, *Electronic Application of Rowan Water, Inc. for an Alternative Rate Adjustment* (Ky. PSC Feb. 16, 2023), Order at 2.

<sup>&</sup>lt;sup>141</sup> See Application, Exhibits PB-2, Appendix C, TS-1, and TS-2.

Northern Bobwhite facility and the Bluegrass Plains facility, subject to the conditions discussed herein.

EKPC tendered SARs describing both proposed facilities. These included surrounding land uses, legal boundaries, access control to the site, location of facility buildings, transmission lines, and other structures, location and use of access ways, existing or proposed utilities servicing the facility, evaluation of noise levels, compliance with applicable setback requirements, an evaluation of the compatibility of the facility with scenic surroundings, any potential changes in property values and land use resulting from the project for the property owners and adjacent property owners, and proposed mitigation measures.

The SARs indicated that the operation of either facility would have limited visual impacts and that the facilities would be in compliance with the scenic surroundings with the proposed mitigation measures, which the Commission finds to be credible given the height of the proposed facilities, and the proposed mitigation measures. Neither of the intervenors tendered any evidence to challenge the findings in the SARs. Several public comments were submitted, as well as concerns raised by the intervenors regarding possible soil degradation as a result of these facilities, and possible issues with returning the land to its current agricultural use. Although no evidence in the record suggests any potential future issues with soil, EKPC has stated that it will prepare a decommissioning plan that will include removing the modules and disposal/recycling thereof. EKPC also stated that it would minimize the amount of site grading, cut, and fill to limit disturbances

<sup>&</sup>lt;sup>142</sup> EKPC's Response to Commission Staff's First Request for Information (filed June 26, 2023), Item 28.

to the land.<sup>143</sup> The Commission finds that EKPC shall be required to restore soil and vegetation as a mitigation measure, similar to measures set forth in Case No. 2020-00208.<sup>144</sup> EKPC did not state any objections to this mitigation measure.<sup>145</sup>

The Commission finds that in addition to those mitigation measures already discussed or proposed by EKPC, the mitigation measures set forth in the Appendix A and Appendix B of this Order and discussed throughout this Order are appropriate and reasonable because they achieve the statutory purpose of mitigating potentially adverse effects identified in the SAR in accordance with KRS 278.708.

#### **Deviation Requests**

As noted above, EKPC's plans for both facilities are inconsistent with the setback requirements in KRS 278.704(2) applicable to facilities such that EKPC must obtain a deviation pursuant to KRS 278.216(4) for the Commission to approve the SCC. To obtain such a deviation, EKPC must establish that the proposed facilities are designed and located to meet the goals of KRS 278.216, 224.10-280,278.010, 278.212, 278.214, 278.218, and 278.700 to 278.716 at a distance closer than those provided by the applicable setback requirements.

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 of utility property, such that the setback requirements would have limited effect on the goals of

<sup>&</sup>lt;sup>143</sup> EKPC's Response to Staff's Second Request, Item 2.

<sup>&</sup>lt;sup>144</sup> Case No. 2020-00208 (Ky. PSC June 18, 2021), Order, Appendix A at 9.

<sup>&</sup>lt;sup>145</sup> EKPC's Response to Staff's Post-Hearing Request, Item 3.

those statutes. Conversely, the goals of KRS 224.10-280, KRS 278.216, and KRS 278.700 to 278.716, which look at the environmental effects and the effects on nearby properties of generation siting, could be significantly affected by deviations from the setback requirements. 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 utilities certified territory before it is interrupted inside a utility's certified territory, such that its application could be affect by the location of generation.

As indicated above, the facility does support the broad goal of KRS Chapter 278 that utilities provide adequate service at fair, just and reasonable rates. Neither project involves the transfer of utility property. The proposed facilities are also being constructed near existing transmission facilities operated by EKPC and should have limited to no effect on EKPC's ability to interrupt service in the event of an emergency, regardless of the setback requirements. Finally, as discussed above, the mitigation measures proposed, and the additional mitigation measures required herein are unlikely to have environmental effects or any material effects on nearby property owners. Thus, the Commission finds that the two facilities are designed and located to meet the goals of KRS 278.216, 224.10-280, 278.010, 278.212, 278.214, 278.218, and 278.700 to 278.716 at a distance closer than those provided by KRS 278.704(2), and therefore, that EKPC's deviation should be granted.

#### IT IS THEREFORE ORDERED that:

1. EKPC's application for CPCNs for the two proposed construction projects is granted.

- 2. EKPC shall notify the Commission within 10 days of gaining knowledge of any material changes to the project, including, but not limited to, a material increase in costs, including EKPC having reason to believe it would not receive any portion of the 40 percent expected investment tax credits, and any significant delays in construction.
- 3. Any material deviation from the construction approved by this Order shall be undertaken only with the prior approval of the Commission.
- 4. EKPC shall file with the Commission documentation of the total costs of the projects, including the cost of construction and all other capitalized costs, (e.g. engineering, legal, administrative, etc.) within 60 days of the date that construction authorized under these CPCNs is substantially completed. Construction costs shall be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for sewer utilities as prescribed by the Commission.
- 5. EKPC shall file a copy of the "as-built" drawings, if any, and a certified statement that the construction has been satisfactorily completed in accordance with the plans and specifications within 60 days of the substantial completion of the construction certificated herein.
- 6. Any documents filed in the future pursuant to ordering paragraph 2 through 5 shall reference this case number and shall be retained in the post-case correspondence file for this proceeding.
- 7. The Executive Director is delegated authority to grant reasonable extensions of time for filing any documents required by this Order upon EKPC's showing of good cause for such extension.
  - 8. EKPC's application for approval of the lease assumption agreements

attached to the application as Exhibits PB-2, Appendix C is granted.

- 9. EKPC's application for a site compatibility certificate to construct the property described in EKPC's application as the Northern Bobwhite facility is conditionally granted subject to full compliance with the mitigation measures and condition prescribed in Appendix A, and any other mitigation measures that EKPC committed to implement in this matter
- 10. EKPC's motion for deviation of setback requirements regarding the Northern Bobwhite facility is granted.
- 11. EKPC shall fully comply with the mitigation measures and conditions prescribed in Appendix A.
- 12. EKPC's application for a site compatibility certificate to construct the property described in EKPC's application as the Bluegrass Plains facility is conditionally granted subject to full compliance with the mitigation measures and condition prescribed in Appendix B, and any other mitigation measures that EKPC committed to implement in this matter.
- 13. EKPC's motion for deviation of setback requirements regarding the Bluegrass Plains facility is granted.
- 14. EKPC shall fully comply with the mitigation measures and conditions prescribed in Appendix B.
- 15. In the event mitigation measures within the body of this Order conflict with those prescribed in the Appendix to this Order, the measures in the Appendix shall control.
  - 16. This case is closed and is removed from the Commission's docket.

ATTEST:

**Executive Director** 

**ENTERED** 

PUBLIC SERVICE COMMISSION

Commissioner

Commissioner

Chairman

DEC 26 2024 AH

KENTUCKY PUBLIC SERVICE COMMISSION

## APPENDIX A

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE COMMISSION IN CASE NO. 2024-00129 DATED DEC 26 2024

## MITIGATION MEASURES AND CONDITIONS IMPOSED FOR NORTHERN BOBWHITE SOLAR PROJECT

The following mitigation measures and conditions are hereby imposed on EKPC to ensure that the Northern Bobwhite facility, proposed in this proceeding, is constructed as ordered, though the failure to include any mitigation measure or plan to which EKPC committed in this matter should not be construed as relieving EKPC or any obligation to comply with such measures.

- 1. A final site layout plan shall be submitted to the Commission upon completion of the final site design. Deviations from the preliminary site layout plan which formed the basis for the Site Assessment Report should be clearly indicated on the revised graphic. Those changes could include, but are not limited to, location of solar panels, inverters, transformers, substation, operations and maintenance building or other Project facilities and infrastructure.
- 2. Any change in facility boundaries from the information which formed this evaluation should be submitted to the Commission.
- 3. The Commission will determine if any deviation in the boundaries or site development plan is likely to create a materially different pattern or magnitude of impacts. If not, no further action is required, but if yes, EKPC will support the Commissions' effort to revise its assessment of impacts and mitigation requirements.

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- 4. A final, project-specific, construction schedule, including revised estimates of on-site workers and commuter vehicle traffic, shall be submitted to the Commission. Deviations from the preliminary construction schedule should be clearly indicated.
- 5. The Commission 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, EKPC will support the Commissions' effort to revise its assessment of impacts and mitigation requirements.
- 6. EKPC or its contractor will control access to the facility during construction and operation. All construction entrances will be gated and locked when not in use.
- 7. EKPC's access control strategy shall also include appropriate signage to warn potential trespassers. EKPC 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 will have its own separate security fence and locked access installed.
- 9. 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 nearby homes and roadways.
- 10. EKPC shall follow through on its commitment to providing vegetative buffers for houses with sight lines within 500 feet of the solar panels, and for 1.85 miles of roadways within 300 feet of the solar panels. If vegetation is used, plants should reach eight feet high within four years. That vegetation should be maintained or replaced as

needed. To the extent an affected property owner indicates to EKPC that such a buffer is not necessary, EKPC will need to obtain that property owner's written consent and submit such consent in writing to the Commission.

- 11. EKPC will cultivate at least two acres of native pollinator friendly species within the solar facility site.
- 12. EKPC will not remove any existing vegetation unless the existing vegetation needs to be removed, except to the extent it must remove such vegetation for the construction and operation of facility components.
- 13. EKPC shall rectify any damage to public roads resulting from Project construction.
- 14. EKPC will comply with all laws and regulations regarding the use of roadways.
- 15. EKPC will consult with the Kentucky Transportation Cabinet (KTC) regarding truck and other construction traffic and obtain necessary permits from the KTC.
- 16. EKPC will consult with Marion County Road Department (MCRD) regarding truck and other construction traffic and obtain necessary permits from the MCRD.
- 17. EKPC will comply with any road use agreement executed with the MCRD. Such an agreement might consider special considerations for overweight loads, routes utilized by heavy trucks, road weight limits and bridge weight limits.
- 18. EKPC shall develop a traffic management plan to minimize the impacts of any traffic increase 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.

- 19. Non-noise-causing and non-construction activities shall take place on the site between 7 a.m. and 10 p.m. Monday through Sunday. Construction activities, which includes process and deliveries, shall only take place from 8 a.m. to 6 p.m., Monday through Saturday, and pile-driving activities within 1,000 feet of non-participating homes shall be limited to 9 a.m. to 5 p.m. Monday through Saturday.
- 20. EKPC must commit to fix or fully compensate the appropriate transportation authorities for any damage or degradation to roads or bridges that it causes or to which it materially contributes to.
- 21. EKPC shall develop special plans and obtain necessary permits before bringing heavy loads, especially the substation transformer, onto state or county roads in the vicinity. Heavy loads over state-designated deficient bridges should be avoided.
- 22. EKPC shall properly maintain construction equipment and follow best management practices related to fugitive dust throughout the construction process. This should keep dust impacts off-site to a minimal level.
- 23. EKPC shall 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.
- 24. EKPC shall remain in contact with nearby residents to confirm that noise levels are not unduly high or annoying after the pounding and placement of the solar panel racking begins. If the noise levels are unduly high or annoying, EKPC should mitigate those effects as needed.

- 25. Pile driving activities shall cease by 6 p.m. each day. 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.
- 26. Construction and pile driving activities are limited to 8 a.m. to 6 p.m., but within 1,000 feet of a non-participating home pile driving shall begin no earlier than 9 a.m. and shall cease by 5 p.m. each day.
- 27. If the pile driving activity occurs within 1,500 feet of a noise sensitive receptor, EKPC 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).<sup>146</sup>
- 28. EKPC shall place panels, inverters, and substation equipment no closer to noise receptors (homes) than indicated in EKPC's noise and traffic study.
- 29. EKPC will maintain natural vegetative screening; however, where the Project could be visible from a roadway or neighboring residence, the EKPC will add a vegetative buffer to mitigate viewshed impacts.
- 30. The facility site is near a small municipal airport, to the north. EKPC will follow Federal Aviation Administration (FAA) guidelines for determining glare issues for ingress and egress from the airport. Based on other solar developments near larger airports.

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<sup>&</sup>lt;sup>146</sup> See Case No. 2020-00280, Electronic Application of Ashwood Solar I, LLC for a Certificate of Construction for an Approximately 86 Megawatt Merchant Electric Solar Generating Facility in Lyon County, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110 (filed May 25, 2021) Ashwood Solar's Response to Siting Board Staff's Post-Hearing Request for Information, Item 2.

- 31. At the request of EKPC, Stantec completed Phase I Environmental Site Assessments for the parcels that comprise the facility. This assessment provides a baseline for returning property to its current condition after decommissioning. EKPC will rely on the baseline established in Phase I Environmental Site Assessment during the decommissioning process.
- 32. Identified wetlands and jurisdictional waters will be avoided during construction and operation to the extent practicable. Note the total acreage assessed may not equal the total acreage of the Project. The assessment covered areas outside the preliminary site layout. If necessary, it is anticipated that the Project would utilize applicable USACE Nationwide Permits. Any required USACE permits, or DOW permits will be obtained prior to commencement of construction.
- 33. As applicable to individual lease agreements, EKPC, its successors, or assigns will abide by the specific land restoration commitments agreed to by individual property owners, as described in each signed lease agreement.
- 34. EKPC shall develop and finalize an explicit or formal decommissioning plan to carry out land restoration. Land restoration requires removal of all facility components at any depth independent of the terms under any lease agreement, while also performing soil and vegetation restoration. This final decommissioning plan shall be filed with the Commission. The final decommissioning plan shall be filed with Commission within one month prior to starting construction. The decommissioning plan shall commit EKPC to removing all facility components from the project site and Marion County at the cessation of operations.

## APPENDIX B

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE COMMISSION IN CASE NO. 2024-00129 DATED DEC 26 2024

## MITIGATION MEASURES AND CONDITIONS IMPOSED FOR BLUEGRASS PLAINS SOLAR PROJECT

The following mitigation measures and conditions are hereby imposed on EKPC to ensure that the Bluegrass Plains facility proposed in this proceeding are constructed as ordered, though the failure to include any mitigation measure or plan to which EKPC committed in this matter should not be construed as relieving EKPC or any obligation to comply with such measures.

- 1. A final site layout plan shall be submitted to the Commission upon completion of the final site design. Deviations from the preliminary site layout plan which formed the basis for the Site Assessment Report should be clearly indicated on the revised graphic. Those changes could include, but are not limited to, location of solar panels, inverters, transformers, substation, operations and maintenance building or other Project facilities and infrastructure.
- 2. Any change in Project boundaries from the information which formed this evaluation should be submitted to the Commission.
- 3. The Commission will determine if any deviation in the boundaries or site development plan is likely to create a materially different pattern or magnitude of impacts. If not, no further action is required, but if yes, EKPC will support the Commissions' effort to revise its assessment of impacts and mitigation requirements.

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- 4. A final, project-specific, construction schedule, including revised estimates of on-site workers and commuter vehicle traffic, shall be submitted to the Commission. Deviations from the preliminary construction schedule should be clearly indicated.
- 5. The Commission 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, EKPC will support the Commissions' effort to revise its assessment of impacts and mitigation requirements.
- 6. EKPC 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. EKPC's access control strategy shall also include appropriate signage to warn potential trespassers. EKPC 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 will have its own separate security fence and locked access installed.
- 9. 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 nearby homes and roadways.
- 10. EKPC shall install and maintain a 15-foot vegetive buffer, where possible and not already existing, for houses and roadways with sight lines of the facility. Plants should reach eight feet high within four years. That vegetation should be maintained or replaced as needed. To the extent an affected property owner indicates to EKPC that

such a buffer is not necessary, EKPC will need to obtain that property owner's written consent and submit such consent in writing to the Commission.

- 11. EKPC shall cultivate at least one acre of native pollinator friendly species within the solar facility site.
- 12. EKPC shall not remove any existing vegetation unless the existing vegetation needs to be removed, except to the extent it must remove such vegetation for the construction and operation of Project components.
- 13. EKPC shall rectify any damage to public roads resulting from Project construction.
- 14. EKPC shall comply with all laws and regulations regarding the use of roadways.
- 15. EKPC will consult with LFUCG regarding truck and other construction traffic and obtain necessary permits.
- 16. EKPC will comply with any road use agreement executed with LFUCG. Such an agreement might consider special considerations for overweight loads, routes utilized by heavy trucks, road weight limits and bridge weight limits.
  - 17. EKPC shall comply with any local noise ordinances.
- 18. EKPC shall consult with the Kentucky Transportation Cabinet (KTC) regarding truck and other construction traffic and obtain necessary permits from the KTC.
- 19. EKPC shall develop a traffic management plan to minimize the impacts of any traffic increase 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.

- 20. Non-noise-causing and non-construction activities shall take place on the site between 7 a.m. and 10 p.m. Monday through Sunday. Construction activities, which includes process and deliveries, shall only take place from 8 a.m. to 6 p.m., Monday through Saturday, and pile-driving activities within 1,000 feet of non-participating homes shall be limited to 9 a.m. to 5 p.m. Monday through Saturday. EKPC must commit to fix or fully compensate the appropriate transportation authorities for any damage or degradation to roads or bridges that it causes or to which it materially contributes to.
- 21. EKPC shall develop special plans and obtain necessary permits before bringing heavy loads, especially the substation transformer, onto state or county roads in the vicinity. Heavy loads over state-designated deficient bridges should be avoided.
- 22. EKPC shall properly maintain construction equipment and follow best management practices related to fugitive dust throughout the construction process. This should keep dust impacts off-site to a minimal level.
- 23. EKPC shall 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.
- 24. EKPC shall remain in contact with nearby residents to confirm that noise levels are not unduly high or annoying after the pounding and placement of the solar panel racking begins. If the noise levels are unduly high or annoying, EKPC should mitigate those effects as needed.
- 25. Construction and pile driving activities are limited to 8 a.m. to 6 p.m., but within 1,000 feet of a non-participating home pile driving shall begin no earlier than 9 a.m. and shall cease by 5 p.m. each day.

- 26. If the pile driving activity occurs within 1,500 feet of a sensitive noise receptor, EKPC 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).<sup>147</sup>
- 27. EKPC completed a Phase I Environmental Site Assessment for the parcels that comprise the facility. This assessment provides a baseline for returning property to its current condition after decommissioning. EKPC will rely on the baseline established in Phase I Environmental Site Assessment during the decommissioning process.
- 28. Identified wetlands and jurisdictional waters will be avoided during construction and operation to the extent practicable. Note the total acreage assessed may not equal the total acreage of the Project. The assessment covered areas outside the preliminary site layout. If necessary, it is anticipated that the Project would utilize applicable USACE Nationwide Permits. Any required USACE permits, or DOW permits will be obtained prior to commencement of construction.
- 29. EKPC shall develop and finalize an explicit or formal decommissioning plan to carry out land restoration. Land restoration requires removal of all facility components at any depth independent of the terms under any lease agreement, while also performing soil and vegetation restoration. This final decommissioning plan shall be filed with the Commission. The final decommissioning plan shall be filed with Commission within one month prior to starting construction. The decommissioning plan shall commit EKPC to

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<sup>&</sup>lt;sup>147</sup> See Case No. 2020-00280, *Electronic Application of Ashwood Solar I, LLC for a Certificate of Construction for an Approximately 86 Megawatt Merchant Electric Solar Generating Facility in Lyon County, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110 (filed May 25, 2021)*, Ashwood Solar's Response to Siting Board Staff's Post-Hearing Request for Information, Item 2.

removing all facility components from the project site and Fayette County at the cessation of operations.

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