

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF BIG RIVERS ELECTRIC	)	
CORPORATION FOR AN ORDER DECLARING	)	
THE CONSTRUCTION OF SEVEN SOLAR POWER	)	CASE NO.
FACILITIES TO BE ORDINARY EXTENSIONS OF	)	2016-00409
EXISTING SYSTEMS IN THE USUAL COURSE OF	)	
BUSINESS	)	

ORDER

On November 28, 2016, Big Rivers Electric Corporation (“Big Rivers”) filed an application requesting that the Commission enter an Order, pursuant to KRS 278.020 and 807 KAR 5:001, Sections 15 and 19, declaring the construction of seven low-capacity solar-power facilities (“Solar Facilities”) to be extensions of existing systems in the usual course of business, or, in the alternative, that the Commission grant Big Rivers a Certificate of Public Convenience and Necessity (“CPCN”) to construct and operate the Solar Facilities.

By Order entered January 5, 2017, the Commission established a procedural schedule that established a deadline for requests to intervene, provided for discovery, and directed Big Rivers to file a statement on or before February 27, 2017, that either requested a hearing or submitted the case for a decision based on the record. There are no intervenors in this matter. Staff issued and Big Rivers responded to one round of discovery. Big Rivers filed a letter on February 24, 2017, requesting that this matter be submitted for a decision based on the evidentiary record without the need for a formal hearing. The Commission finds that Big Rivers’ request to submit the matter for a decision

based upon the existing evidentiary record should be granted, given that discovery has been completed and there are no outstanding factual issues to be addressed at a formal evidentiary hearing. Accordingly, the matter now stands submitted to the Commission for a decision.

### BACKGROUND

Big Rivers is a member-owned, rural electric cooperative headquartered in Henderson, Kentucky, and organized pursuant to KRS Chapter 279. Big Rivers owns and operates facilities that generate and transmit energy for sale at wholesale to its three member distribution cooperatives, Jackson Purchase Energy Corporation (“Jackson Purchase”), Kenergy Corp. (“Kenergy”), and Meade County Rural Electric Cooperative Corporation (“Meade County RECC”) (collectively, “Members”). These member cooperatives distribute power to approximately 114,000 retail customers in 22 western Kentucky counties.<sup>1</sup>

In support of its request, Big Rivers states that it developed the proposal for construction of Solar Facilities in response to its Members’ request for such solar projects. Big Rivers further states that its Members have received requests from their retail customers for solar programs. The proposed Solar Facilities will serve primarily as education and demonstration projects for Big Rivers, its Members, and the retail customers, and to develop experience with and understanding of solar power facilities.<sup>2</sup> The proposed locations of the Solar Facilities were selected to allow retail customers to view the projects. They are located on property owned by Members or on public land,

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<sup>1</sup> Application, paragraph 3.

<sup>2</sup> *Id.* at paragraph 11.

one in a public park and two on public school property. Big Rivers states that the two Solar Facilities proposed for location on public school property will be incorporated into the school's science curricula.<sup>3</sup>

### PROPOSED SOLAR FACILITIES

Big Rivers proposes to construct seven Solar Facilities that will have a total capacity of 120 kilowatts (kW).<sup>4</sup> The total cost to construct all seven of the proposed Solar Facilities is approximately \$500,000, with an estimated annual cost of operation and maintenance (“O&M”) of not more than \$4,000 for all of the Solar Facilities.<sup>5</sup> Based on the capital investment and a projected useful life of 25 years, the estimated average cost per kWh for energy generated by the Solar Facilities is \$0.285947.<sup>6</sup>

Given its existing available capacity, Big Rivers states that the Solar Facilities were designed to be low-capacity, with the total proposed project large enough to achieve economy-of-scale benefits while taking advantage of the current low price of solar panels.<sup>7</sup> If approved by the Commission, construction would begin within two months of the Commission Order; the Solar Facilities are projected to begin generating power within four to six months after construction is started.<sup>8</sup>

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<sup>3</sup> *Id.*

<sup>4</sup> *Id.* at paragraph 6.

<sup>5</sup> *Id.* at paragraphs 9 and 25; Big Rivers' Response to Commission Staff's Initial Request for Information (“Staff's First Request”), Item 7.

<sup>6</sup> Big Rivers' Response to Staff's First Request, Item 8.

<sup>7</sup> Application, paragraph 12.

<sup>8</sup> *Id.* at paragraph 21.

The Solar Facilities will be constructed in Big Rivers' Members' respective service territories on property owned by a Member or on public property selected in conjunction with local government authorities.<sup>9</sup> Site selection criteria included visibility, accessibility, and the technical needs for siting solar generation facilities. Big Rivers will own the Solar Facilities and will lease the property upon which they will be located. Three of the Solar Facilities will be located in Jackson Purchase's service territory, two in Kenergy's service territory, and two in Meade County RECC's service territory. The Solar Facilities will interconnect directly with each Member's respective distribution system.<sup>10</sup>

The three Solar Facilities in Jackson Purchase's service territory will have a total capacity of 30 kW.<sup>11</sup> One of the Solar Facilities will be located on the grounds of Livingston County Middle School, in Burna, Kentucky, on property leased from the Livingston County Board of Education.<sup>12</sup> The second Solar Facility will be located on the grounds of McCracken County High School, in Paducah, Kentucky, on property leased from the McCracken County Board of Education.<sup>13</sup> The third Solar Facility will be located at Mike Miller Park in Benton, Marshall County, Kentucky, on property leased from the Marshall County Fiscal Court.<sup>14</sup>

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<sup>9</sup> Big Rivers' Response to Staff's First Request, Item 2.

<sup>10</sup> *Id.* at Item 8.

<sup>11</sup> Application, paragraph 6.

<sup>12</sup> *Id.* at paragraphs 8 and 20.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

The two Solar Facilities in Kenergy's service territory will have a total capacity of 60 kW.<sup>15</sup> The Solar Facilities located in Kenergy's service territory will be located at Kenergy's Henderson, Kentucky, and Owensboro, Kentucky, offices. Big Rivers will lease the sites from Kenergy.<sup>16</sup>

The two Solar Facilities in Meade County RECC's service territory will have a total capacity of 30 kW.<sup>17</sup> The Solar Facilities in Meade County RECC's service territory will be located at the Hardinsburg, Kentucky, and Brandenburg, Kentucky, offices of Meade County RECC. Big Rivers will lease the sites from Meade County RECC.<sup>18</sup>

Big Rivers asserts that constructing the Solar Facilities will not result in any increased charges to its Members because Big Rivers will underwrite the capital costs of the Solar Facilities, which do not involve sufficient capital outlay to materially affect Big Rivers' financial condition.<sup>19</sup> Big Rivers will meter the energy produced at each Solar Facility and sell the power generated to its Members under Big Rivers' Rural Delivery Service tariff ("RDS Tariff"), which is currently on file with the Commission.<sup>20</sup> Under the RDS tariff, all delivery points are charged a demand charge of \$13.8050 per KW and an energy charge of \$0.045000 per kW. The power generated by the proposed Solar Facilities will not appear as a separate line item on Members' monthly billing statement.<sup>21</sup>

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<sup>15</sup> *Id.* at paragraph 6.

<sup>16</sup> *Id.* at paragraphs 8 and 20.

<sup>17</sup> *Id.* at paragraph 6.

<sup>18</sup> *Id.* at paragraphs 8 and 20.

<sup>19</sup> Big Rivers' Response to Staff's First Request, Item 4; Application, paragraph 10.

<sup>20</sup> Application, Exhibit C, Direct Testimony of Russell L. Pogue ("Pogue Direct Testimony"), page 3, lines 11–13; Big Rivers' Response to Staff's First Request, Item 6.

<sup>21</sup> Application, paragraph 13.

Energy will be allocated to each Member based on the metered production of Solar Facilities interconnected with the respective Member's distribution system; metered energy from Solar Facilities in one Member's service territory will not appear on the other Members' monthly bills.<sup>22</sup> After Members are billed by Big Rivers, Members may then provide the energy to their retail members under any of their applicable tariffs.<sup>23</sup>

In order to obtain the reasonable, least-cost option for low-capacity solar generation facilities, Big Rivers issued a request for proposal ("RFP"). Big Rivers received bids from three of the four vendors who were invited to bid on the RFP.<sup>24</sup> After evaluating the bids, Big Rivers selected Harvest Energy Solutions ("Harvest Energy") of Almo, Calloway County, Kentucky, to construct the arrays.<sup>25</sup> Big Rivers will not execute a final contract with Harvest Energy unless and until the Commission approves this Application.

#### PROPOSED FINANCING

As discussed above, the projected capital cost for the proposed project is \$500,000, and future operations expense is projected to be not more than \$4,000 annually. Big Rivers intends to apply for a \$125,000 Rural Energy for America Program ("REAP") grant from the U.S. Department of Agriculture.<sup>26</sup> If awarded the REAP grant, Big Rivers' capital cost for constructing the Solar Facilities would be \$375,000. Big Rivers

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<sup>22</sup> Big Rivers' Response to Staff's First Request, Item 6.

<sup>23</sup> Big Rivers' Response to Staff's First Request, Item 6.

<sup>24</sup> Big Rivers' Response to Staff's First Request, Item 10.

<sup>25</sup> Pogue Direct Testimony, page 8, lines 6–10.

<sup>26</sup> Application, paragraph 10.

states that it will not need to issue debt to finance the Solar Facilities, but instead will finance their construction from Big Rivers' current cash flow.<sup>27</sup>

Big Rivers states that the REAP grant application is still in development and thus has not yet been submitted. The deadline for submitting the REAP grant application is March 31, 2017. Big Rivers states that, should Big Rivers not receive a REAP grant, it will reevaluate whether to proceed with the proposed project.

#### DISCUSSION

KRS 278.020(1) requires a utility to obtain a CPCN prior to constructing any new facility that is intended to furnish regulated utility services to the public. However, this statute also provides an exemption from the certificate requirement if the new facility is an ordinary extension of existing systems in the usual course of business. Commission regulation 807 KAR 5:001, Section 15(3), defines that exemption as follows:

Extensions in the ordinary course of business. A certificate of public convenience and necessity shall not be required for extensions that do not create wasteful duplication of plant, equipment, property, or facilities, or conflict with the existing certificates or service of other utilities operating in the same area and under the jurisdiction of the commission that are in the general or contiguous area in which the utility renders service, and that do not involve sufficient capital outlay to materially affect the existing financial condition of the utility involved, or will not result in increased charges to its customers.

The Commission, having reviewed the record and being sufficiently advised, finds that the proposed Solar Facilities as described herein are an ordinary extension in the usual course of business, and therefore are exempt from the requirements of a CPCN

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<sup>27</sup> Pogue Testimony, page 9, lines 10–12.

pursuant to KRS 278.020(1). The Commission further finds that Big Rivers has sufficiently established an interest in and need for the proposed Solar Facilities.

“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.”<sup>28</sup> Big Rivers has established the Solar Facilities will not be a wasteful duplication of plant, equipment, property, or facilities. The Solar Facilities are not intended to replace existing generation and are not a material supplement to existing generation. In acknowledgement of its existing available capacity, Big Rivers designed the project to be low-capacity, but large enough for Big Rivers to gain experience in developing and operating Solar Facilities, and integrating Solar Facilities into the power grid. Further, the Solar Facilities were designed to serve an educational purpose, with related cost, and weather and production data posted online in order to be accessible to the general public.<sup>29</sup>

The cost to construct and operate the proposed Solar Facilities will not involve sufficient capital outlay to materially affect the financial condition of Big Rivers. The capital cost of the Solar Facilities is \$500,000 for 120 kW total capacity, with annual O&M costs of not more than \$4,000. Although significantly smaller than other solar facilities

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

<sup>29</sup> *Id.* at page 6, line 17 to page 7, line 2.

recently installed or proposed by other generating utilities in Kentucky, the cost of the proposed Solar Facilities in this matter compares favorably to the cost of those solar facilities.<sup>30</sup> The proposed project is designed to take advantage of current low prices of solar panels. Additionally, the capital cost is such that Big Rivers intends to self-finance the construction of the Solar Facilities.

Big Rivers states that it intends to file a REAP grant on or before March 31, 2017, and that, should Big Rivers not receive a REAP grant, it will reevaluate whether to proceed with the proposed project. The Commission finds it reasonable for Big Rivers to file a report with the Commission setting forth whether Big Rivers was awarded a REAP grant and the amount of the REAP grant, or, if Big Rivers is not awarded a REAP grant, to file a report setting forth whether it will proceed with the proposed project.

IT IS THEREFORE ORDERED that:

1. The Solar Facilities as proposed and discussed herein are properly classified as an ordinary extension of existing systems in the usual course of business, and a CPCN, pursuant to KRS 278.020(1) is not required for their constructions.

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<sup>30</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) (approving a ten-MW solar photovoltaic facility with an estimated capital cost of \$36 million); Case No. 2016-00274, *Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Approval of an Optional Solar Share Program* (Ky. PSC Nov. 4, 2016) (approving a four-MW community solar facility with an estimated capital cost of \$9.8 million); Case No. 2016-00269, *Application of East Kentucky Power Cooperative, Inc. for Issuance of a Certificate of Public Convenience and Necessity, Approval of Certain Assumption of Evidences of Indebtedness and Establishment of a Community Solar Tariff* (Ky. PSC Nov. 22, 2016) (approving a 8.5 MW Community Solar Facility for \$17.7 million).

2. Big Rivers' request to submit the case for a decision based upon the existing record, is granted.

3. Big Rivers shall file a report within three months of the date of this Order setting forth whether it received a REAP grant and the amount of the REAP grant that was awarded to Big Rivers or, if Big Rivers does not receive a REAP grant, stating whether it will proceed with the proposed project. If Big Rivers has not received a decision on the REAP grant within three months of the date of this Order, Big Rivers shall file a report stating the expected date of a decision and will file reports every three months until a decision is made regarding the REAP grant.

4. Big Rivers shall file a report to notify the Commission when each of the seven Solar Facilities has been constructed.

5. Any documents filed in the future pursuant to ordering paragraphs 3 and 4 herein shall reference this case number and shall be retained in the utility's general correspondence files.

6. The Executive Director is delegated authority to grant reasonable extension of time for the filing of any documents required by ordering paragraphs 3 and 4 of this Order upon Big Rivers' showing of good cause.

By the Commission

ENTERED  
MAR 30 2017  
KENTUCKY PUBLIC  
SERVICE COMMISSION

ATTEST:

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Case No. 2016-00409

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