## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:		
ELECTRONIC 2023 INTEGRATED RESOURCE PLAN OF BIG RIVERS ELECTRIC CORPORATION	) ) ) ) ) )	Case No. 2023-00310

## SIERRA CLUB COMMENTS ON COMMISSION STAFF'S REPORT

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#### I. INTRODUCTION

Pursuant to the Public Service Commission's (the "PSC" or "Commission") August 1, 2024 Procedural Order, Sierra Club offers the following comments regarding Commission Staff's Report ("Report") on Big Rivers Electric Corporation's ("Big Rivers" or "BREC") 2023 Joint Integrated Resource Plan ("IRP").<sup>1</sup>

Staff's Report correctly recognizes that Big Rivers' IRP contains numerous analytical flaws and omissions which are so severe and pervasive that the IRP is "nearly useless" as a resource planning document.<sup>2</sup> Staff appropriately concludes that the IRP is unreasonable and does not comply with Kentucky's regulatory requirements for resource planning.<sup>3</sup> Sierra Club agrees with most of Staff's conclusions regarding the IRP's flaws and largely supports Staff's recommendations, with some refinement explained further below. We commend Staff for its thorough and thoughtful analysis in the Report.

Sierra Club respectfully disagrees with Staff on one critical recommendation: how to remedy the IRP's deficiencies. Staff declines to recommend that the Commission require Big Rivers file a new IRP. Allowing the IRP's flaws to remain unaddressed until the next IRP, which commences in 2026, would perpetuate a cycle of IRP non-compliance. In this IRP, Big Rivers has ignored clearly delineated statutory requirements for resource planning. Unless the Commission exercises its well-established authority to require re-submission of a legally compliant IRP, Big Rivers may again ignore basic IRP requirements in the next cycle, again disregarding Staff's well thought out recommendations. For that reason, Sierra Club again requests that the Commission require Big Rivers to submit a new IRP that cures the many flaws and analytical gaps identified by Staff in the Report and by Sierra Club and Joint Intervenors in post-hearing comments.<sup>4</sup>

## II. COMMISSION STAFF CORRECTLY IDENTIFIES FATAL DEFICIENCIES IN BIG RIVERS' IRP AND APPROPRIATE REMEDIES FOR THOSE FLAWS.

<sup>&</sup>lt;sup>1</sup> See Case No. 2023-00310, Commission Staff's Report on the 2023 Integrated Resource Plan of Big Rivers Electric Corporation (August 2024) (hereinafter "Staff Report").

<sup>&</sup>lt;sup>2</sup> Staff Report at 49.

<sup>&</sup>lt;sup>3</sup> *Id.* at 49-50.

<sup>&</sup>lt;sup>4</sup> See Case No. 2023-00310, Sierra Club's Supplemental Post-Hearing Comments Regarding Big Rivers' Proposed Integrated Resource Plan (July 2, 2024) (hereinafter "Sierra Club Opening Post-Hearing Comments").

Staff's Report appropriately highlights many deficiencies and analytical flaws throughout Big Rivers' IRP, including in the modeling and analysis of resource portfolios and retirements, and including both supply-side and demand-side resources. In some cases, Staff recommendations could more clearly direct Big Rivers towards a compliant IRP. We suggest amendments where appropriate.

#### A. Demand Side Management

Staff notes that Big River's own Market Potential Study ("MPS") showed that demand-side management ("DSM") and energy efficiency ("EE") programs are cost-effective, finding that a proposed suite of DSM programs would generate savings more than three times the cost of the programs. Staff appropriately criticizes Big Rivers' failure to utilize the study results and failure to implement the DSM programs identified in the study, noting that "BREC has not shown *any* amount of effort into creating DSM/EE programs that were found cost-effective and result in energy-savings in the DSM MPS." Staff recommends that Big Rivers more thoroughly evaluate DSM study findings in future IRPs, and "develop a plan to implement DSM and EE programs that BREC has identified as being cost-effective and meet targets for BREC's energy savings and demand reductions goals in the future."

#### Amendments to Staff Recommendations

Big Rivers should be required to model larger DSM and EE portfolios. In the IRP, Big Rivers locked in de minimis DSM-EE funding, at just \$1 million, amounting to only 16 MWs in load reduction from summer peak demand.<sup>8</sup> Given concerns raised in the hearing and in comments by intervenors and Chairman Chandler about excess capacity, Big Rivers should be specifically required to model multiple DSM and EE portfolios, including much larger ones, and evaluate their costs against the proposed NGCC plant and other resources.

#### **B.** Modeling of Generating Resource Portfolios and Retirements

<sup>&</sup>lt;sup>5</sup> Staff Report at 43.

<sup>&</sup>lt;sup>6</sup> *Id.* at 43 (emphasis added).

<sup>7</sup> *Id*.

 $<sup>^{8}\</sup> See$  Sierra Club Post-Hearing Comments at 21.

Staff identifies numerous deficiencies related to the scenario modeling and assumptions used in the IRP, as explained below. Staff finds that IRP modeling did not adequately consider available generating resource options or potential retirement scenarios for existing resources.

Staff recommends that Big Rivers' IRP modeling avoid making unsupported assumptions about the selection of generation technologies and timing of resource retirements "unless mandated by pending or recent enforceable regulations or for which the utility has committed for retirement in a given year." Staff explained that "the model should be permitted to select addition or retirement of any generation technologies in any year," and "should consider the useful lives of generation resources, fuel costs, and any other costs or benefits beyond the 15-year planning horizon." Among other modeling recommendations, Staff also recommends that Big Rivers explain the basis for capacity limits placed on any resource. Sierra Club is particularly supportive of Staff's recommendation that if Big Rivers applies for Commission approval of new generating resources, it should provide an updated load forecast and resource portfolio analysis demonstrating that the requested generation asset is the most reasonable and cost-effective solution to the identified need.

#### **C.** Power Plant Retirements

Staff correctly finds that "[e]conomic retirement of Wilson Station should have been an input option for resource selection," and that Big Rivers should have considered and allowed the IRP model to select economic retirement of Wilson, as the model might have selected early retirement in light of high regulatory costs. 12 Staff concludes that Big Rivers has not introduced any evidence showing that early retirement of Wilson would be cost-prohibitive. 13

Staff concludes that all available and near-market-ready resources should be considered as input options in the resource portfolio selection analysis, and that Big Rivers should not preemptively exclude resource retirement options on the basis of cost, because the model will determine cost-effectiveness of each option.<sup>14</sup> For example, for Green units 1 and 2, Staff appropriately criticizes Big Rivers' decision to artificially limit the model to only two options,

<sup>&</sup>lt;sup>9</sup> Staff Report at 47.

<sup>&</sup>lt;sup>10</sup> *Id*.

<sup>&</sup>lt;sup>11</sup> Id. at 50.

<sup>12</sup> Id. at 45.

<sup>&</sup>lt;sup>13</sup> *Id*.

<sup>&</sup>lt;sup>14</sup> *Id*.

retirement in 2029 or 2040, and concludes that "[t]o get a better picture of when the most cost-effective time to retire the units would be, the model should have been allowed to dynamically decide when or if retirement was the best option." <sup>15</sup>

#### Amendments to Staff Recommendations

Staff's recommendations must go further in order to protect Big Rivers member-owners from the risk of stranded assets at Wilson. Sierra Club recommends that the Commission require Big Rivers to update and re-submit its IRP analysis of Wilson, incorporating environmental compliance costs and reliability data, and allow the model to select economic retirement of the plant in any year. If the updated modeling determines that the costs of continued operation at Wilson are higher than early retirement and replacement with alternative resources, Big Rivers should select an earlier retirement date for Wilson. Big Rivers has not justified its apparent preference to keep Wilson online until 2045. The IRP process must evaluate the economics of all potential retirement years and select the retirement date that is in the best interest of memberowners. And the Commission should inform Big Rivers that it risks disallowances if it does not plan for the lowest-cost resource mix that delivers reliable and adequate service.

#### D. NGCC Project

Staff appropriately criticizes the IRP's selection of the Natural Gas Combined Cycle ("NGCC") project, finding that the IRP "did not clearly explain why a 635 MW NGCC unit was selected in six out of seven scenarios," while the Low Gas scenario selected two 237 MW combustion turbines. The Staff concludes that "BREC did not make clear why it needed the additional capacity" provided by the NGCC project, "especially since BREC appears to be only satisfying its MISO PRMR (based on MISO peak), not its own forecast peak, and it has excluded up to 274 MW of capacity from its load forecasts. Staff appropriately recommends that Big Rivers evaluate what it would do with the excess capacity from the NGCC project if no cogeneration partner is obtained and there is no need for a larger generation unit.

<sup>&</sup>lt;sup>15</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> As witness Mathews stated, "Wilson was not allowed to retire in the modeling." Hearing transcript at 3:30:42 (Chairman Chandler cross-exam of Talina R. Mathews).

<sup>&</sup>lt;sup>17</sup> Staff Report at 46.

<sup>&</sup>lt;sup>18</sup> *Id*.

<sup>&</sup>lt;sup>19</sup> *Id.* at 46-47.

#### Amendments to Staff Recommendations

The Commission must go further to ensure that Big Rivers does not unnecessarily build a 635 MW NGCC plant that exceeds capacity requirements. The Commission should require Big Rivers to model alternative resources, including but not limited to clean energy procurement, DSM and EE, market power, and combinations of these resources, which could fill capacity needs and avoid the need for the proposed NGCC plant. The Commission should direct Big Rivers to include an analysis of the risks of fuel volatility and environmental compliance costs in its assessment of the NGCC plant versus alternative resource pathways.

#### **E.** Environmental Compliance Costs

Staff rightly criticizes Big Rivers' analysis of environmental compliance costs, noting Big Rivers' admitted failure to conduct any formal analysis of the cost of complying with recently proposed and enacted EPA regulations. Staff notes that the IRP's base scenario modeling run did not include estimated environmental compliance costs, except for regulations that have already been implemented. Staff notes that "[a]t hearing, BREC indicated that it did not plan on implementing carbon capture technology at Wilson Station due to the estimated cost of approximately \$4 billion, but had not evaluated the cost in the IRP, nor had it allowed the model to retire Wilson Station due to pending carbon capture requirements."

Staff recommends that Big Rivers further evaluate environmental compliance costs in future IRPs, including but not limited to carbon capture technology, and provide more information about how the Company selected the carbon dispatch adder costs sensitivities used in the IRP. Staff makes clear that however environmental compliance costs are calculated, "retirement of Wilson Station should be permitted by the model," and that if Big Rivers is using an estimated carbon capture cost of \$4 billion to inform its decisionmaking, the IRP must include the basis for that estimate.<sup>23</sup> Staff also recommends that Big Rivers "include more information on how environmental compliance informed its decision-making at the portfolio selection

<sup>&</sup>lt;sup>20</sup> *Id.* at 48.

<sup>&</sup>lt;sup>21</sup> *Id*. at 49.

<sup>&</sup>lt;sup>22</sup> *Id.* at 48-49.

<sup>&</sup>lt;sup>23</sup> *Id.* at 49.

stage."<sup>24</sup> Staff appropriately cautions that "[f]or modeling purposes, regulations being challenged in court should be modeled in scenario analyses, but not ignored as if they did not exist."<sup>25</sup>

#### Amendments to Staff Recommendations

Sierra Club recommends that the Commission give Big Rivers clear direction as to how it must incorporate environmental compliance costs into its modeling. The Commission should require that Big Rivers dispense with its "carbon emission dispatch adders" and instead analyze the actual compliance costs associate with federal Greenhouse Gas emissions rules under Section 111 of the Clean Air Act, the Mercury and Air Toxics Standards ("MATS"), the Good Neighbor Rule, the Coal Combustion Residuals ("CCR") rule, and Effluent Limitation Guidelines ("ELG"), including compliance pathways and compliance dates. This more specific analysis is not only required by IRP regulations, which ask that utilities test key uncertainties, they also can inform when replacement capacity will be needed in order to save Big Rivers member-owners from paying for potentially astronomical environmental compliance costs.

#### F. Excess Capacity

Staff aptly notes that under the Base Portfolio, if non-member contracts are not renewed, Big Rivers will have excess capacity starting in 2030 upon expiration of those contracts. <sup>27</sup> Staff correctly finds that Big Rivers has not explained how it plans to treat that excess capacity. Staff appropriately recommends that "[i]f a contingency, such as renewal of non-member sales, has a significant impact on load forecast, BREC should indicate how it will respond if the plan may result in a capacity shortfall or surplus."<sup>28</sup>

#### **G.** Modeling of Renewable Resource Options

Staff criticizes Big Rivers' selection of wind resources instead of solar in the IRP's Base Portfolio and other scenarios. No wind resources were proposed in Big Rivers' most recent Request for Proposals and Big Rivers considered wind economically unviable. On the other hand, many solar projects are currently proposed or approved in Kentucky, indicating that "solar

<sup>&</sup>lt;sup>24</sup> *Id*.

<sup>&</sup>lt;sup>25</sup> *Id.* at 47.

<sup>&</sup>lt;sup>26</sup> See Big Rivers Electric Corporation 2023 Integrated Resource Plan at 148.

<sup>&</sup>lt;sup>27</sup> Staff Report at 47.

<sup>&</sup>lt;sup>28</sup> *Id.* at 47-48.

is an economically viable resource."<sup>29</sup> Staff finds that "[i]t is unclear why the model did not choose solar and consistently chose wind as an intermittent resource."<sup>30</sup> Staff concludes that the IRP model's repeated selection of unavailable wind resources over available and economically viable solar resources "detracts from the usefulness of the Base Portfolio as a reasonable least-cost resource plan."<sup>31</sup> Staff also finds that Big Rivers failed to explain why the model did not select the PACE solar and battery storage projects except in the High Load Growth scenario, as those projects are government subsidized. Staff concludes that Big Rivers should have explained why the subsidized PACE solar and storage projects were not selected in every scenario.

#### Amendments to Staff Recommendations

Again, Sierra Club recommends that the Commission be more prescriptive, requiring Big Rivers to perform new modeling. Rather than merely requiring that Big Rivers explain its reasoning for its portfolio mix, the Commission should require Big Rivers to model wind, solar, and battery storage resources and incorporate both federal tax credits and potential federal programs such as PACE into its modeling scenarios. The Commission should specifically require Big Rivers to model a clean energy replacement scenario that includes a combination of solar and storage or wind and storage against continued operation of Wilson as well as against construction of the proposed NGCC plant, as described above.

## III. THE BIG RIVERS IRP IS DEFICIENT FOR ADDITIONAL REASONS NOT ADDRESSED BY THE STAFF REPORT.

While Sierra Club agrees with Staff's analysis regarding the many deficiencies contained in the Big Rivers IRP, there are several other notable flaws in the IRP that Sierra Club highlighted in our previous comments but which Staff did not discuss in Section 6 of the Report (Reasonableness and Recommendations).

First, the IRP fails to adequately describe or analyze reliability problems at Wilson or the associated risks, as Sierra Club explained in its opening and reply comments.<sup>32</sup> Wilson has had

<sup>&</sup>lt;sup>29</sup> *Id.* at 46.

<sup>&</sup>lt;sup>30</sup> *Id.* at 48.

<sup>&</sup>lt;sup>31</sup> *Id.* at 46.

<sup>&</sup>lt;sup>32</sup> Sierra Club Opening Post-Hearing Comments at 3-5; Sierra Club's Responses to Supplemental Post-Hearing Comments Regarding Big Rivers' Proposed Integrated Resource Plan at 3 (July 19, 2024) (hereinafter "Sierra Club Reply Comments").

more frequent outages and substandard availability in recent years, and the IRP does not sufficiently consider the plant's reliability risks.<sup>33</sup> The Commission should require Big Rivers to fully analyze those reliability issues and incorporate them into analyses comparing continued operation of Wilson against retirement and replacement of the plant with alternative resources.

Second, the IRP does not adequately analyze potential utilization of federal Inflation Reduction Act ("IRA") tax credits and Infrastructure Investment and Jobs Act ("IIJA") clean energy program funding, nor does it analyze associated economic benefits. Sierra Club's opening comments explained that the IRA's expansion of tax credits for clean energy resources, as well as clean energy financing programs such as the Energy Infrastructure Reinvestment Program, New Era Program, and Rural America Energy Program, will lower the cost of clean energy projects and make them more economically attractive.<sup>34</sup> In order to accurately model the inclusion of those resources in the IRP, Big Rivers should have considered the effects of these tax credits and federal funding sources on clean resource costs.<sup>35</sup>

# IV. STAFF CORRECTLY CONCLUDES THAT BIG RIVERS' IRP IS UNREASONABLE AND INCONSISTENT WITH REGULATORY REQUIREMENTS.

Commission Staff correctly finds that "BREC's 2023 IRP is unreasonable and inconsistent with 807 KAR 5:058" for several reasons.<sup>36</sup> Staff notes that the IRP's resource acquisition plan does not comply with Section 8 of 807 K.A.R. 5:058 because evidence showed that "the selected generation portfolio in no way reflected a plan that BREC intends on following even in the short term."<sup>37</sup> Staff therefore appropriately finds that "[t]he acquisition plan as filed *is not a useful resource* for the Commission, BREC, or its ratepayers for evaluating the need for and cost-effectiveness of potential generation options."<sup>38</sup> Indeed, Staff explains that "BREC's IRP is nearly useless to inform any future CPCN application evaluation."<sup>39</sup>

In particular, Staff finds that the IRP's selection of the 635 MW NGCC project is unreasonable because it "was based on a co-generation plan that never came to fruition yet was

<sup>&</sup>lt;sup>33</sup> Sierra Club Opening Post-Hearing Comments at 3-5; Sierra Club Reply Comments at 3.

<sup>&</sup>lt;sup>34</sup> Sierra Club Opening Post-Hearing Comments at 18-20.

<sup>&</sup>lt;sup>35</sup> *Id*.

<sup>&</sup>lt;sup>36</sup> Staff Report at 39.

<sup>37</sup> *Id* 

<sup>&</sup>lt;sup>38</sup> *Id.* (emphasis added).

<sup>&</sup>lt;sup>39</sup> *Id.* at 49.

included as the sole NGCC resource option with no mention of the contingent co-generation plan in the IRP."<sup>40</sup> Staff concludes that this flawed analysis of the NGCC as a new resource addition undermines the retirement analysis for existing resources, so that "nothing from the Base Portfolio can be relied upon except perhaps the PACE Solar and Storage projects."<sup>41</sup>

In addition to the reasons expressly identified in the "Introduction" and "Reasonableness" sections of Staff's Report, the IRP is also unreasonable and inconsistent with regulatory requirements because of the other flaws Staff identifies elsewhere in the Report. For example, the IRP's failure to adequately analyze economic retirement of Wilson, reliability issues at the facility, or environmental compliance costs affecting the plant renders the IRP unreasonable and inconsistent with 807 K.A.R. 5:058, Section 8.

In sum, Sierra Club agrees with Staff's determination that "BREC's 2023 IRP is unreasonable, due to its minimal usefulness to the Commission, BREC, and its ratepayers in evaluating available resource options and determine the least-cost reasonable alternatives for meeting its capacity needs during the planning horizon."<sup>42</sup>

## V. THE COMMISSION SHOULD REQUIRE BIG RIVERS TO COMPLY WITH IRP REGULATIONS IN THIS CYCLE.

Staff states that its goals for the IRP process are to ensure that a) "[a]ll resource options are adequately and fairly evaluated;" b) "[c]ritical data, assumptions, and methodologies for all aspects of the plan are adequately documented and are reasonable;" and c) "[t]he report includes an incremental component, noting any significant changes from BREC's most recent IRP filed in 2020."43 These goals aptly mirror Kentucky's IRP regulations, which require a utility to analyze different resource mixes, test underlying assumptions, and analyze uncertainties, providing such analyses in detail for the public.

Regarding Staff's first goal, the Report makes clear that Big Rivers did not adequately and fairly evaluate all resource options. As detailed above, the IRP modeled no Wilson retirement options, analyzed no alternative resource mixes, and capped demand-side load at just 16 MW. Regarding the second goal, the Report makes clear that underlying analyses in the IRP

<sup>&</sup>lt;sup>40</sup> *Id*.

<sup>&</sup>lt;sup>41</sup> *Id*.

<sup>&</sup>lt;sup>42</sup> *Id.* at 50.

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

are *not* adequately documented and that many of the assumptions in the IRP are unexplained and therefore unreasonable. Staff goes a step further, appropriately concluding that the Big Rivers IRP as a whole is unreasonable.

Given these shortcomings, Staff cannot meet its goals in this proceeding by asking Big Rivers to provide a more compliant IRP in the 2026 cycle. Kentucky's IRP regulations would go unenforced if the IRP's shortcomings are not addressed in *this cycle*. As Staff notes, the Commission's imperative is to "to ensure that all reasonable options to meet projected load [are] being examined in order to provide ratepayers a reliable supply of electricity that is cost-effective." The Commission would abandon this obligation if it closes this proceeding without requiring Big Rivers to correct the many flaws in the IRP, giving Big Rivers license to proceed with inadequate plans for reliable, least cost electricity for another three years. Such inaction would be an abdication of the Commission's responsibility to ensure that Big Rivers memberowners receive reliable least-cost service.

### A. Declining to Require a New IRP Would Render Kentucky IRP Regulations Unenforceable.

Closing this proceeding without requiring changes to Big Rivers' IRP would result in requirements in IRP regulations going completely unenforced. Big Rivers has shown in this proceeding that it can freely ignore IRP regulations, as well as Staff recommendations from the 2020 IRP and comments from intervenors, Staff, and even Commissioners, all pushing Big Rivers to comply with IRP regulations. Staff's recommendation to not require a newly submitted IRP in this proceeding would reward Big Rivers for its noncompliance. If the Commission closes this proceeding, the only consequence Big Rivers would face from submitting a "nearly useless" IRP would be a new set of recommendations that Big Rivers can again ignore in the 2026 IRP cycle.

#### B. Turnover in Big Rivers Leadership Foreshadows Perpetual IRP Noncompliance.

A particularity of the Big Rivers IRP was that Big Rivers leadership were not able to explain the assumptions and decision points that led to its formation. Staff notes that "[t]hroughout the hearing, BREC's witnesses were unable to explain why certain decisions were

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<sup>&</sup>lt;sup>44</sup> *Id*. at 2.

made by BREC executives who were no longer employed by BREC."45 Big Rivers' new leadership indicated that the conclusions in the IRP are not final and do not represent BREC's actual plans, as they are planning to take a "fresh look" at resource planning. As the Joint Intervenors pointed out, in order for Big Rivers' "fresh look' to be meaningful ... it will be critical that the errors and unreasonable constraints in the 2023 IRP are not repeated and that all potential resource options are fairly and objectively evaluated through robust resource modeling."46 Big Rivers member-owners deserve an IRP that can be explained by current leadership. And requiring Big Rivers to submit an IRP with appropriate cost analyses and resource modeling will give current leadership an opportunity to implement their "fresh look" while providing member-owners oversight and accountability. Big Rivers customers cannot afford to wait until 2026 for a new IRP only to have new leadership again claim ignorance of the assumptions behind that IRP.

#### C. Resource planning, especially for Big Rivers, is an urgent matter that cannot be punted three years.

While failing to require Big Rivers to submit a statutorily compliant IRP in the 2023 cycle sets a dangerous precedent for future IRPs, it also has concerning near-term consequences for Big Rivers member-owners. The IRP is not merely an exercise to be completed and set aside. It is a plan to "meet future demand with an adequate and reliable supply of electricity at the lowest possible cost for all customers" while satisfying state and federal laws and regulations. 807 K.A.R. 5:058 (necessity, function, and conformity). If Big Rivers IRP is so lacking in analyses as to be deemed "useless" and "unreasonable," then it places its member-owners at risk of unreliable service and/or unreasonable rates.

Big Rivers member-owners cannot afford the risk of a three-year gap in adequate resource planning. A complete and adequate IRP that complies with Kentucky regulations could mitigate reliability and cost risks now. Instead, Big Rivers is likely headed towards a resource mix unsupported by analyses and modeling, for at least the next three years. Lingering analytical gaps will have real world consequences for Big Rivers member-owners.

<sup>&</sup>lt;sup>45</sup> *Id.* at 43.

<sup>&</sup>lt;sup>46</sup> Joint Intervenors' Post-Hearing Comments at 24 (July 2, 2024).

As Sierra Club demonstrated in its post-hearing comments, Wilson is increasingly unreliable. A Continuing to operate Wilson without replacement or retirement plans places member-owners in a vulnerable position when Wilson currently provides 37 percent of Big Rivers' total capacity. Continuing to operate Wilson could also result in significant environmental compliance costs starting as soon as 2026 for the Good Neighbor Rule, 2027 for the MATS rule, and 2030 for the Section 111 Greenhouse Gas Rules. Big Rivers member-owners deserve to understand today whether they can avoid outages during winter storms or ballooning costs by replacing Wilson's capacity with alternative resources that are cheaper and more reliable. Member-owners can only be assured that their service is least-cost and reliable (as required by IRP regulations) if Big Rivers models Wilson retirement scenarios, analyzes Wilson's reliability, and analyzes and incorporates the risk of environmental compliance costs into its IRP. Planning for replacement resources is an urgent matter. Three years of delayed planning could very lead to three years of higher rates and unreliable service, as it takes time to plan for replacement resources.

Moreover, recently adopted Kentucky legislation governing plant retirements demonstrates the urgency of adequate resource planning. K.R.S. 278.264 requires that utilities apply to the Commission for approval of electric generating unit retirements. For fossil fuel-fired electric generating units, the law provides for "a rebuttable presumption against" retirement. Id. § 278.264(2). Rebutting that presumption requires, among other showings, evidence as to replacement capacity, whether the unit's retirement will "caus[e] the utility to incur any net incremental costs . . . that could be avoided by continuing to operate the . . . unit . . . in compliance with applicable law," and a showing "that cost savings will result to customers as a result of the retirement." *Id.* § 278.264(2)(a)-(b), (3). Answering these questions before retirement requires planning far into the future to anticipate showings of cost savings and absence of avoidable net incremental costs in order to plan for retirement at a time that is beneficial to customers. The IRP is the place to plan for eventual retirements of aging, unreliable generating units, but Big Rivers IRP contains no retirement analysis, simply assuming Wilson's continued operation, to member-owners' detriment. Only through an updated and legally compliant IRP can Big Rivers explain through "description and discussion" the assumptions, judgments, and criteria that underlie determinations regarding retirement, as well as the efforts

<sup>&</sup>lt;sup>47</sup> Sierra Club Opening Post-Hearing Comments at 3-5; Sierra Club Reply Comments at 3.

that the utility is taking and will take to continue to "assess[] and refine[]" this analysis. 807 K.A.R. 5:058 § 8(5).

## **D.** The Commission has the authority to require submission of a statutorily compliant IRP.

As Sierra Club detailed in post-hearing comments, the Commission has expansive authority to require utilities to "conform to the laws of this state, and to all reasonable rules, regulations and orders of the commission not contrary to law." K.R.S 278.040(3). The Commission has the authority to determine that an electric utility is failing to "render adequate service" and enter an order requiring that the failure be corrected in a reasonable time frame. KRS 278.108(3). Big River's submission of a "nearly useless" IRP means that it has failed to plan for reliable and adequate least-cost service. Sierra Club reiterates its recommendation that the Commission find that Big Rivers is failing to provide adequate service to its customers through its legally deficient IRP and order Big Rivers remedy that failure, by opening an investigatory docket into the failed analyses in the IRP and issuing an order requiring resubmission of the IRP with certain analysis and evaluation gaps filled.<sup>48</sup> As previously noted, the Commission has ordered analogous investigatory dockets for utility failure to meet statutory obligations.<sup>49</sup>

#### VI. CONCLUSION

For the foregoing reasons, Sierra Club respectfully reiterates its recommendation that the Commission reject this IRP and order Big Rivers to resubmit an updated IRP in a new investigatory docket, in order to address the many deficiencies identified by Staff and by parties to this proceeding. Sierra Club appreciates the opportunity to submit these comments.

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<sup>&</sup>lt;sup>48</sup> See Sierra Club Opening Post-Hearing Comments at 25-26.

<sup>&</sup>lt;sup>49</sup> *Id.* at 25 (citing Case 2023-00422, Electronic Investigation of Louisville Gas and Electric Company and Kentucky Utilities Company Service Related to Winter Storm Elliott (filed Dec. 22, 2023); 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 Certificates And Approval Of A Demand Side Management Plan And Approval Of Fossil Fuel-Fired Generating Unit Retirements (filed Mar. 10, 2023); Case No. 2021-00370, Electronic Investigation of the Service, Rates and Facilities of Kentucky Power Company (Ky. PSC June 23, 2023), Order at 7.)

Respectfully submitted,

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Dated: September 6, 2024

#### **CERTIFICATE OF SERVICE**

Pursuant to the Commission's Orders in Case No. 2020-00085, and in accord with all other applicable law, Counsel certifies that an electronic copy of the forgoing was served and filed by e-mail to the parties of record, on this 6th day of September, 2024

> /s/ Joe F. Childers\_ JOE F. CHILDERS