COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC 2019 INTEGRATED RESOURCE)	
PLAN OF EAST KENTUCKY POWER)	CASE No.
COOPERATIVE, INC.)	2019-00096

ATTORNEY GENERAL'S INITIAL DATA REQUESTS

Comes now the intervenor, the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention, and submits these Initial Data Requests to East Kentucky Power Cooperative, Inc. [hereinafter "EKPC," or "the Company"] to be answered by the date specified in the Commission's Order of Procedure, and in accord with the following:

(1) In each case where a request seeks data provided in response to a staff request, reference to the appropriate request item will be deemed a satisfactory response.

(2) Identify the witness who will be prepared to answer questions concerning each request.

(3) Repeat the question to which each response is intended to refer. The Office of the Attorney General can provide counsel for EKPC with an electronic version of these questions, upon request.

(4) These requests shall be deemed continuing so as to require further and supplemental responses if the company receives or generates additional information within the scope of these requests between the time of the response and the time of any hearing conducted hereon.

(5) Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association, be accompanied by a signed certification of the preparer or person supervising the preparation of the response on behalf of the entity

that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

(6) If you believe any request appears confusing, request clarification directly from Counsel for the Office of Attorney General.

(7) To the extent that the specific document, workpaper or information as requested does not exist, but a similar document, workpaper or information does exist, provide the similar document, workpaper, or information.

(8) To the extent that any request may be answered by way of a computer printout, identify each variable contained in the printout which would not be self-evident to a person not familiar with the printout.

(9) If the company has objections to any request on the grounds that the requested information is proprietary in nature, or for any other reason, notify the Office of the Attorney General as soon as possible.

(10) As used herein, the words "document" or "documents" are to be construed broadly and shall mean the original of the same (and all non-identical copies or drafts thereof) and if the original is not available, the best copy available. These terms shall include all information recorded in any written, graphic or other tangible form and shall include, without limiting the generality of the foregoing, all reports; memoranda; books or notebooks; written or recorded statements, interviews, affidavits and depositions; all letters or correspondence; telegrams, cables and telex messages; contracts, leases, insurance policies or other agreements; warnings and caution/hazard notices or labels; mechanical and electronic recordings and all information so stored, or transcripts of such recordings; calendars, appointment books, schedules, agendas and diary entries; notes or memoranda of conversations (telephonic or

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otherwise), meetings or conferences; legal pleadings and transcripts of legal proceedings; maps, models, charts, diagrams, graphs and other demonstrative materials; financial statements, annual reports, balance sheets and other accounting records; quotations or offers; bulletins, newsletters, pamphlets, brochures and all other similar publications; summaries or compilations of data; deeds, titles, or other instruments of ownership; blueprints and specifications; manuals, guidelines, regulations, procedures, policies and instructional materials of any type; photographs or pictures, film, microfilm and microfiche; videotapes; articles; announcements and notices of any type; surveys, studies, evaluations, tests and all research and development (R&D) materials; newspaper clippings and press releases; time cards, employee schedules or rosters, and other payroll records; cancelled checks, invoices, bills and receipts; and writings of any kind and all other tangible things upon which any handwriting, typing, printing, drawings, representations, graphic matter, magnetic or electrical impulses, or other forms of communication are recorded or produced, including audio and video recordings, computer stored information (whether or not in printout form), computer-readable media or other electronically maintained or transmitted information regardless of the media or format in which they are stored, and all other rough drafts, revised drafts (including all handwritten notes or other marks on the same) and copies of documents as hereinbefore defined by whatever means made.

(11) For any document withheld on the basis of privilege, state the following: date; author; addressee; indicated or blind copies; all persons to whom distributed, shown, or explained; and, the nature and legal basis for the privilege asserted.

(12) In the event any document called for has been destroyed or transferred beyond the control of the company, state: the identity of the person by whom it was destroyed or

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transferred, and the person authorizing the destruction or transfer; the time, place, and method of destruction or transfer; and, the reason(s) for its destruction or transfer. If destroyed or disposed of by operation of a retention policy, state the retention policy.

(13) Provide written responses, together with any and all exhibits pertaining thereto, in one or more bound volumes, separately indexed and tabbed by each response, in compliance with Kentucky Public Service Commission Regulations.

(14) "And" and "or" should be considered to be both conjunctive and disjunctive, unless specifically stated otherwise.

(15) "Each" and "any" should be considered to be both singular and plural, unless specifically stated otherwise.

Respectfully submitted, DANIEL CAMERON ATTORNEY GENERAL

LAWRENCE W. COOK JUSTIN M. McNEIL J. MICHAEL WEST ASSISTANT ATTORNEYS GENERAL 700 CAPITOL AVE., STE. 20 FRANKFORT KY 40601 (502) 696-5453 FAX: (502) 573-8315 Larry.Cook@ky.gov Justin.McNeil@ky.gov Michael.West@ky.gov

Certificate of Service and Filing

Counsel certifies that the foregoing is a true and accurate copy of the same document being filed in paper medium with the Commission within two business days; that the electronic filing has been transmitted to the Commission on February 24, 2020; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.

This 24th day of February, 2020.



Assistant Attorney General

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- According to the articles at the link below,¹ several major insurance companies have issued new directives stating they will cease: (i) issuing new insurance policies to companies that derive more than 30% of their revenues from thermal coal mining; and (ii) making new investments in companies that have a large exposure to thermal coal mining or coal-based energy production. According to the second article ("Energy Transition Prompts More Insurers to Back Away From Coal"), insurance policy premiums and the cost of capital will increase for utilities having significant coal-fired generation resources.
 - a. Provide a discussion of whether these new directives on behalf of major insurance companies will have any effect on the Company, its production facilities, and fuel sources, and if so, how.
 - b. State whether these new directives have entered into the Company's planning and decision making regarding the instant IRP. If not, state whether they will or may enter into the Company's planning and decision making regarding future IRP filings.
- 2. Explain whether the Company's IRP modelling takes into consideration the escalating number of coal mining company bankruptcy filings. If not, why not?
 - a. If the modeling does not take this factor into consideration, explain what would have to be done to do so.
 - b. If the Company believes the increasing incidence of coal mining company bankruptcies is of little or no concern, explain fully why not.
 - c. Provide the most current forecast of EKPC's member-owners' retail power sales to the mining industry.
 - d. For the regions served by EKPC's member-owners, provide any coal price estimates for the next ten (10) years that may have conducted.
 - e. Is EKPC aware of any Moody's Investors Service analyses regarding the stability of coal mining companies over the next one (1) to five (5) years? If so, provide copies.
- 3. In the event the Company decides to pursue more detailed analysis regarding PPAs, explain to what extent transmission costs, including uplift and congestion, enter into the Company's decision making process.

¹ <u>https://www.latimes.com/business/la-fi-chubb-bans-coal-coverage-20190701-story.html</u>; <u>https://www.axios.com/energy-transition-prompts-more-insurers-back-away-from-coal-1e85a50f-ef35-4ce7-b57b-0bec745a376e.html</u>

- 4. In the event the Company should decide at some future point in time to construct a new gas-fired combined cycle plant, provide an estimate for the time required from the plan's inception until the date such a plant can become commercially operable.
- 5. Provide a discussion regarding the extent to which the Company has examined the potential for both: (i) building and owning its own renewable generation sources within its service territory; and/or (ii) entering into PPAs for renewable generation from other sources, whether located inside or outside its service territory. With regard to resources outside its territory, explain how congestion or the risk of congestion could affect the cost and benefits in determining resource decisions.
 - a. Has the Company, or any entity acting on its behalf, conducted any studies or analyses of the cost impact of congestion with regard to entering into any external PPAs for renewable energy or other resources? If so, provide copies of all such studies.
- 6. With regard to the cost-effectiveness of continuing to use existing coal-fired generation assets as opposed to switching to renewable sources of generation, state whether the IRP modeling examines both a coal plant's marginal cost of energy, and a renewable source's lower, levelized cost of energy.
- 7. For purposes of comparing noncombustible renewable energy generation to fossil fuel generation sources, and costs attendant with both forms of generation, explain whether EKPC's modelling compares energy consumption based on the fossil fuel equivalence approach, or the captured energy approach as discussed in more detail in the EIA publication accessible at the below-referenced link.²
- 8. Explain whether fixed O&M and capital costs are: (i) factored into the calculation of revenue requirements for any of the scenarios modelled in the IRP, and if not, why not; (ii) impacted by the scenarios evaluated; and (iii) considered when assessing whether to retire existing units.
 - a. If fixed O&M and capital costs are not taken into consideration, explain whether this is consistent with the Commission's requirement to take into consideration the impact of existing and future environmental regulations.
- 9. Explain how the Company's IRP modeling takes into consideration the continuing costs of complying with state and federal environmental regulations for coal-fired

² <u>https://www.pressreleasepoint.com/eia-offers-two-approaches-compare-renewable-electricity-generation-other-sources</u>

generating plants, including but not limited to ash storage and ash pond remediation/reclamation.

- a. Provide any year-over-year inflation factors and discount rates used in estimating costs for environmental compliance with regard to coal-fired generation, including ash storage and ash pond remediation/reclamation.
- b. Provide a discussion of how the year-over-year inflation factors and discount rates for environmental compliance with regard to coal-fired generation, including ash storage and ash pond remediation/reclamation are taken into consideration in considering the costs and benefits of continued operation of coal-fired plants, as opposed to obtaining other power sources.
- 10. Produce the most recent estimate that the Company has prepared or caused to be prepared of the capital and O&M costs to comply with the following regulations:
 - a. Mercury and Air Toxics Standards;
 - b. Coal Combustion Residuals rule;
 - c. Effluent Limitations Guidelines;
 - d. 316(b) cooling water intake rule;
 - e. NAAQS, including any new ozone standard, including any standards still in the draft stages or which are still open to pubic comment;
 - f. Cross State Air Pollution Rule;
 - g. Carbon regulations, including the Clean Power Plan and the Affordable Clean Energy Plan;
 - h. Any applicable state environmental regulations;
 - i. Any other federal environmental regulation; and
 - j. Pending enforcement actions by citizen groups or regulatory agencies of any state and/or federal environmental requirements.
- 11. State whether the IRP modelling takes into consideration estimates for gas transportation, and if so, whether estimates are prepared for both firm and interruptible transportation.
- 12. Demonstrate where in the IRP filing the Company addressed affordability of electricity rates, and if so, how.
- 13. Identify any counties in the service territories of EKPC's members which are projected to lose population, and provide the projected losses over the next ten (10) years.
- 14. Reference IRP § 3.0, p. 36, wherein it is stated that "Factors considered when preparing the [load] forecast include . . . population and housing trends . . ." Discuss how the IRP takes into consideration projections that most of the Commonwealth's

population growth through 2025 will occur in the Lexington and Louisville metropolitan areas.³

- 15. Reference the 2015 IRP (Case No. 2015-00134) Staff Report, p. 6. Confirm that in that prior IRP, the residential customer count was forecasted to increase by nearly 70,000 during the 15-year period 2015-2029. Confirm also that the current IRP, § 6.3, Table 6-2, forecasts residential customer count to grow by approximately 55,700 over the same timeframe.
- 16. Explain how the Company determined the anticipated capacity factor for each generating unit in each year analyzed.
- 17. Explain whether any of the Company's generating and/or transmission facilities are required to meet any North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards. If so:
 - a. explain whether the Company's generating facilities have been designated as low, medium or high impact;
 - b. provide the costs of meeting such standards (both initial and on-going costs), and how they are calculated into the overall costs of these facilities; and
 - c. explain whether those costs are significant enough for them to be taken into consideration in the IRP modeling, and if so, how.
- 18. Provide the projected peak load forecast for each year since the date of the Company's last IRP filing. Provide also the actual peak load for each of the last three (3) years.
- 19. Provide the following historical annual data by generating unit, from 2010 to present:
 - a. Fixed O&M cost;
 - b. Variable O&M cost (without fuel);
 - c. Fuel costs;
 - d. Capital costs;
 - e. Capacity factor; and
 - f. Generation in kWh.
- 20. Provide the Company's off-system sales for each of the past three (3) years.

³ See, e.g., "Kentucky Demographics: Present and Future," Kentucky State Data Center, University of Louisville Dept. of Urban and Public Affairs, in particular p. 25, accessible at: http://www.ksdc.louisville.edu/wpcontent/uploads/2015/08/kysu.pdf

- 21. Provide the Company' current order of economic dispatch, and the dispatch rate for each generating unit, including the Clark County solar generation facility.
- 22. Explain when the Bluegrass combustion turbines will have dual-fuel capability.
 - a. Explain if a cost-benefit analysis for constructing dual-fuel capability at Bluegrass has been, or will be performed. If one has been performed, provide a copy. If one has yet to be performed, provide an estimate for when it will be completed.
 - b. State whether the Company will seek a CPCN for installing such dual fuel capability.
- 23. Explain if the Company has any plans to construct dual-fuel capability for Smith units 9 and 10.
- 24. State whether EKPC is able to demonstrate any energy conservation resulting from the use of AMI meters by those member cooperatives that have initiated system-wide AMI deployments. Provide a discussion of whether the members' increased deployments of AMI systems have proved useful to EKPC in relation to its PJM membership, and if so, how.
- 25. Provide a copy of EKPC's RUS-approved Work Plan, as identified in IRP § 1.2.
- 26. Reference IRP § 1.2, Load Forecast. Provide a breakdown by customer class of the projected 1.4% annual load growth.
 - a. Given that the winter and summer net peak annual demand will increase by 0.6% and 0.9% respectively, explain whether the fact that the summer peak is growing approximately 30% faster than the winter peak will have any implications on the Company's planning processes.
- 27. Reference IRP § 1.3, Demand Side Management. Provide a copy of the GDS Associates, Inc. report, if not already included within the IRP filing.
- 28. Reference IRP § 1.6, third paragraph regarding winter peak energy and capacity needs, in which the Company states that in the 2024 timeframe, it will either have to enter into a PPA or pursue other economic power supply alternatives to be identified in an RFP process. EKPC further states that PJM provides enough capacity to cover EKPC's winter peak load, but the prices for that energy are not hedged. Explain whether the RFP process will include obtaining bids for a financial hedge against PJM market prices in lieu of entering into a PPA for capacity.

- 29. Provide a discussion regarding the risk of fuel source with regard to EKPC's landfill gas to energy generation facilities.
 - a. In the event methane should no longer be available on a reliable basis to one or more of these facilities, explain whether EKPC could replace the lost energy production with existing resources.
- 30. Confirm that power output from neither the landfill gas generating stations, nor the Company's Solar Farm One generating facility, are dispatched into PJM.
- 31. Explain whether EKPC's 100 MW hydropower allocation from the Cumberland System remains on track to return to normal in the fall of 2020. If not, explain why not.
 - a. If EKPC has prepared any projections regarding where the hydropower will be placed in the order of economic dispatch, provide this data.
 - b. Explain how much of EKPC's allocation is available for scheduling during summer, and how much during winter.
 - c. Explain whether the hydropower is, and/or will be available for dispatch into one or more PJM auctions.
- 32. Reference IRP § 2.0, p. 29, the discussion of the CPP and the Affordable Clean Energy Rule (ACE). Explain whether the final ACE Rule has been published in the Federal Register. If so: (i) provide the Federal Register citation; and (ii) provide a discussion on whether EKPC's power supply plan as submitted in the IRP will be compliant with the ACE Rule.
- 33. Reference IRP § 2.0, p. 30, the discussion on the ongoing SEPA construction. Provide an update on the Center Hill project, and a description of this project.
- 34. Reference IRP § 6.0, Transmission and Distribution Planning. Provide a description of all on-going supplemental transmission expansion plans⁴ the Company has, as well as those for the next three (3) years, together with cost projections for each project.

⁴ For purposes of this question, the term "supplemental transmission project" is defined as a transmission expansion or enhancement that is not required for compliance with PJM criteria for system reliability, operational performance, or economic criteria, and is not a state public policy project according to the PJM Operating Agreement.

- a. Provide a description of all supplemental transmission expansion projects the Company has had for the last three (3) years, together with: (i) costs for each project; and (ii) any cost performance studies.
- b. Provide an asset management plan that includes a forecast of the expected costs for each supplemental transmission project over the next five (5) years.
- c. Provide an estimate of the transmission capital investment over the next five (5) years.
- d. For each supplemental transmission project scheduled for the next five (5) years, provide a description of whether the investment is for new infrastructure, or for maintenance of existing facilities.
- e. Provide cost-benefit analyses for each supplemental transmission project scheduled for the next five (5) years.
- f. For each supplemental transmission project scheduled for the next five (5) years, identify the quantifiable benefits expected to be achieved.
- g. Explain whether each supplemental transmission project scheduled for the next five (5) years will be competitively bid. If not, explain fully why not.
- 35. Explain whether EKPC utilizes, or has considered utilizing, dynamic transmission line ratings as opposed to static transmission line ratings.
- 36. Reference the IRP filing, § 6, p. 92, wherein EKPC states it is planning two new interconnections. Explain whether these projects will or may be RTEP projects, supplemental transmission projects. Provide a full explanation.
- 37. Explain whether SERC provided any reports, or conducted any studies and/or analyses on EKPC's behalf with regard to the instant IRP. If so, provide copies.
- 38. Reference the IRP generally, and in particular § 8.5 and Table 8.6. Confirm that the IRP's preferred plan indicates the Company will likely need to enter into a PPA.
 - a. Confirm further that based on Table 8.6, the Company in 2024 is projected to have excess winter capacity of 40.6 MW and excess summer capacity of 582.6 MW.
 - b. Provide the level of reserves that PJM and SERC require for both winter and summer.
- 39. Reference Table 8.5. Confirm that the IRP under Plan 2 projects a resource need in 2030 for 300 MW of intermediate power.
 - a. Explain whether the Company has analyzed the cost effectiveness of either acquiring or building a resource with a capacity in the range of 200 MW -

300 MW, as opposed to entering into the two PPAs identified in Table 8-7 over the period 2024 - 2030.

- 40. Reference IRP § 9.1 generally. Provide any applicable updates since the date the application was filed.
- 41. Reference the Technical Appendix, vol. 2.
 - a. Confirm that at p. DSM-3, the report states that all of the proffered DSM programs pass the Total Resource Cost test. If not already provided, provide the results of the TRC evaluation for each program.
 - b. If EKPC has performed any other California tests regarding the proffered programs, provide those.
- 42. Reference the Technical Appendix, vol. 2, at p. DSM-4. Explain whether the \$81 million in benefits refers to current year dollars.
 - a. Provide the lifetime period of the cost-effectiveness study.