COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In The Matter Of:

ELECTRONIC JOINT APPLICATION OF AMERICAN)	
ELECTRIC POWER COMPANY, INC., KENTUCKY)	
POWER COMPANY AND LIBERTY UTILITIES CO.)	Case No.
FOR APPROVAL OF THE TRANSFER OF OWNERSHIP)	2021-00481
AND CONTROL OF KENTUCKY POWER COMPANY)	

DIRECT TESTIMONY OF THOMAS HOATSON ON BEHALF OF LS POWER DEVELOPMENT, LLC

1 Q. PLEASE STATE YOUR NAME FOR THE RECORD.

2 A. My name is Thomas Hoatson.

3 Q. WHAT IS YOUR TITLE AND BY WHOM ARE YOU EMPLOYED?

4 A. I am a Director, Project Development for LS Power Development, LLC (LS Power).

5 Q. WHAT IS YOUR BUSINESS ADDRESS?

6 A. My business address is 1700 Broadway, 35th Floor, New York, NY 10019.

7 Q. PLEASE DESCRIBE YOU EXPERIENCE AND BACKGROUND.

A. I have over 40 years' experience in the power industry with approximately 20 years dedicated to the PJM market. I received a Bachelor of Science in Electric Engineering from the New Jersey Institute of Technology and hold a Masters of Business

12 Q. PLEASE TELL US ABOUT LS POWER.

Administration from Seton Hall University.

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13 LS Power is a development, investment and operating company focused on the North A. 14 American power and energy infrastructure sector. Since its inception in 1990, in addition 15 to its development of more than 660 miles of high voltage transmission, LS Power has 16 developed, constructed, managed or acquired more than 45,000 MW of power generation, 17 including utility-scale solar, wind, hydro, natural gas-fired and battery energy storage 18 projects. LS Power actively invests in distributed energy resource platforms, waste to 19 renewable generation and fuel initiatives, renewables and energy storage. Across its 20 efforts, LS Power has raised in excess of \$48 billion in debt and equity financing to support 21 North American infrastructure. LS Power is an owner, operator and developer of power 22 plants throughout the U.S., including Kentucky.

23 Q. IS LS POWER CURRENTLY A CUSTOMER OF KENTUCKY POWER?

1	A.	Yes. LS Power purchases some station power from Kentucky Power to operate our
2		Kentucky facilities when they are not generating their own power.
3	Q.	DOES LS POWER HAVE ANY OTHER COMMERCIAL RELATIONSHIP TO
4		KENTUCKY POWER?
5	A.	Yes. In addition to purchasing station power from Kentucky Power, we also have an
6		interconnection to the bulk power grid through Kentucky Power.
7	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
8	A.	The purpose of my testimony is to raise and address various topics that are important to LS
9		Power as the Kentucky Public Service Commission (Commission) considers whether to
10		approve the proposed sale of Kentucky Power Company to Liberty Utilities Company.
11		Primarily, I want to address Kentucky Power's participation in PJM and long-term
12		planning of its generation resources. I'll also briefly discuss concerns that we have with
13		how the transfer will negatively impact the rates of Kentucky Power's customers, including
14		LS Power.
15	Q.	ARE YOU SPONSORING ANY EXHIBITS AS PART OF YOUR TESTIMONY?
16	A.	No.
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18		A. KENTUCKY POWER'S MEMBERSHIP AND STATUS IN PJM
19	Q.	LET'S START BY TALKING ABOUT KENTUCKY POWER AND PJM
20		INTERCONNECTION, LLC (PJM). WHO IS PJM?
21	A.	PJM is a multi-state Regional Transmission Organization (RTO) serving 65 million people
22		in 13 states and the District of Columbia. PJM operates competitive markets for capacity,
23		energy and ancillary services to ensure that its member utilities have sufficient resources

to meet their short-term and long-term reliability obligations while procuring resources to supply those obligations at the lowest cost.

3 Q. IS KENTUCKY POWER A MEMBER OF PJM?

- 4 A. Yes. Kentucky Power is part of the American Electric Power (AEP) Fixed Resource
 5 Requirement (FRR) where the AEP utilities procure resources to meet their capacity
 6 obligations themselves rather than procuring through the PJM competitive capacity
 7 auctions.
- 8 Q. ARE YOU FAMILIAR WITH THE FACT THAT LIBERTY HAS LEFT OPEN
- 9 THE OPTION OF WITHDRAWING KENTUCKY POWER FROM PJM IF THE
- 10 TRANSACTION IS APPROVED?
- 11 A. Yes. Kentucky Power has indicated that it will continue to participate as part of AEP's
 12 FRR for the upcoming PJM capacity auction for the 2023/2024 delivery year and,
 13 potentially, the 2024/2025 delivery year under its to-be-negotiated Bridge PCA with AEP.
 14 Additionally, according to the Kentucky Power testimony, "Within 2 years of the close of
 15 the Transaction, Kentucky Power will evaluate the benefits and costs of its participation in
 16 PJM, and to the extent appropriate, explore alternatives". This is very concerning to LS
- 18 Q. WHAT IS YOUR PERSPECTIVE ON WHAT ANY EVALUATION SHOULD
- 19 ENTAIL?

Power.

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A. As part of an approval of the transaction, the Commission should order that any such evaluation be conducted as part of an open Commission proceeding, include a study by an experienced independent third party, such as the PJM Independent Market Monitor, and assess whether Kentucky Power should participate in PJM's competitive capacity auctions

going forward. Without adequate transparency and input from an independent, third party, the results of an evaluation could be swayed in one direction or another. Furthermore, the Applicants' testimony did not specify whether continued participation as an FRR entity would be part of its evaluation of participation in PJM. This is an important topic for the competitiveness and cost of Kentucky Power's future capacity supply plans and an assessment of whether Kentucky Power should remain as an FRR entity or participate in the PJM competitive capacity auctions should also be included in any evaluation of PJM participation. LS Power believes the best course of action for both Kentucky Power's customers and its planned transition to a lower carbon resource mix should be to remain in the PJM market and fully participate in the PJM competitive capacity market.

Q. PLEASE ELABORATE ON YOUR ANSWER.

A.

With regard to the question of whether Kentucky Power should exit PJM, I would point out that the PJM competitive markets provide a number of benefits to both utilities and their customers by providing clear market price signals that attract private investment in newer, less expensive technologies and allow the lowest-cost power source, wherever it is located, to provide electricity to wherever it is needed, over a wide region. PJM dispatches the system such that in every hour the lowest cost resource that can be deliverable based on the topography of the system sets the wholesale price. The broad geographical boundaries of PJM also ensure that customers have a better chance of not having their power cut due to severe weather, absent local distribution curtailments. For these reasons, customers have benefitted from their participation in all the PJM markets: wholesale energy and capacity prices have decreased while the participation of new supply resources such as demand response, wind, solar and battery storage have been incorporated

- seamlessly into those markets from a reliability and cost efficiency perspective.
- 2 Impressively, the markets have also ensured a significant reduction in emissions by
- 3 enabling such technology to be incorporated into all aspects of the market.

4 Q. HOW WOULD KENTUCKY POWER'S CHOICE TO MOVE OUT OF PJM SHIFT

RISK FROM GENERATORS TO CUSTOMERS?

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The PJM market places the risk of new generation investment and performance on private capital rather than the utilities and their customers. In the PJM competitive market, the cost of new generation, whether thermal or renewable, is borne by the generators and their investors. If a new power plant is built and market prices don't subsequently support the cost of that investment, the private investors in that plant incur the losses rather than the utility's customers. Similarly, generators wear the risk of any operating underperformance in the PJM market because they are only paid when they produce electricity and are penalized if they do not perform when needed by the grid. However, in a utility-driven or FRR procurement approach (such as what exists with AEP today), because rates are set and do not fluctuate to reflect performance, the utility's customers bear the loss from a bad investment decision by the utility as well as any operating underperformance by a utility's generation. The customers also would not benefit from any subsequent decrease in electric prices or the cost of new technologies as they are "locked in" to the utility's resource decisions. Moving out of this market would shift risk from generators to consumers, eliminate resource competition, make the region less attractive for renewable development and likely result in higher costs. This risk-transfer is a particularly important consideration as Kentucky Power evaluates how to supply its future resource obligations using new and cleaner technologies.

- 1 Q. YOU ALSO MENTIONED THAT IF KENTUCKY POWER WAS TO EXIT PJM,
- 2 IT WOULD NEGATIVELY IMPACT RESOURCE COMPETITION. WHAT DID
- 3 YOU MEAN BY THAT?

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- A. The PJM market creates competition among electric generators to provide the lowest-cost supply to customers by creating open market access to new supplies of electricity, providing clear price signals and liquid prices to power plants to sell their electricity and enabling generators to sell across a large market to where the electricity is needed. The open market and increased competition encourages generators to improve efficiencies and reduce costs and incentivizes newer, more efficient, and lower cost supply to enter the market, both of which lower electricity prices for customers.
- 11 Q. YOU ALSO MENTIONED THAT LEAVING PJM WOULD MAKE IT MORE
- DIFFICULT FOR KENTUCKY POWER TO TRANSITION TO A CLEANER
- GRID. CAN YOU ELABORATE ON THAT STATEMENT?
 - A. New technologies tend to improve efficiency, and PJM's current generation mix in 2020 was about 39 percent less carbon-intensive than 15 years ago. This reduction has come at no additional cost to consumers. Emissions reductions are largely the result of competitive markets encouraging the free entry of new, more efficient technologies. Furthermore, integration of renewables benefits from participation in a competitive market. PJM is far better suited to deal with the integration of these technologies in a cost-efficient and reliable manner than any single utility or FRR entity could be as the best and least-correlated renewable resources will likely be spread over a wide area. PJM also provides price signals and an open market for renewables development within Kentucky and the Kentucky Power

1		service territory even if the utility doesn't contract with the renewable facility. By exiting
2		PJM, Kentucky Power would be losing out on all these benefits.
3	Q.	FINALLY, WHAT ABOUT REDUCED COSTS? YOU MENTIONED THAT A
4		TRANSFER OUT OF PJM WOULD NOT RESULT IN REDUCED COSTS
5		PLEASE EXPLAIN THAT.
6	A.	I would point you to PJM's Value of Markets Report, where it states on page two:
7 8 9 10 11 12 13 14 15		Energy market prices signal to generators how much energy to produce and where, at any given time, to ensure the reliable flow of electricity. The pricing system facilitates use of the lowest-cost generation options. The energy market encourages suppliers and consumers of electricity to buy and sell electricity at prices that are as low as possible while still ensuring reliabilityThe PJM markets help save consumers at least \$3.2 billion a year by integrating more efficient resources, ensuring the lowest production costs, and reducing the need for reserves by drawing from a wide pool.
16		By leaving PJM, Kentucky Power would be preventing itself from taking advantage of the
17		cost benefits the PJM market provides.
18	Q.	BASED UPON YOUR KNOWLEDGE AND EXPERIENCE, DO YOU BELIEVE
19		THAT IT WOULD BE BENEFICIAL TO KENTUCKY POWER'S CUSTOMERS
20		IF IT WERE TO LEAVE PJM?
21	A.	It is my opinion that exiting PJM would be a bad idea and would adversely impact
22		Kentucky Power's customers.
23	Q.	YOU ALSO MENTIONED THAT LS POWER WOULD OPPOSE KENTUCKY
24		POWER REMAINING AN FRR ENTITY WITHIN PJM. PLEASE ELABORATE
25		ON THAT SUBJECT.

¹ Source: https://pjm.com/-/media/about-pjm/newsroom/fact-sheets/the-value-of-pjm-markets.ashx

- 1 A. Certainly. It is my belief that continued participation in the PJM capacity market as an
 2 FRR entity exposes Kentucky Power's customers to similar costs and risks as fully exiting
 3 the PJM market.
- 4 Q. HOW WOULD KENTUCKY POWER CUSTOMERS BE EXPOSED TO SIMILAR

5 COSTS AS IF THE COMPANY HAD SIMPLY LEFT PJM?

A. Under the FRR mechanism, the utility is responsible for selecting the resources it procures and thecost of that procurement to meet its reliability obligation. Additionally, the utility must make its procurement selections in advance of the PJM competitive capacity auctions and makes a minimum five (5) year commitment to operating under the FRR mechanism. As a result, its customers don't benefit when capacity prices available in the PJM capacity auctions are below the utility's cost of procurement and, additionally, don't participate in future price decreases driven by declining technology costs as they are stuck with the costs of the resources the utility procures. As an example, the publicly available FRR capacity rates for another AEP-owned utility in PJM, Appalachian Power Company, are \$465/MW-day for the 2021/2022 delivery year², which is significantly higher than the 2021/2022 and 2022/2023 capacity prices for the RTO region of PJM of \$140/MW-day³ and \$50/MW-day,⁴ respectively.

O. WHAT ABOUT RISK?

 $^{^2\} Source: \ https://www.pjm.com/-/media/markets-ops/settlements/frr-lse-capacity-rates/2021/2021-capacity-formula-rate-summary.ashx$

³ Source: https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx

 $^{^4 \} Source: \ https://pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2022-2023/2022-2023-base-residual-auction-report.ashx$

As noted above, if Kentucky Power selects more expensive resources as part of its FRR procurement or technology costs subsequently decrease, any increased costs versus the PJM capacity auctions are borne by its customers rather than being incurred by the more expensive generators. The utility is also responsible for any performance issues with the resources it selects as part of its FRR supply plan, which are almost always passed through to customers, whereas the cost and risk of any performance issues in non-FRR zones are borne by the generators in the competitive PJM capacity market.

Q. DOES REMAINING AN FRR ENTITY POTENTIALLY IMPACT KENTUCKY POWER'S ABILITY TO PROCURE COMPETITIVE RESOURCES?

Allowing the utility to select the resources to meet its capacity market obligations is inherently uncompetitive and allows the utility to give preference to rate-based resources. Whereas the PJM competitive capacity market allows many resources to participate and bid into the auctions and then selects the lowest cost resources from the bids, utility-driven resource selection as part of an FRR supply plan does not benefit from this market discipline and excludes resources that are not selected as part of the FRR plan from participating in the market, which discourages the development of more cost-efficient new and cleaner resources.

Q. ARE THERE ANY POTENTIAL RELIABILITY CONCERNS FOR KENTUCKY

POWER?

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Participating as an FRR entity results in lower reliability and less supply than participating in the PJM competitive capacity market. As an FRR entity, Kentucky Power is only required to procure the minimum reserve margin needed to meet its FRR obligation (14.4%), whereas the PJM capacity market has historically exhibited higher supply and

1		reserve margin (22.4%) than FRR entities have procured. Moreover, generators that are
2		outside of the FRR are subject to performance penalties so are incented to avoid outages,
3		while the same performance incentives are not in place for generation in FRR entities.
4	Q.	IF LIBERTY DECIDED TO TAKE KENTUCKY POWER OUT OF PJM, WHAT
5		WOULD THAT ENTAIL?
6	A.	First, the Commission and FERC would have to approve such a decision. While I am no
7		expert on Commission precedent, I understand that prior orders of the Commission indicate
8		that Kentucky Power cannot leave PJM or change its status as a fixed resource requirement
9		participant in PJM without pre-approval. I would urge the Commission to reject any
10		request to take Kentucky Power out of PJM.
11	Q.	BASED UPON YOUR KNOWLEDGE AND EXPERIENCE, DO YOU BELIEVE
12		THAT IT WOULD BE BENEFICIAL TO KENTUCKY POWER'S CUSTOMERS
13		FOR KENTUCKY POWER TO REMAIN AN FRR ENTITY?
14	A.	It is my opinion that Kentucky Power's customers are more likely to benefit from Kentucky
15		Power changing its status as an FRR entity and instead fully participating in PJM's
16		competitive capacity market.
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18		B. KENTUCKY POWER'S LONG-TERM SUPPLY PORTFOLIO
19	Q.	HOW WOULD YOU CHARACTERIZE KENTUCKY POWER'S CURRENT
20		RESOURCE PORTFOLIO?
21	A.	Kentucky Power's current resource portfolio predominately consists of coal-fired
22		generation capacity at the Mitchell Generating Station.

1 Q. WHAT ARE YOUR GENERAL THOUGHTS ON HOW KENTUCKY POWER

2 SHOULD BE THINKING ABOUT OPTIMIZING ITS LONG-TERM RESUORCE

3 **PORTFOLIO?**

- 4 A. As Liberty, Kentucky Power and the Commission all evaluate Kentucky Power's long-
- 5 term supply portfolio, LS Power would encourage the parties to incorporate the principles
- of competitiveness, cost, local benefits and reliability in addition to environmental benefits
- 7 into its review.

8 Q. WHAT GUIDANCE HAS LIBERTY PROVIDED REGARDING ITS FUTURE

9 LONG-TERM RESOURCE PORTFOLIO?

- 10 A. Liberty has identified the opportunity to replace Kentucky Power's existing ~1.2 GW coal-
- fired supply with over one (1) GW of renewable generation facilities in the application and
- its investor presentations.⁵ Specifically, it has focused on "rate-regulated renewables
- sources" in its investor communications. As a developer, owner and operator of a number
- of clean energy resources, including utility-scale solar, wind, hydro and battery projects as
- well as demand resource and distributed generation resources, LS Power supports the
- direction Liberty and Kentucky Power are taking towards a clean energy supply mix.
- However, the shift must be implemented in a way that is cost-competitive and reliable for
- 18 Kentucky Power's ratepayers.

19 Q. ARE YOU SATISIFED THAT LIBERTY'S PROPOSAL IS APPROPRIATE?

- 20 A. No. The proposed supply plan raises a number of issues that I believe should be addressed
- as part of the transaction

22 Q. PLEASE ELABORATE ON THAT ANSWER.

⁵ Slide 10 of presentation titled: "Algonquin to Acquire Kentucky Power Company & AEP Kentucky Transmission Company, Inc", Algonquin Power & Utilities Corp., October 26, 2021.

First, the emphasis on "rate-regulated" implies that new resources will be developed and owned by Kentucky Power, increasing its rate base and returns to its equity owners (e.g. Liberty). The most cost-competitive solution for Kentucky Power's supply plan will be for the utility and the Commission to evaluate all options available to it and select the least-cost, least-risk solution, including self-build resources, acquisition of resources developed and constructed by third parties, and/or contracting with resources owned by others. A narrow focus on self-build resources to the benefit of Liberty's shareholders would be expected to lead to worse outcomes for Kentucky Power's ratepayers as it eliminates competition from the procurement plan.

Q. WHAT OTHER CONCERNS DO YOU HAVE?

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A.

Second, replacement of ~1 GW of coal-fired resources that are dispatchable and have firm fuel supply with ~1 GW of intermittent renewable resources as noted in Liberty's investor presentation raises concerns about how reliability requirements will be met under such circumstances. In any given day, only a portion of the renewable resources will be available to Kentucky Power to serve load. Based on PJM's latest forecast of Effective Load Carrying Capability (which sets forth the percentage of an intermittent resource's MW output that can supply capacity obligations to meet reliability requirements), by 2028 only 11.0% of on-shore wind output and 27.0% - 39.0% of solar output would be available to be used to meet Kentucky Power's capacity obligations. (PJM, July 2021 Effective Load Carrying Capability (ELCC) Report, July 1st, 2021) Therefore, only a portion of the 1 GW of new renewables can be counted on to supply capacity. Given this, Liberty and Kentucky Power should be required to take a holistic view to resource planning and incorporate firm and flexible resources such as demand response, gas-fired generation and batteries in its

supply plan to ensure the grid is capable of serving customer needs when the wind is not blowing and the sun is not shining.

O. DO YOU HAVE ANY OTHER CONCERNS?

Yes. Third, I would point out that Liberty has made a number of commitments to the local community that LS Power supports, including maintaining Kentucky Power's head office in its service territory, adding local jobs and reopening the Ashland service center. The focus on the local community should also extend to Kentucky Power's resource procurement plan. As the Commission and Kentucky Power evaluate the utility's resource plan, they should take into consideration in such evaluation the local benefits to Kentucky and the service territory in any analysis of the resources to build, acquire or contract. While Kentucky Power's customers can receive the benefits of participating in the regional PJM market, as discussed previously, they can also receive added tax and jobs benefits when resources in Kentucky Power's plan are located within the state and/or the utility's service territory.

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C. RATE CONCERNS

17 Q. AT A HIGH LEVEL, WHAT ARE YOUR CONCERNS ABOUT THE POTENTIAL 18 RATE IMPACTS TO CUSTOMERS OF THE PROPOSED TRANSACTION?

As a ratepayer, LS Power and its affiliates are concerned about potential ratepayer impacts resulting from the transaction that are not adequately addressed in the commitments made by Liberty to the Commission as part of the transaction. LS Power believes that additional commitments should be made as part of the transaction to ensure fair treatment of its ratepayers.

Q. CAN YOU GIVE ME AN EXAMPLE OF SUCH A COMMITMENT?

Yes. First, Liberty has not made a commitment regarding overall rate impacts to the customers. Liberty lists thirteen (13) commitments that its management is making as described on pages 7-8 of the Eichler testimony. However, none of these commitments address maintaining customer rates at current levels for a set period of time. Having a commitment regarding future rate changes would be beneficial to customers.

7 Q. ARE THERE ANY OTHER COMMITMENTS THAT YOU THINK SHOULD BE

MADE TO ASSURE THAT CUSTOMERS ACTUALLY BENEFIT FROM THE

TRANSACTION?

A.

Yes. Liberty raises several points in its application and investor materials that could lead to potential ratepayer impacts and should be addressed as part of the transaction. First, Kentucky Power notes that it will be entering into a Transition Services Agreement with AEP as part of this transaction where AEP will be providing services to Kentucky Power at cost. Any costs associated with the transition beyond what Kentucky Power would have paid as part of AEP should not be pushed down to Kentucky Power's ratepayers. Even if AEP is providing such transition services at cost, LS Power would anticipate there would be incremental costs incurred by transitioning certain activities and functions locally to Kentucky Power and to the new employees. While one of Liberty's commitments is to: "Not seek recovery of the transaction premium or transaction costs in Kentucky Power's rates," this commitment does not account for incremental transition cost of migrating centralized services and costs from AEP to the Kentucky Power local level. Second, Liberty identifies certain areas in its October 2021 Investor Presentation⁶ where there are

⁶ Slide 8 of presentation titled: "Algonquin to Acquire Kentucky Power Company & AEP Kentucky Transmission Company, Inc", Algonquin Power & Utilities Corp., October 26, 2021.

"Opportunities for Regulatory Enhancements and Improved Regulatory Outcomes." Notably, Liberty identifies: (a) that Kentucky Power's average earned return on equity (ROE) may be too low; (b) they may want to seek a forecasted versus a historical test year; and (c) that Kentucky Power's current equity thickness is lower than its peers. These statements point to areas where Liberty may seek to increase Kentucky Power's revenue requirement and, consequently, its customers' rates. While such issues may be adjudicated during a future rate case, these statements suggest that a commitment on rate protection for a fixed period of time for Kentucky Power's customers as part of the Transaction is reasonable and warranted.

10 Q. DOES THAT CONCLUDE YOUR TESTIMONY?

11 A. Yes.