

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

Electronic Application Of Kentucky Power Company )	
For (1) Renewed Authority Under KRS 278.2207(2) )	
And KRS 278.2219 To Enable The Company To Pay )	
The Fees And Costs Imposed By The Grid Assurance )	Case No. 2023-00305
LLC Subscription Agreement; And (2) The Grant Of )	
All Other Required Approvals And Relief )	

**VERIFIED APPLICATION**

Kentucky Power Company moves the Public Service Commission of Kentucky (“Commission”) pursuant to KRS 278.2207(2), KRS 278.2219(2), and the Commission’s November 15, 2018 Order in Case No. 2018-00287<sup>1</sup> for an order **to be issued no later than November 15, 2023**: (1) renewing the Company’s authority to execute the Subscription Agreement with Grid Assurance LLC, to enter into all transactions contemplated by the Subscription Agreement, and to continue to pay all fees and costs required by the Subscription Agreement; and (2) granting all other required relief or approvals. The Commission previously granted Kentucky Power’s request for deviation from KRS 278.2207 and its approval for a period of five years to enter into the Subscription Agreement with Grid Assurance LLC, subject to certain limitations, by its order dated November 15, 2018 in Case No. 2018-00287. That approval expires after November 15, 2023, and Kentucky Power hereby requests via this Application that the Commission renew that authority. The Subscription Agreement has not

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<sup>1</sup> *In The Matter Of: Electronic Application Of Kentucky Power Company For 1) Authority Under KRS 278.2207(2) And KRS 278.2219 To The Extent Required To Enable The Company To Pay Fees And Costs Imposed By The Grid Assurance, LLC Subscription Agreement; 2) The Grant Of All Other Required Approvals And Relief, Case No. 2018-00287.*

materially changed from the form and terms previously approved by the Commission. In support Kentucky Power states:

**Applicant**

1. Kentucky Power is a corporation organized on July 21, 1919 under the laws of the Commonwealth of Kentucky. The Company is in good standing in Kentucky.<sup>2</sup>

2. The post office address of Kentucky Power is 1645 Winchester Avenue, Ashland, Kentucky 41101. The Company’s electronic mail address is kentucky\_regulatory\_services@aep.com.

3. Kentucky Power is a wholly-owned subsidiary of American Electric Power Company, Inc. (“AEP”). AEP is a multi-state public utility holding company that provides electric service to customers in parts of eleven states: Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia, and West Virginia.

**Non-Party Entities**

4. AEP Transmission Holding Company, LLC (“AEP Transmission Holding”) is a limited liability company organized under the laws of the State of Delaware. Its address is 1 Riverside Plaza, Columbus, Ohio 43215. AEP Transmission Holding is a wholly-owned subsidiary of AEP and an affiliate of Kentucky Power as that term is defined at KRS 278.010(18). AEP Transmission Holding does not provide retail electric service in the Commonwealth and is not otherwise a utility as the term is defined at KRS 278.010(3)(a).

5. Grid Assurance LLC is a limited liability company organized under the laws of the State of Delaware. Its address is 1 Riverside Plaza, Columbus, Ohio 43215. Grid Assurance

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<sup>2</sup> A certified copy of the Company’s Articles of Incorporation and all amendments thereto was attached to the Joint Application in *In the Matter Of: The Joint Application Of Kentucky Power Company, American Electric Power Company, Inc. And Central And South West Corporation Regarding A Proposed Merger*, P.S.C. Case No. 99-149. The Company’s September 15, 2023 Certificate of Existence is filed as **EXHIBIT 1** to this Application.

provides services to subscribing utility members designed to assist subscribing members in promptly restoring the bulk electric system in the wake of catastrophic events such as a natural disaster or a physical or cyber-attack. Grid Assurance maintains a website at <http://www.gridassurance.com/>. Grid Assurance does not provide retail electric service in the Commonwealth and is not otherwise a utility as the term is defined at KRS 278.010(3)(a).

6. AEP Appalachian Transmission Co., Inc.; AEP Indiana Michigan Transmission Co., Inc.; AEP Kentucky Transmission Co., Inc.; AEP Ohio Transmission Co., Inc.; AEP Oklahoma Transmission Co., Inc.; AEP Texas Inc.; AEP West Virginia Transmission Co., Inc.; Appalachian Power Company; Electric Transmission Texas, LLC; Indiana Michigan Power Company; Kingsport Power Company; Ohio Power Company; Public Service Company of Oklahoma; Southwestern Power Company; and Wheeling Power Company (collectively the “other AEP Subscribers”) have executed the Subscription Agreement. The other AEP Subscribers, with the exception of Electric Transmission Texas, LLC,<sup>3</sup> are wholly-owned subsidiaries of AEP and are affiliates of Kentucky Power as that term is defined at KRS 278.010(18). None of the other AEP Subscribers is a Kentucky utility as the term is defined at KRS 278.010(3)(a).

### **The Proposed Transaction**

#### **A. *Overview of Grid Assurance***

7. The current equity investors in Grid Assurance are three major utility companies or their affiliates — Berkshire Hathaway Energy U.S. Transmission, LLC (20%); AEP Transmission Holding on behalf of AEP (70.1%); and FirstEnergy Transmission, LLC (9.9%).

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<sup>3</sup> Electric Transmission Texas, LLC, is an equity interest joint venture between AEP Transmission Holding Company, LLC and Berkshire Hathaway Energy Company formed to own and operate electric transmission facilities in Electric Reliability Council of Texas.

8. Other transmission-owning electric utilities that execute Subscription Agreements (“Subscribers”) may become investors in Grid Assurance.

9. Kentucky Power does not hold an equity interest in Grid Assurance. Kentucky Power does not anticipate that it or any affiliate of Kentucky Power other than AEP Transmission Holding will hold an equity interest in Grid Assurance.

**B. *Overview of Grid Assurance Services***

10. Grid Assurance was launched in May 2016 to address an increasingly critical and foreseeable need for grid resilience facing transmission-owning electric utilities. Grid Assurance supports the restoration of electric service after catastrophic events through multiple services including but not limited to:

- Procuring and maintaining an inventory of critical spare transformers, circuit breakers, and related transmission equipment optimized for the collective resilience needs of its Subscribers;
- Providing secure domestic warehousing of the inventory of spares in secure and strategic locations; and
- Releasing inventory of spares to Subscribers as needed in response to specified types of emergencies (known as “Qualifying Events”) and assisting with delivery logistics.

These services collectively are referred to as Sparing Service.

11. The Sparing Service provided by Grid Assurance is intended to supplement the inventory management practices of Subscribers. The Sparing Service thus is different from mutual assistance mechanisms such as are available through programs such as the Edison Electric Institute Spare Transformer Equipment Program (“EEI-STEP”) or the Regional Equipment Sharing for Transmission Outage Restoration (“RESTORE”) initiative. Rather Grid Assurance is a third-party entity that will provide Sparing Service to Subscribers. The critical spare transformers, circuit breakers, and related transmission equipment made available to

Subscribers are owned and maintained by Grid Assurance and not the Subscribers. The secure domestic warehousing available through Grid Assurance is maintained by Grid Assurance and not the Subscribers; the logistical services available through Grid Assurance likewise are provided by Grid Assurance and not the Subscribers. Unlike mutual assistance mechanisms, Grid Assurance will increase the inventory of critical transmission equipment available to respond to catastrophic events.

12. Grid Assurance procures and maintains an inventory of new spare transformers, circuit breakers, and other critical transmission equipment (“Inventoried Spares”); it also provides ready access to Inventoried Spares to Subscribers following catastrophic events. The Inventoried Spares are purchased by Grid Assurance based upon the responses received by Grid Assurance to a Request for Proposals sent to select and vetted vendors. Grid Assurance currently maintains and provides access to an inventory of extra-high-voltage, large power transformers and circuit breakers. This equipment is adjusted based upon the needs of subscribing transmission owners, as indicated by the quantities nominated by them in their subscription agreements (“Nominated Quantity”), which are grouped into multiple “equipment classes” with common specifications (“Equipment Class”).

13. Each Equipment Class has a target inventory optimized and managed to meet the collective needs of transmission owners that subscribe to equipment in that class. Grid Assurance warehouses its inventory in secure domestic locations away from affected substations. Grid Assurance currently maintains two warehouse locations. One warehouse is located in the east and one warehouse is located in the Midwest. The specific locations of the warehouses cannot be disclosed for security reasons. The warehouses are located in areas that meet criteria for long haul transportation facilities, security, topology, weather, and environment.

14. Grid Assurance also assists with delivery logistics. Grid Assurance performs ongoing logistics planning and maintains expertise in large asset transportation, including intermodal transportation for inbound and outbound inventory.

15. The Grid Assurance Subscription Agreement enables a Subscriber to purchase Inventoried Spares from Grid Assurance upon the occurrence of a Qualifying Event. The term Qualifying Event embodies a broad range of events that are the most probable to cause catastrophic damage to the transmission grid, including physical terrorism attacks, cyber-attacks, intentional electromagnetic interference, or catastrophic natural/weather events.

**C. *The Grid Assurance Subscription Agreement***

16. The Grid Assurance Subscription Agreement remains unchanged in all material respects from the terms and form previously approved by the Commission. The Subscription Agreement provides Subscribers the contractual right to receive Sparing Service in accordance with the agreement's terms and conditions. Any transmission-owning entity that enters into the Subscription Agreement and pays the required annual Sparing Service Fee may become a Subscriber and receive Sparing Service.

**D. *Sparing Service Fee.***

17. The Sparing Service Fee is an annual cost and is designed to reflect Grid Assurance's costs, including its cost to purchase, store, and maintain an inventory of spare parts; general and administrative expenses; and financing costs. The Sparing Service Fee continues to be calculated consistent with the methodology previously approved by the Commission.

18. Kentucky Power proposes to continue its participation in Grid Assurance as a Subscriber and thereby continue its eligibility to receive Sparing Service upon receipt of all required Commission approvals. Kentucky Power proposes its continued participation as a Subscriber in conjunction with fifteen other AEP transmission-owning affiliates.

19. Kentucky Power's portion of the annual Sparing Service Fee to be paid by Kentucky Power is the Company's allocated share ("Contract Allocated Share") of the total annual Sparing Service Fee due under the Subscription Agreement from the AEP Subscribers. Grid Assurance bills AEP Transmission Holding Company which directly bills Kentucky Power. AEP Transmission Holding Company pays Grid Assurance the Company's Contract Allocated Share of the annual Sparing Service Fee.

20. Kentucky Power's Contract Allocated Share is calculated based on the asset make-up of the AEP affiliates participating in Grid Assurance. For example, the allocation of costs to Kentucky Power are based on its transformer and circuit breaker assets, compared to total AEP transformer and circuit breaker assets.

21. Based upon participation by each AEP Subscriber listed in paragraph 6, and based on Grid Assurance's August 30, 2023 projection of AEP's annual Sparing Service Fee for the period from January 1, 2024 through December 31, 2024, is projected to be the amount indicated in **CONFIDENTIAL EXHIBIT 2**. The fee structure is not anticipated to change materially from year to year.

22. Cost allocation is based on asset make-up of the AEP entities participating in Grid Assurance. The allocation of costs to Kentucky Power will be based on its transformer and circuit breaker assets, compared to total AEP transformer and circuit breaker assets. Based upon participation by each AEP Transmission owning entity, Kentucky Power's projected annual Sparing Service Fee for period from January 1, 2024 through December 31, 2024 is expected to be approximately \$4,958.00 on a total company basis.

23. Through payment of this de minimis annual amount, Kentucky Power gains access to the multiple benefits available to the Company through Grid Assurance, including an

enhanced ability to avoid the potentially devastating impacts of prolonged transmission outages by providing Kentucky Power with ready access to a pre-positioned and optimized inventory of critical transmission grid equipment. The payment of the de minimis amount comprising Kentucky Power's Contract Allocated Share also allows the Company to avoid or limit the potentially higher costs and less certainty likely with other alternatives.

**1. Purchase And Sale Of Inventoried Spares.**

*(a) Sales Upon Qualifying Events.*

24. In the event of a Qualifying Event, Kentucky Power may purchase an Inventoried Spare from any Equipment Class in which Kentucky Power is participating at the time of the Qualifying Event. A Qualifying Event is defined as “[a]ny damage, destruction, or material impairment of any equipment comprising ... [Kentucky Power's] electric transmission system ... in which [the] damage, destruction, or impairment is caused by or the result of...” the four classes of events described in the Subscription Agreement. These terms remain unchanged from the agreement previously approved by the Commission.

25. The Subscription Agreement governs all pricing and services, including the Sparing Service Fees and the cost of Inventoried Spares, on an equitable basis for all Subscribers, regardless of whether or not the entities are affiliates of Kentucky Power. Kentucky Power may purchase the Inventoried Spare at a price equal to the Original Cost of the Inventoried Spare. Original Cost is defined as “the total cost incurred by Grid Assurance to purchase or acquire that Inventoried Spare and have it delivered to a ... [Grid Assurance] Warehouse, including all transportation and delivery charges, taxes, duties (including custom duties), assessments, fees (including import and export fees) and other charges.” The Original Cost may be greater or lesser than the market price at the time of the Qualifying Event, although in practice Kentucky Power anticipates that obtaining comparable spares upon the same schedule



in the case of a Qualifying Event would be more costly, if even possible, given the likely price premium that could be expected from a market transaction under such circumstances.

(b) *Discretionary Sales.*

26. The Grid Assurance Subscription Agreement provides Grid Assurance with the right but not the obligation to make Discretionary Sales of Inventoried Spares. The Subscription Agreement defines a Discretionary Sale as: “Any sale of any Inventoried Spare(s) by Grid Assurance other than a sale that is: (a) made to a Transmission Group Member; (b) due to damage or destruction caused by a Qualifying Event affecting the electric transmission system of that Transmission Group Member; (c) from an Equipment Class in which such Transmission Group Member is participating; and (d) in a quantity, for each such Equipment Class, no greater than the Nominated Quantity of such Transmission Group Member in that Equipment Class.” Grid Assurance cannot make a Discretionary Sale in lieu of a sale upon a Qualifying Event.

27. Kentucky Power anticipates that Discretionary Sales, which are optional with Grid Assurance, principally will be used by Grid Assurance to manage its inventory of Inventoried Spares. In particular, the Company anticipates Grid Assurance will use Discretionary Sales to mitigate the risk that Inventoried Spares could become technologically or physically obsolete, and to mitigate the risk of Inventoried Spares aging beyond the applicable warranty period.

28. Participation in Grid Assurance as a Subscriber, including the ability to request a Discretionary Sale, is not designed to supplant a utility’s inventory procedures addressing normal equipment wear or failure. Kentucky Power’s subscription is limited to the equipment classes and numbers listed in **CONFIDENTIAL EXHIBIT 2** and is intended to provide the Company with the ability to address high-impact, low-frequency events where Kentucky Power’s normal

procedures (principally acquiring the equipment from within Kentucky Power or from another AEP affiliate) will be used to address the need for replacement equipment. Kentucky Power anticipates exercising its rights to acquire Inventoried Spares only in the case of a Qualifying Event, although it has the ability under the Subscription Agreement to request that Grid Assurance exercise its discretion to make a Discretionary Sale to the Company. Currently Kentucky Power is required to obtain Commission approval prior to acquiring assets through a Discretionary Sale under the Subscription Agreement. Kentucky Power has not sought such approval under the Subscription Agreement to date.

**E. *The Commission's Approval to Enter into the Subscription Agreement***

29. In its November 15, 2018 Order in Case No. 2018-00287, the Commission partially granted Kentucky Power's previous application. The Commission granted Kentucky Power's requests to enter into the Subscription Agreement, pay its Contract Allocated Share, and purchase equipment from Grid Assurance at Original Cost following Qualifying Events, subject to certain specified conditions. Although Kentucky Power's request for deviation from KRS 278.2207 to purchase equipment through a Discretionary Sale was previously denied, the Commission did allow Kentucky Power to seek deviation for specific purchases on a case-by-case basis.

30. The Commission found that Grid Assurance's Sparing Service would increase Kentucky Power's ability to restore electricity to customers during catastrophic events, and in light of that increased ability, the Contract Allocated Share to be paid was reasonable and it was in the public interest for Kentucky Power to enter into the Subscription Agreement. The Commission also found that following a Qualifying Event, market prices for Inventoried Spares would likely be higher than the Original Cost available through Grid Assurance. Further, the Commission recognized that even if the market price was lower, a purchase on the open market

would likely come with significant lead time— under present market conditions now up to four (4) years for certain types of equipment—which would delay Kentucky Power from restoring affected equipment. Thus, the Commission found that a Qualifying Event purchase from Grid Assurance at Original Cost would be reasonable and in the public interest compared to a market transaction with significant lead time. The Commission therefore granted approval for such purchases. These findings continue to be valid under present and anticipated future market conditions.

31. The Commission’s approval came with five conditions. First, the Commission required Kentucky Power to seek renewed approval of the Subscription Agreement after five years. Second, the Commission was to be notified of any changes to the Sparing Service or the fee paid for it. Third, following a Qualifying Event, if Kentucky Power could purchase equipment at a market price lower than the Original Cost available from Grid Assurance and without significant lead time, it was to purchase the equipment at market price. Fourth, Kentucky Power was to notify the Commission of the terms of any purchase from Grid Assurance within 30 days of the purchase. And fifth, the Commission clarified that its approval had no accounting or ratemaking implications. These conditions continue to be appropriate and amenable to the Company.

**F. *The Benefits to Kentucky Power of the Subscription Agreement***

32. The Subscription Agreement is extremely beneficial to Kentucky Power and its customers. As a “sub-subscriber” to the Grid Assurance program through AEP, Kentucky Power is able to take advantage of cost sharing among all AEP affiliates. Kentucky Power has paid a relatively small amount over the years, and will pay relatively little in the future if its renewal is approved, compared to the tremendous benefits it receives from having access to millions of dollars of assets should the need for those assets suddenly arise.

33. Since Kentucky Power’s subscription to Grid Assurance, from 2019 through the end of 2022, Kentucky Power has paid a total of \$13,467 (an average of \$3,300/year) in Grid Assurance subscription fees. Kentucky Power’s Grid Assurance subscription allows it to access up to fifteen (15) 345kV circuit breakers and twenty (20) 138kV circuit breakers at Grid Assurance’s original cost basis. Fortunately, during this period, Kentucky Power did not require Grid Assurance’s assistance. But similar to carrying insurance, Grid Assurance provides Kentucky Power—and more importantly, its customers—certainty and prompt response following a potential grid outage event. Grid Assurance has assets at the ready, and at substantially lower 2019 prices, to immediately assist Kentucky Power’s grid restoration efforts, whereas insurance would merely provide cash to purchase assets at today’s higher prices, and with today’s high lead times, which sometimes are up to four years.

34. By participating in Grid Assurance, Kentucky Power estimates it has saved approximately \$3.7 million, and its ratepayers saved approximately \$4.3 million (including avoided return on equity grossed up for taxes), compared to what it would have cost to achieve a reasonable and comparable level of risk exposure through self-supply. Please see **CONFIDENTIAL EXHIBIT 3** for the supporting data.

35. Grid Assurance’s services are a cost-effective and innovative solution that is an integral piece of Kentucky Power’s commitment to keeping customers’ power on.

### **Affiliate Transaction Statutes**

#### ***A. Application Of KRS 278.010(18) To Grid Assurance.***

36. KRS 278.2201 to KRS 278.2219 regulate transactions among regulated utilities, such as Kentucky Power, and their affiliates. KRS 278.010(18) defines an affiliate as “a person that controls or that is controlled by, or is under common control with, a utility.”

37. The Commission previously found in its November 15, 2018 Order in Case No. 2018-00287 that Grid Assurance is an affiliate of Kentucky Power as defined by KRS 278.010(18).

**B. *Asymmetrical Pricing Requirements.***

38. KRS 278.2207(1)(b) mandates that if Grid Assurance is determined to be an affiliate of Kentucky Power all services and products provided by Grid Assurance to Kentucky Power must be priced at the lower of Grid Assurance's fully distributed cost or market.<sup>4</sup>

39. The Contract Allocated Share to be paid by Kentucky Power to receive the benefits available to Subscribers is a cost-based fee that includes a return on equity component.<sup>5</sup> There currently is no established market for the types of services to be provided to Kentucky Power under the Subscription Agreement. It thus is not practicable to quantify the market price for such services.

40. Kentucky Power is entitled to purchase from Grid Assurance, upon the occurrence of a Qualifying Event, Inventoried Spares of those Equipment Classes in which Kentucky Power participates. The purchase price in connection with such sales is equal to the Original Cost of the Inventoried Spare. Although the Original Cost of an Inventoried Spare would qualify as Grid Assurance's fully distributed cost, and thus satisfy one part of the requirements of KRS 278.2207(1)(b), such Original Cost may, under limited hypothetical circumstances, be greater than the market price for the Inventoried Spare.

41. Kentucky Power may request that Grid Assurance make a Discretionary Sale to the Company of an Inventoried Spare when required by circumstances other than a Qualifying

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<sup>4</sup> KRS 278.2207(1)(b).

<sup>5</sup> See Schedule 5.1 of the Subscription Agreement.

Event. Grid Assurance has the right but is not obligated to make such a Discretionary Sale.

Unlike sales upon a Qualifying Event, the purchase price for a Discretionary Sale is anticipated to be the greater of the Original Cost or the Replacement Cost<sup>6</sup> (subject to Grid Assurance’s right to further negotiate prices as desired). Although the Original Cost of an Inventoried Spare would qualify as Grid Assurance’s fully distributed cost, and thus satisfy one part of the requirements of KRS 278.2207(1)(b), purchase at the Replacement Cost may be at a cost greater than the Original Cost or market price for the Inventoried Spare.

**C. *Kentucky Power’s Request For A Waiver Or Deviation To The Extent The Commission Determines The Need For A Waiver Or Deviation.***

42. KRS 278.2207(2) provides that the Commission may grant a deviation from the asymmetrical pricing requirements of KRS 278.2207(1)(b) for a “class of transactions” upon the demonstration by Kentucky Power that the requested pricing is reasonable and the deviation is in the public interest.

43. KRS 278.2219 provides the Commission may grant Kentucky Power a waiver or deviation from the Affiliate Transaction statutes, including the asymmetrical pricing requirements of KRS 278.2207(1)(b), upon the demonstration by Kentucky Power that compliance with such requirements is impracticable or unreasonable.

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<sup>6</sup> The Replacement Cost is equal to “the total costs and expenses that Grid Assurance incurs or would incur to purchase or acquire new equipment to replace such Inventoried Spare and have it delivered to a ... [Grid Assurance warehouse] in accordance with Grid Assurance’s policies, procedures and procurement practices, including all transportation and delivery charges, taxes, duties (including custom duties), assessments, fees (including import and export fees) and other charges, as such costs and expenses are determined by Grid Assurance in its reasonable judgment.”

**1. The Contract Allocated Share And The Purchase Of Inventoried Spares In Connection With A Qualifying Event Or A Discretionary Sale Are Reasonable.**

44. Given the Commission's determination in Case No. 2018-00287 that Grid Assurance is an affiliate of Kentucky Power, the Company requests that the Commission grant Kentucky Power a deviation from the requirements of KRS 278.2207.

45. Because they are cost-based the Company's Contracted Allocated Share and the purchase of Inventoried Spares at Original Cost are reasonable.

46. The Replacement Cost of an Inventoried Spare, which would be paid by Kentucky Power in the event of a Discretionary Sale by Grid Assurance, likewise is reasonable even if it exceeded the Original Cost because it approximates the market price Kentucky Power would otherwise pay for the Inventoried Spare in the absence of Kentucky Power being a Subscriber.

47. Inventoried Spares are high-cost items that are infrequently used but that are critical to the operation of the Company's electrical infrastructure. The cost associated with Kentucky Power individually purchasing and inventorying Inventoried Spares would be much greater than utilizing a pooling approach, such as provided by Grid Assurance, that spreads the costs. Grid Assurance's Sparing Service minimizes costs by optimizing purchases and inventory for the collective resiliency needs of multiple utilities across the country and providing an opportunity for high volume purchases.

48. The lead time to obtain an Inventoried Spare from a manufacturer may be up to four years. By paying the Contract Allocated Share, and purchasing the Inventoried Spare at Original Cost, Replacement Cost, or a negotiated cost in the event of a Grid Assurance-initiated Discretionary Sale, Kentucky Power is able to obtain important benefits not available through a market purchase.

49. Most important among these benefits is the ability to obtain an Inventoried Spare with greater certainty, in a timely fashion, of the exact desired specification, and without regard to the normal lead times required to purchase the Inventoried Spare from a manufacturer. Kentucky Power's membership in Grid Assurance also enhances the Company's ability to respond to catastrophic grid events by allowing Kentucky Power to rely upon a known dedicated inventory of new equipment for sparing purposes. Grid Assurance's Sparing Service is capable of supporting high-confidence restoration plans for transmission owners nationwide, as Kentucky Power and other Subscribers know the specifications and physical location of Inventoried Spares, providing a basis for developing logistical and transportation plans ahead of time that can be confidently relied upon and executed upon the occurrence of a Qualifying Event.

50. Kentucky Power, in conjunction with AEPSC, examined alternatives to Grid Assurance. That examination indicated that Grid Assurance provides multiple advantages over other alternatives. Grid Assurance provides the cost advantages available through economies of scale purchases that would not be available to Kentucky Power through maintaining its own inventory or through mutual assistance agreements. Grid Assurance also provides Kentucky Power with increased deployment-ready capacity, pre-planned transportation and logistical plans, storage in secure warehouses located away from facilities where the Inventoried Spares would be used, as well as cost transparency, and regulatory clarity.

51. Because of these unique benefits there is not a market price readily available for the Sparing Service Fee and Kentucky Power's resulting Contract Allocated Share.

52. Consistent with the Commission's determination that Grid Assurance is an affiliate of Kentucky Power, and to the extent the pricing provided by the Subscription Agreement does not reflect the asymmetrical pricing requirements of KRS 278.2207(1)(b), a



continuation of the Commission’s approval of a deviation from those asymmetrical pricing requirements is reasonable for the reasons described above. The Company considers it reasonable to continue to be required to seek approval on a case-by-case basis for Discretionary Sales under the Subscription Agreement.

**2. Kentucky Power’s Payment Of The Fees And Costs Provided By The Grid Assurance Subscription Agreement Is In The Public Interest And There Are No Practicable Alternatives.**

53. Because the Commission has determined that Grid Assurance is an affiliate of Kentucky Power, the Company requests that the Commission grant Kentucky Power a waiver pursuant to KRS 278.2219 from the requirements of KRS 278.2207.

54. Electric transmission grid resilience is a matter of national public importance. In response to increased threats to the electric grid, federal policy makers identified the importance of resilience in the grid, as evidenced by the passage of the Fixing America’s Surface Transportation (“FAST”) Act which, among other things, found that “the storage of strategically located spare large power transformers . . . will reduce the vulnerability of the United States to multiple risks facing electric grid reliability, including physical attack, cyber-attack, electromagnetic pulse, geomagnetic disturbances, severe weather, and seismic events.”<sup>7</sup>

55. In 2017, the Department of Energy (“DOE”) released its Report on a Strategic Transformer Reserve,<sup>8</sup> whereby the DOE identified the need to develop a reserve of large power transformers and indicated support for the efficiency of industry-based approaches like Grid Assurance.

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<sup>7</sup> Fixing America’s Surface Transportation Act, Pub. L. 114-94, §31004(a), 129 Stat. 1312, 1779 (December 4, 2015).

<sup>8</sup> U.S. Department of Energy, Strategic Transformer Reserve Report to Congress (March 2017), (*available at: <https://energy.gov/sites/prod/files/2017/04/f34/Strategic%20Transformer%20Reserve%20Report%20-%20FINAL.pdf>* (“Strategic Transformer Reserve Report”).

56. FERC has found that a transmission owner may subscribe to Grid Assurance as part of a utility's reliability compliance plan (CIP Standard 014-1) and that Federal Power Act authorization is not required for Grid Assurance to transfer equipment to a transmission owner/subscriber following a triggering event.<sup>9</sup> Additionally, FERC found in a later order that subscribing to Grid Assurance Sparing Service and purchasing equipment from Grid Assurance in an emergency would be prudent.<sup>10</sup> Finally, FERC has found that a transmission owner/subscriber with a formula rate will not be required to make a separate Section 205 filing for Grid Assurance costs, provided such entity's formula rates already incorporate the accounts to which Grid Assurance-related charges will be booked.<sup>11</sup>

57. Grid Assurance enhances the ability of Kentucky Power and other participating utilities to avoid the potentially devastating impacts of prolonged transmission outages by providing Subscribers with ready access to a pre-positioned and optimized inventory of critical transmission grid equipment. In the event of a catastrophic event, and absent Grid Assurance, such critical long lead-time transmission equipment would need to be acquired on a "case-by-case" basis or through mutual sharing arrangements. The acquisition of critical long lead-time equipment such as Inventoried Spares on a case-by-case basis or through a mutual sharing agreement typically requires longer lead times, at potentially higher costs, and with less certainty than through Grid Assurance. Grid Assurance will provide for rapid deployment of Inventoried Spares during emergencies.

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<sup>9</sup> See *Grid Assurance LLC*, 152 FERC ¶ 61,116 (August 7, 2015).

<sup>10</sup> See *Grid Assurance LLC*, 154 FERC ¶ 61,244 (March 25, 2016).

<sup>11</sup> See *Grid Assurance LLC, order granting clarification and denying reh'g*, 156 FERC ¶ 61,027 (July 8, 2016).

58. The efficient operation of the Company, in accordance of its public service obligations under KRS 278.030(2), including its duty to employ reasonable means to protect the electric grid from long-term outages, has been supported by the Company's participation in the Subscription Agreement. The terms and conditions of the Subscription Agreement continue to be reasonable, no affiliate of Kentucky Power or other transmission owner will be given an undue advantage as a result of Kentucky Power's subscription, and the public will not be adversely affected by the relief sought by Kentucky Power in this application.

59. There are no practicable alternatives to Grid Assurance that provide the same level and types of benefits. As a result, compliance by Kentucky Power with the asymmetrical pricing requirements of KRS 278.2207(1)(b) is impracticable.

60. Waiver by the Commission of the asymmetrical pricing requirements of KRS 278.2207(1)(b) is in the public interest in light of the national public importance of grid resiliency, as well as the multiple benefits available only through Grid Assurance.

### **Exhibits**

61. The exhibits listed in the Appendix to this application are attached to and made a part of this application.

### **Communications**

62. The Applicant respectfully requests that communications in this matter be addressed to the e-mail addresses identified on Kentucky Power's September 7, 2023 Notice of Election of Use of Electronic Filing Procedures.

WHEREFORE, Kentucky Power Company requests that the Commission issue an Order:

- (a) Renewing Kentucky Power's authority, including all required deviations or waivers pursuant to KRS 278.2207(2) and KRS 278.2219 from the asymmetrical pricing requirements of KRS 278.2207(1)(b), to pay all fees and costs required in connection with the Grid Assurance Subscription Agreement, including Kentucky Power's Contract Allocated Share and the purchase cost associated with purchases in connection with a Qualifying Event and Discretionary Sale purchases; and
- (b) Granting Kentucky Power such other relief as may be appropriate.

Respectfully submitted,



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Katie M. Glass  
STITES & HARBISON PLLC  
421 West Main Street  
P. O. Box 634  
Frankfort, Kentucky 40602-0634  
Telephone: (502) 223-3477  
Fax: (502) 560-5377  
[kglass@stites.com](mailto:kglass@stites.com)

COUNSEL FOR KENTUCKY POWER  
COMPANY



## **APPENDIX – EXHIBITS**

- EXHIBIT 1: Company’s September 7, 2023 Certificate of Existence.
- EXHIBIT 2: Confidential 2024 Sparing Fee Estimate for AEP (dated: August 30, 2023).
- EXHIBIT 3: Confidential Demonstrated Savings Resulting From Company’s Participation in Grid Assurance.

**Commonwealth of Kentucky**  
**Michael G. Adams, Secretary of State**

Michael G. Adams  
Secretary of State  
P. O. Box 718  
Frankfort, KY 40602-0718  
(502) 564-3490  
<http://www.sos.ky.gov>

**Certificate of Existence**

Authentication number: 297415

Visit <https://web.sos.ky.gov/ftshow/certvalidate.aspx> to authenticate this certificate.

I, Michael G. Adams, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records in the Office of the Secretary of State,

**KENTUCKY POWER COMPANY**

is a corporation duly incorporated and existing under KRS Chapter 14A and KRS Chapter 271B, whose date of incorporation is July 21, 1919 and whose period of duration is perpetual.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that Articles of Dissolution have not been filed; and that the most recent annual report required by KRS 14A.6-010 has been delivered to the Secretary of State.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 15<sup>th</sup> day of September, 2023, in the 232<sup>nd</sup> year of the Commonwealth.



*Michael G. Adams*

Michael G. Adams  
Secretary of State  
Commonwealth of Kentucky  
297415/0028317





KYPCo				
kV Class	CAT	TOT NO	\$/Unit	\$/Class
[REDACTED]				
			Total Equipment Cost	
<b>Self Supply (\$000)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Capital Expenditure (Total Equipment cost)	[REDACTED]			
Debt Expense (56.5% / Avg 4% interest rate)	[REDACTED]			
ROE (43.5% / 10.35% ROE)	[REDACTED]			
O&M (Carrying Cost)	[REDACTED]			
Total (Expenditure)/Income	[REDACTED]			
<b>GA Subscription Fee (\$000)</b>				
O&M (Expenditure)	[REDACTED]			
Self Supply Variance (\$000)	[REDACTED]			
<b>Total KYPCO savings derived from Grid Assurance participation (2019-2022)</b>	[REDACTED]			
<b>Total KYPCO ratepayer savings derived from Grid Assurance participation (2019-2022, includes ROE grossed up for taxes)</b>	[REDACTED]			