COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Electronic Application Of Kentucky Power Company)	
For Approval of A Certificate of Public Convenience)	
And Necessity For Environmental Project)	Case No. 2021-00004
Construction At The Mitchell Generating Station, An)	Case 110. 2021-00004
Amended Environmental Compliance Plan, And)	
Revised Environmental Surcharge Tariff Sheets)	

APPLICATION

Kentucky Power Company ("Kentucky Power" or "Company") applies to the Public Service Commission of Kentucky ("Commission") pursuant to KRS 278.020(1), KRS 278.183, 807 KAR 5:001, Section 14, 807 KAR 5:001, Section 15, 807 KAR 5:011, and all other applicable statutes and regulations, for an order granting: (1) a certificate of public convenience and necessity authorizing the construction of the environmental projects at the Mitchell Generating Station; (2) approval of its 2021 Environmental Compliance Plan; (3) approval of amendments to its Tariff E.S. to reflect its 2021 Environmental Compliance Plan and amended environmental cost recovery surcharge; and (4) all other required approvals and relief. The Company states as follows in support of its Application:

Background

A. INFORMATION REGARDING THE APPLICANT.

1. <u>Name and Address</u>: The applicant's full name and post office address is: Kentucky Power Company, 1645 Winchester Avenue, Ashland, Kentucky 41101. The Company's electronic mail address is <u>kentucky regulatory services@aep.com</u>.

- 2. <u>Incorporation</u>: Kentucky Power is a corporation organized on July 21, 1919 under the laws of the Commonwealth of Kentucky. The Company currently is in good standing in Kentucky.¹
- 3. <u>Business</u>: Kentucky Power Company is a public utility principally engaged in the provision of electricity to Kentucky consumers. The Company generates and purchases electricity that it distributes and sells at retail to approximately 165,000 customers located in all, or portions of, the Counties of Boyd, Breathitt, Carter, Clay, Elliott, Floyd, Greenup, Johnson, Knott, Lawrence, Leslie, Letcher, Lewis, Magoffin, Martin, Morgan, Owsley, Perry, Pike, and Rowan. The Company also furnishes electric service at wholesale to the City of Olive Hill and the City of Vanceburg.
- 4. <u>Mitchell Generating Station.</u> Kentucky Power owns and operates a fifty percent undivided interest in the coal-fired Mitchell Generating Station ("Mitchell Plant"), located approximately ten miles south of Moundsville, West Virginia.² The remaining 50 percent undivided interest in the Mitchell Plant is owned by Wheeling Power Company ("Wheeling Power"). Kentucky Power's fifty percent undivided share of the Mitchell Plant comprises 780 MW.
- 5. <u>Big Sandy Unit 1 And The Rockport Unit Power Agreement</u>. Kentucky

 Power owns and operates the 285 MW natural gas-fired Big Sandy Unit 1 located near Louisa in

 Lawrence County, Kentucky. In addition, the Company is contractually entitled under the

¹ 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 January 27, 2021 Certificate of Existence is filed as EXHIBIT 1 to the Application.

² Order, In the Matter of: Application of Kentucky Power Company for (I) A Certificate of Public Convenience and Necessity Authorizing the Transfer to the Company of an Undivided Fifty Percent Interest in the Mitchell Generating Station and Associated Assets; (2) Approval of the Assumption by Kentucky Power Company of Certain Liabilities in Connection with the Transfer of the Mitchell Generating Station; (3) Declaratory Rulings; (4) Deferral of Costs Incurred in Connection with the Company's Efforts to Meet Federal Clean Air Act Requirements; and (5) All Other Required Approvals and Relief, Case No. 2012-00578 (Ky. P.S.C. October 7, 2013).

Rockport Unit Power Agreement to a total of 393 MW of capacity and associated energy from Rockport Unit 1 and Rockport Unit 2. The Rockport Unit Power Agreement expires December 7, 2022. Kentucky Power has elected not to renew the agreement.

- 6. The Company's total capacity following the expiration of the Rockport UPA, but with the continued operation of the Mitchell Plant, will be 1,065 MW. Kentucky Power's total capacity if the Mitchell Plant is retired will be 285 MW.
- 7. <u>Kentucky Power's Peak Demand</u>. Kentucky Power's 2020 peak demand was 925 MW.
 - B. <u>Notices</u>.
- 8. Notice of Intent. Kentucky Power filed its Notice of Intent pursuant to KRS 278.183(2) with the Commission on January 4, 2021. The Notice of Intent was filed at least thirty days prior to the filing of this Application. A copy of the Notice of Intent also was transmitted by United States mail on January 4, 2021 to the Office of the Attorney General, Office of Rate Intervention and to Counsel for Kentucky Industrial Utility Customers, Inc. A copy of the Notice of Intent is attached as **EXHIBIT 2** to this Application.
- 9. <u>Customer Notices</u>: The Company is providing the customer notices required by law as follows:
- a) The Company will publish the Customer Notice required by 807 KAR 5:011, Section 8(2) once a week for three consecutive weeks in a prominent manner in newspapers of general circulation in Kentucky Power's service area. The Customer Notice was first published beginning the week of February 1, 2021. An affidavit verifying the contents of the published notice, that the notice was published, and the dates of publication will be filed

when available. The Customer Notice complies with the requirements of 807 KAR 5:011, Section 8(4); a copy of the Customer Notice is provided in **EXHIBIT 3** to the Application;

- b) The public postings required by 807 KAR 5:011, Section 8(1)(a) were made on or before February 8, 2021 at the following locations:
 - i) Ashland Corporate Office, 1645 Winchester Avenue, Ashland, Kentucky;
 - ii) Cannonsburg (Ashland) Service Center, 12333 Kevin Avenue, Ashland, Kentucky;
 - iii) Hazard Service Center, 1400 E. Main Street, Hazard, Kentucky; and
- iv) Pikeville Service Center, 3249 N. Mayo Trail, Pikeville, Kentucky. The Company also is posting a copy of the Application for public inspection during regular business hours at each of the above locations. The public postings will remain available for public inspection in conformity with the requirements of 807 KAR 5:011, Section 8(1)(c) until the Commission enters a final decision in this matter; and
- c) The Company will post a copy of the public notice specified by 807 KAR 5:011, Section 8(4) and a hyperlink to the Commission's website required by 807 KAR 5:011, Section 8(1)(b) on Kentucky Power's website (www.kentuckypower.com) within five business days of filing this Application. This information will remain available for public access and inspection in conformity with the requirements of 807 KAR 5:011, Section 8(1)(c) on Kentucky Power's website until the Commission enters a final decision in this matter.
- d) The Company will include a clear and concise explanation of its proposed change in the applicable rate schedule in its customer billings beginning March 2021. A copy of the billing message text is provided as **EXHIBIT 4** to the Application.

10. <u>Notices to the Company</u>: The Company requests that electronic copies of all orders, pleadings, and other filings relating to this proceeding be directed to the persons identified in Kentucky Power Company's January 4, 2021 Notice of Election of Use of Electronic Filing Procedures, as amended on January 20, 2021.

C. APPLICABLE ENVIRONMENTAL REQUIREMENTS.

- Environmental Protection Agency ("EPA") regulations arising under the federal Clean Air Act.

 Kentucky Power also is subject to federal, state, and local environmental requirements applicable to coal combustion byproducts. Among such requirements are the Coal Combustion Residuals ("CCR") Rule and Steam Electric Effluent Limitation Guidelines ("ELG") Rule promulgated by EPA. The CCR and ELG Rules' requirements as they apply to the operation of the Mitchell Plant are among the Environmental Requirements described in KRS 278.183.
- 12. Kentucky Power is required to comply with the CCR Rule in order for the Mitchell Plant to continue to operate after April 11, 2021.
- 13. Compliance with the ELG Rule is necessary for the Mitchell Plant to continue to operate through 2040.
 - **D.** The Proposed Construction ("Project 22").
- 14. Kentucky Power, in conjunction with Wheeling Power, filed with the EPA on November 30, 2020 their Notice of Intent to Comply with Site-Specific Alternative to Initiation of Closure ("Notice of Intent to Comply"). The notice contains a request for an extension to permit the Mitchell bottom ash pond to continue to receive waste streams after the April 21, 2021 deadline for discontinuing receipt of CCR and non-CCR waste streams. The extension was requested to provide time to complete the necessary retrofits to convert the existing systems to dry ash handling systems. Kentucky Power previously filed its November 30, 2020 Notice of

Intent to Comply on December 7, 2020 in Case No. 2020-00174³ and Case No. 2019-00443.⁴ The Notice of Intent to Comply is incorporated herein by reference.

- 15. Making the investments required for both CCR and ELG compliance at the Mitchell Generating Station is necessary to enable the Company to keep Mitchell's generating capacity online through 2040. The capital improvements necessary to achieve compliance with the CCR and ELG rules, as they apply to the Mitchell Plant, and for which Kentucky Power is seeking a certificate of public convenience and necessity, are:
 - (a) modification of the bottom ash handling systems to no longer allow the discharge of bottom ash transport water, including the installation of submerged grind conveyor systems;
 - (b) installation of a new ash bunker;
 - (c) removal of ash from the existing ponds;
 - (d) over-excavation of the ponds to ensure closure by removal;
 - (e) installation of a new liner system in the footprint of the existing bottom ash pond to accept current CCR and non-CCR wastewater streams;
 - (f) installation of a chemical treatment system for non-CCR wastewater streams; and
 - (g) installation of a new FGD Biological Treatment System with Ultrafiltration.

³ In the Matter of: Electronic Application Of Kentucky Power Company For (1) A General Adjustment Of Its Rates For Electric Service; (2) Approval Of Tariffs And Riders; (3) Approval Of Accounting Practices To Establish Regulatory Assets And Liabilities; (4) Approval Of A Certificate Of Public Convenience And Necessity; And (5) All Other Required Approvals And Relief, Case No. 2020-00174 (Ky. P.S.C.)

⁴ In the Matter of: Electronic 2019 Integrated Resource Planning Report Of Kentucky Power Company, Case No. 2019-00443 (Ky. P.S.C.).

- 16. The work described above comprises Project 22 of the Company's proposed 2021 Environmental Compliance Plan. Project 22 also is referred to as "Case 1" in testimony of the Company Witnesses filed with this Application.
- 17. Project 22 is forecasted to go in service in stages. The first stage will be placed in service in May 2023 (dry ash handling system); the second stage is forecasted to be placed into service in November 2023 (waste water ponds). The final portion of Project 22 (water biological treatment system with ultrafiltration) will be placed in service in April 2024 and is projected to achieve full ELG Rule compliance in April 2025.
- 18. Items (a) and (b) described in paragraph 15 above comprise the dry ash handling system. Items (c) through (f) are required for the waste water ponds. Item (g) makes up the water biological treatment system with ultrafiltration.
- 19. The total presently estimated cost for Project 22 is \$133.5 million (\$131.5 million in capital, \$1.8 million in other charges, and \$166,000 in Asset Retirement Obligation ("ARO") costs.) Kentucky Power's fifty percent undivided share of the total estimated Project 22 cost is \$66.75 million. Further information regarding the total estimated cost for Project 22 is provided in testimony of Company Witness Sherrick and Exhibit BDS-3 to his testimony.

Application For Certificate Of Public Convenience And Necessity.

20. Project 22 is required by the public convenience and necessity. The CCR storage ponds at the Mitchell Plant are unlined. The CCR Rule requires that closure of the CCR storage ponds must be initiated by April 11, 2021 and completed by October 17, 2023. Alternatively, the Company may seek an extension of time from the EPA to complete the construction required to comply with the CCR Rule. Kentucky Power sought an extension on November 30, 2020 by filing its Notice of Intent to Comply with the EPA. The extension is required to permit the Company to undertake, subject to this Commission's grant of the requested certificate of public

convenience and necessity, the construction required to comply with the CCR Rule. The construction required to comply with the CCR Rule comprises a portion of Project 22.

- 21. Under the ELG Rule the Company may continue discharging bottom ash transport water and FGD wastewater at the Mitchell Plant, subject to specific limitations, in exchange for a commitment to cease combusting coal, or retire the Mitchell Plant by December 31, 2028.

 Alternatively, the Company may continue operating the Mitchell Plant after December 31, 2028 by making the additional capital investment in dry ash handling or waste water treatment equipment at the Mitchell Plant required to comply with the ELG Rule. The additional investment comprises the remainder of Project 22.
- 22. Project 22 will enable the Mitchell Plant to meet the requirements of the CCR Rule and ELG Rule and continue to operate under the Rules beyond 2028 and through 2040. Further information regarding the manner in which Project 22 will enable Kentucky Power to meet the applicable CCR Rule and ELG Rule requirements with respect to the Mitchell Plant is provided in the testimony of Company Witness Spitznogle.
- 23. The retirement of the Mitchell Plant no later than 2023 absent the CCR Rule-related construction contained in Project 22, coupled with the expiration of the Rockport UPA on December 7, 2022, would leave Kentucky Power with only 285 MW of capacity. This level of capacity would be inadequate to meet the Company's demand obligations.
- 24. AEPSC, on behalf of Kentucky Power and Wheeling Power, reviewed multiple CCR-Rule and ELG-Rule compliance and construction options. These options were presented to Kentucky Power and Wheeling Power management. The compliance and construction options that were reviewed in conjunction with management of Kentucky Power and Wheeling Power

are described in the testimony of Company Witness Mattison, Company Witness Spitznogle, and Company Witness Sherrick.

- 25. Following consultation with Kentucky Power and Wheeling Power management, two of the compliance and construction options and their associated costs were provided to Company Witness Becker for evaluation of their comparative costs and benefits. The first option modeled was Project 22 ("Case 1"), which would enable Mitchell to continue to provide capacity and energy value to customers and delay hundreds of millions of dollars of investments in replacement capacity through 2040.
- 26. The second option modeled was a CCR-Only compliance option ("Case 2"). The Mitchell Plant under Case 2 must be retired at the end of 2028 and replacement capacity obtained thereafter.
- 27. Company Witness Becker analyzed the net present value of the savings or cost of Case 1 and Case 2. The details of the economic modeling performed on behalf of Kentucky Power and Wheeling Power are presented in the testimony of Company Witness Becker.
- 28. The economic modeling performed on behalf of Kentucky Power and Wheeling Power indicates that the continued operation of the Mitchell Plant through 2040 (Case 1/Project 22) would result in net present value savings of \$27 million (2020 base without carbon commodity price forecast) versus the retirement of the Mitchell Plant in 2028 (Case 2). Modeling the continued operation of the Mitchell Plant through 2040 using a carbon commodity price forecast yielded a net present value cost of \$6 million versus the retirement of the Mitchell Plant in 2028 (Case 2).

- 29. Project 22 represents the least cost, technically feasible option for Kentucky Power to maintain or obtain the capacity required to furnish adequate, efficient, and reasonable service at fair, just, and reasonable rates. Project 22 will not result in wasteful duplication.
- 30. Kentucky Power is seeking a certificate of public convenience and necessity to perform the construction required for Project 22 to permit the continued operation of the Mitchell Plant through 2040.
- 31. A franchise is not required for Project 22. Kentucky Power will obtain all required regulatory approvals or permits for Project 22. Among the required permits and regulatory approvals are permitting for dam modifications, expected to be obtained by June 2021. Modifications to the Mitchell Plant's existing air and West Virginia National Pollutant Discharge Elimination System permits and a Stormwater Pollution Prevention Plan permit, all expected to be obtained by March 2022, are also required. Copies of subsequently obtained permits and regulatory approvals will be filed with the Commission as they become available.
- 32. Maps to suitable scale in portable document format showing the location of the Mitchell Plant, the proposed construction, as well as the location of like facilities located anywhere within the map area with adequate identification of the ownership of the like facilities are attached as **EXHIBIT 5**. The Company will file two paper copies of the maps, along with an electronic copy on electronic storage medium, within 30 days of the reopening of the offices of the Commission.
- 33. Plans and specifications for Project 22 are detailed in Exhibit BDS-1 and Exhibit BDS-2 to the Direct Testimony of Brian D. Sherrick filed herewith.
- 34. Kentucky Power currently does not anticipate any incremental operating and maintenance expenses as a result of placing the proposed facilities in service.

35. Kentucky Power proposes to fund its share of the construction of Project 22 through the Company's operating cash flow and other internally generated funds. No debt or equity will be issued to fund Kentucky Power's share of the construction of Project 22.

KENTUCKY POWER'S 2021 ENVIRONMENTAL COMPLIANCE PLAN.

A. Plan Components.

- 36. The Commission approved Kentucky Power's current environmental compliance plan (the "2019 Environmental Compliance Plan") by Order dated May 18, 2020 in Case No. 2019-00389.⁵
- 37. Kentucky Power's 2021 Environmental Compliance Plan consists of the items contained in the Company's 2019 Environmental Compliance Plan plus Project 22. A copy of Kentucky Power's 2021 Environmental Compliance Plan is attached as **EXHIBIT 6** to this Application.
- 38. Kentucky Power is legally obligated for its 50 percent share of Mitchell environmental projects, including the Company's share of the Mitchell CCR and ELG compliance (Project 22) costs.

B. Project 22's Estimated Annual Revenue Requirement.

39. The costs associated with the 2021 Environmental Compliance Plan are reasonable. The 2021 Environmental Compliance Plan is required to comply with those environmental requirements whose costs are eligible to be recovered through the surcharge mechanism authorized by KRS 278.183(2). The costs associated with the 2021 Environmental Compliance Plan projects, including Project 22, are a cost-effective means for the Company to comply with the environmental requirements specified by KRS 278.183(1).

⁵ Order, In the Matter of: Electronic Application of Kentucky Power Company for Approval of an Amended Environmental Compliance Plan and a Revised Environmental Surcharge, Case No. 2019-00389 (Ky. P.S.C. May 18, 2020).

- 40. Kentucky Power is entitled to the current recovery of its environmental compliance costs, including a reasonable return on construction and other capital costs, under its Commission-approved Environmental Compliance Plan. KRS 278.183.
- 41. None of the costs associated with Project 22 currently are included in Kentucky Power's base electric rates.
- 42. The estimated annualized first year revenue requirement associated with completing Project 22 is \$1,449,677. The estimated annual revenue requirement after all aspects of Project 22 are in service is \$8,166,153.6
- 43. Although the Company is proposing in Project 22 to complete both CCR and ELG compliance work, the Company also examined a CCR-only compliance option (referred to throughout the Company's witnesses' testimony as Case 2), under which the Mitchell Generating Station would continue to operate through December 31, 2028. The total cost of the Case 2 compliance alternative is estimated to be \$35.1 million with the Company's share equal to \$17.55 million, excluding the cost of the capacity the Company would be required to obtain following the retirement of the Mitchell Plant in 2028. The estimated annualized first year annual revenue requirement associated with the Case 2 compliance alternative is \$561,052. The annual revenue requirement after all aspects of Case 2 go in service in 2024, but excluding the cost of the capacity the Company would be required to obtain following the retirement of the Mitchell Plant in 2028, is estimated to be \$3,246,750.7

⁶ See Direct Testimony of Lerah M. Scott at 6-7 and Exhibit LMS-4 for further information regarding the Project 22 revenue requirement.

⁷ *Id*.

44. Kentucky Power proposes that the Commission approve in this proceeding the 9.10 percent return on equity established by the Commission in Case No. 2020-00174 for non-Rockport environmental compliance costs recovered through Tariff E.S.⁸

AMENDED TARIFF E.S. (ENVIRONMENTAL SURCHARGE).

are filed with this Application as **EXHIBIT 7**. The amendments add Project 22 (Costs Associated with CCR and ELG Compliance at Mitchell Plant) to the Company's existing Environmental Compliance Plan and provide for the recovery of the environmental compliance costs associated with Kentucky Power's 2021 Environmental Compliance Plan. Kentucky Power seeks to recover the costs associated with its 2021 Environmental Compliance Plan beginning with cycle 1 of the Company's October 2021 billing cycle.

TESTIMONY.

- demonstrate how the public convenience and necessity require the construction related to Project 22, detail the environmental compliance requirements relevant to Project 22, and describe how Kentucky Power's 2021 Environmental Compliance Plan, including Project 22, is a reasonable and cost-effective means of meeting those requirements. Specifically, the Company offers the following testimony in support of the 2021 Environmental Compliance Plan:
 - Brett Mattison, President and Chief Operating Officer, Kentucky Power Company;
 - Gary O. Spitznogle, Vice President, Environmental Services, AEPSC;

⁸ See Order, In the Matter of: Electronic Application of Kentucky Power Company for (1) a General Adjustment of its Rates for Electric Service; (2) Approval of Tariffs and Riders; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; (4) Approval of a Certificate of Public Convenience and Necessity; and (5) all other Required Approvals and Relief, Case No. 2020-00174 (Ky. P.S.C. Jan. 13, 2021).

- Brian D. Sherrick, Managing Director of Projects, Generation Projects Controls and Construction, AEPSC;
- Mark A. Becker, Managing Director of Resource Planning, AEPSC;
- Connie S. Trecazzi, Staff Economic Forecast Analyst, Fundamentals Analysis, AEPSC;
- Lerah M. Scott, Regulatory Consultant, Kentucky Power Company; and
- Heather M. Whitney, Director of Regulatory Accounting Services, AEPSC.

WHEREFORE, Kentucky Power Company respectfully requests the Public Service Commission of Kentucky to enter an Order:

- 1. Granting Kentucky Power a certificate of public convenience and necessity to construct Project 22;
- 2. Approving the Company's 2021 Environmental Compliance Plan filed as **EXHIBIT 6** to the Application;
- 3. Approving the Company's revised Tariff E.S. filed as **EXHIBIT 7** to the Application; and
 - 4. Granting such further relief to which the Company may be entitled.

Respectfully submitted,

Mark R. Overstreet

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COUNSEL FOR KENTUCKY POWER COMPANY

EXHIBITS

EXHIBIT 1	Kentucky Power Company's January 27, 2021 Certificate of Existence
EXHIBIT 2	Kentucky Power Company's Notice of Intent
EXHIBIT 3	Kentucky Power Company's published Customer Notice
EXHIBIT 4	Kentucky Power Company's billing message text
EXHIBIT 5	Maps to suitable scale in portable document format showing the location of the Mitchell Plant, the proposed construction, as well as the location of like facilities located anywhere within the map area with adequate identification of the ownership of the like facilities
EXHIBIT 6	Kentucky Power Company's 2021 Environmental Compliance Plan
EXHIBIT 7	Kentucky Power Company's proposed amended Tariff E.S. (Environmental Surcharge) pages

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: 241518

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 27th day of January, 2021, in the 229th year of the Commonwealth.



Michael G. adams

Michael G. Adams Secretary of State Commonwealth of Kentucky 241518/0028317



421 West Main Street Post Office Box 634 Frankfort, KY 40602-0634 [502] 223-3477

January 4, 2021

ELECTRONICALLY FILED

Mark R. Overstreet (502) 223-3477 (502) 779-8349 FAX moverstreet@stites.com

Linda C. Bridwell Executive Director Public Service Commission 211 Sower Boulevard P.O. Box 615 Frankfort, KY 40602-0615

RE: Case No. 2021-00004

Dear Ms. Pinson:

Kentucky Power Company provides notice pursuant to KRS 278.183(2) that on or after February 4, 2021 it will file an application for approval of:

- (a) an amended environmental compliance plan and amendments to the applicable tariff sheets to reflect the amended compliance plan;
- (b) a revised environmental surcharge, including amendments to the applicable tariff sheets, to recover the costs of the amended environmental compliance plan; and
- (c) a certificate of public convenience and necessity for environmental project construction.

Very truly yours,

Mark R. Overstreet

MRO

cc: John G. Horne Michael L. Kurtz

Notice of Kentucky Power Company's Application

for Approval of an Amended Environmental Compliance Plan and Recovery of Additional Costs Through Amendment of the Company's Tariff E.S.

PLEASE TAKE NOTICE that Kentucky Power Company will file on or after February 4, 2021 an application with the Public Service Commission of Kentucky seeking approval of its amended environmental compliance plan to add Project 22 to Kentucky Power's existing environmental compliance plan. Kentucky Power also will seek approval of amendments to its Tarriff E.S. (Environmental Surcharge) to reflect the amended plan and to implement a revised environmental surcharge to recover the costs of the amended environmental compliance plan. Kentucky Power's application has been assigned case number 2021-00004.

Project 22 involves the (i) closure of the existing ash ponds; (ii) installation of a new liner system in the existing bottom ash pond; (iii) installation of a chemical treatment system for wastewater streams; and (iv) modification of the bottom ash handling systems, installation of a new ash bunker, and installation of a new biological treatment system with ultrafiltration. Project 22 is required for compliance with the Coal Combustion Residuals Rule and the Steam Electric Effluent Limitation Guidelines Rule.

Project 22 is expected to be placed in service in multiple stages. Kentucky Power anticipates Project 22 will be placed in service in its entirety beginning in April 2024. Between the October 2021 billing cycle and the June 2024 billing cycle the Company's environmental surcharge factor rate will change as construction work in progress ("CWIP") is added to the Tariff E.S. rate base and as the stages of Project 22 are placed in service.

If approved by the Commission, the environmental surcharge factor first will be modified to reflect the amended environmental compliance plan beginning with the October 2021 billing cycle to include in the Tariff E.S. rate base CWIP for Project 22 construction costs (Period 1). The residential environmental surcharge factor rate is estimated to increase from 7.2070% (annualized surcharge factor for period ended December 31, 2020) to 7.4890% for the October 2021 billing cycle to reflect the levelized addition of accrued and current CWIP to the Tariff E.S. rate base. The environmental surcharge factor rate for all other customers is estimated to increase from 11.4702% (annualized surcharge factor for period ended December 31, 2020) to 11.8977% for the October 2021 billing cycle to reflect the addition of accrued and current CWIP to the Tariff E.S. rate base. The annualized dollar amount of this Period 1 increase is estimated to be \$647,861 for residential customers as a class and \$801.816 for all other customers.

The environmental surcharge factor calculation next will be modified to reflect the amended environmental compliance plan beginning with the August 2023 billing cycle to include the May 2023 forecasted in-service date for the dry ash handling system (Period 2). The residential environmental surcharge factor rate is estimated to increase from 7.2070% (annualized surcharge factor for period ended December 31, 2020) to 8.2857% beginning with the August 2023 billing cycle. The environmental surcharge factor rate for all other customers is estimated to increase from 11.4702% (annualized surcharge factor for period ended December 31, 2020) to 13.0969% beginning with the August 2023 billing cycle. The annualized dollar amount of this Period 2 increase is estimated to be \$2,499,245 for residential customers as a class and \$3,093,159 for all other customers.

The environmental surcharge factor calculation also will be modified to reflect the amended environmental compliance plan beginning with the February 2024 billing cycle to include the November 2023 forecasted in-service date for the wastewater ponds (Period 3). The residential environmental surcharge factor rate is estimated to increase from 7.2070% (annualized surcharge factor for period ended December 31, 2020) to 8.5229% beginning with the February 2024 billing cycle. The environmental surcharge factor rate for all other customers is estimated to increase from 11.4702% (annualized surcharge factor for period ended December 31, 2020) to 13.4517% beginning with the February 2024 billing cycle. The annualized dollar amount of this Period 3 increase is estimated to be \$3,056,688 for residential customers as a class and \$3,783,070 for all other customers.

The environmental surcharge factor calculation last will be modified to reflect the amended environmental compliance plan beginning with the July 2024 billing cycle to include the April 2024 forecasted in-service date for the water biological treatment system with ultrafiltration (Period 4). The residential environmental surcharge factor rate is estimated to increase from 7.2070% (annualized surcharge factor for period ended December 31, 2020) to 8.7738% beginning with the July 2024 billing cycle. The environmental surcharge factor rate for all other customers is estimated to increase from 11.4702% (annualized surcharge factor for period ended December 31, 2020) to 13.8257% beginning with the July 2024 billing cycle. The annualized dollar amount of this Period 4 increase is estimated to be \$3,649,454 for residential customers as a class and \$4,516,699 for all other customers.

The impact on the total monthly bill amount beginning in October 2021 for Kentucky Power's residential customers is estimated to be 0.28% and increasing to 1.58% beginning with the July 2024 billing cycle. The impact on the total monthly bill amount beginning in October 2021 for all non-residential customers is estimated to be 0.30% and increasing to 1.68% beginning with the July 2024 billing cycle. For a residential customer using 1,219 kWh per month, the monthly increase in the customer's total bill is expected to be \$0.40 beginning in October 2021 and increasing to \$2.26 beginning in July 2024.

Information regarding the effect on customer bills by customer classification for each of Period 1 through Period 4 is presented in the table below:

Period 1

Customer Classification	Average Customer Usage (kWh)*	Average Customer Demand (kW)*	Present Average Bill*	Percent Change	Average Change / Total Bill Impact	Proposed Average Bill
(1)	(2)	(3)	(4)	(5)	(6)	(7)
R.S.	1,219	0	\$ 142.92	0.28%	\$ 0.40	\$ 143.32
S.G.S T.O.D.	1,445	0	\$ 169.50	0.30%	\$ 0.51	\$ 170.00
M.G.S T.O.D.	3,391	0	\$ 396.91	0.30%	\$ 1.18	\$ 398.09
G.S.	1,523	5	\$ 213.34	0.30%	\$ 0.64	\$ 213.98
L.G.S.	57,379	180	\$ 6,496.34	0.30%	\$ 19.39	\$ 6,515.73
I.G.S.	2,343,333	4,231	\$ 140,288.15	0.30%	\$ 418.72	\$ 140,706.87
M.W.	17,830	27	\$ 1,912.39	0.30%	\$ 5.71	\$ 1,918.10
0.L.	79	0	\$ 16.65	0.30%	\$ 0.05	\$ 16.70
S.L.**	59	0	\$ 11.37	0.30%	\$ 0.03	\$ 11.41

Period 2

Customer Classification	Average Customer Usage (kWh)*	Average Customer Demand (kW)*	Present Average Bill*	Percent Change	Average Change / Total Bill Impact	Proposed Average Bill
(1)	(2)	(3)	(4)	(5)	(6)	. (7)
R.S.	1,219	0	\$ 142.92	1.09%	\$ 1.55	\$ 144.47
S.G.S T.O.D.	1,445	0	\$ 169.50	1.15%	\$ 1.95	\$ 171.45
M.G.S T.O.D.	3,391	0	\$ 396.91	1.15%	\$ 4.57	\$ 401.48
G.S.	1,523	5	\$ 213.34	1.15%	\$ 2.46	\$ 215.80
L.G.S.	57,379	180	\$ 6,496.34	1.15%	\$ 74.80	\$ 6,571.14
I.G.S.	2,343,333	4,231	\$ 140,288.15	1.15%	\$ 1,615.30	\$ 141,903.45
M.W.	17,830	27	\$ 1,912.39	1.15%	\$ 22.02	\$ 1,934.41
O.L.	79	0	\$ 16.65	1.15%	\$ 0.19	\$ 16.84
S.L.**	59	0	\$ 11.37	1.15%	\$ 0.13	\$ 11.50

Period 3

Customer Classification	Average Customer Usage (kWh)*	Average Customer Demand (kW)*	Present Average Bill*	Percent Change	Average Change / Total Bill Impact	Proposed Average Bill
(1)	(2)	(3)	(4)	(5)	(6)	(7)
R.S.	1,219	0	\$ 142.92	1.33%	\$ 1.90	\$ 144.81
S.G.S T.O.D.	1,445	0	\$ 169.50	1.41%	\$ 2.39	\$ 171.89
M.G.S T.O.D.	3,391	0	\$ 396.91	1.41%	\$ 5.59	\$ 402.50
G.S.	1,523	5	\$ 213.34	1.41%	\$ 3.00	\$ 216.35
L.G.S.	57,379	180	\$ 6,496.34	1.41%	\$ 91.48	\$ 6,587.82
I.G.S.	2,343,333	4,231	\$ 140,288.15	1.41%	\$ 1,975.58	\$ 142,263.73
M.W.	17,830	27	\$ 1,912.39	1.41%	\$ 26.93	\$ 1,939.32
O.L.	79	0	\$ 16.65	1.41%	\$ 0.23	\$ 16.88
S.L.**	59	0	\$ 11.37	1.41%	\$ 0.16	\$ 11.53

Period 4

Customer Classification	Average Customer Usage (kWh)*	Average Customer Demand (kW)*	Present Average Bill*	Percent Change	Average Change / Total Bill Impact	Proposed Average Bill
(1)	(2)	(3)	(4)	(5)	(6)	(7)
R.S.	1,219	0	\$ 142.92	1.58%	\$ 2.26	\$ 145.18
S.G.S T.O.D.	1,445	0	\$ 169.50	1.68%	\$ 2.85	\$ 172.35
M.G.S T.O.D.	3,391	0	\$ 396.91	1.68%	\$ 6.67	\$ 403.58
G.S.	1,523	5	\$ 213.34	1.68%	\$ 3.59	\$ 216.93
L.G.S.	57,379	180	\$ 6,496.34	1.68%	\$ 109.22	\$ 6,605.56
I.G.S.	2,343,333	4,231	\$ 140,288.15	1.68%	\$ 2,358.70	\$ 142,646.84
M.W.	17,830	27	\$ 1,912.39	1.68%	\$ 32.15	\$ 1,944.54
O.L.	79	0	\$ 16.65	1.68%	\$ 0.28	\$ 16.93
S.L.**	59	0	\$ 11.37	1.68%	\$ 0.19	\$ 11.56

Based on 12-months ending December 2020

The application described in this notice is proposed by Kentucky Power. The Public Service Commission may issue an order modifying or denying the relief sought in Kentucky Power's application. Such action may result in an environmental surcharge for customers of Kentucky Power other than the environmental surcharge described in this notice.

Upon filing, Kentucky Power's application, tariff filings, and any related filings will be available for public inspection at Kentucky Power's offices located at 1645 Winchester Avenue, Ashland, Kentucky 41101 with a phone number of 606-327-2600; 1400 E. Main St., Hazard, KY 41701 with a phone number of 606-436-1322; and 3249 North Mayo Trail, Pikeville, KY 41501 with a phone number of 606-437-3827. Additionally, the application and other related filings will be available for public inspection on the Company's website: www.kentuckypower.com.

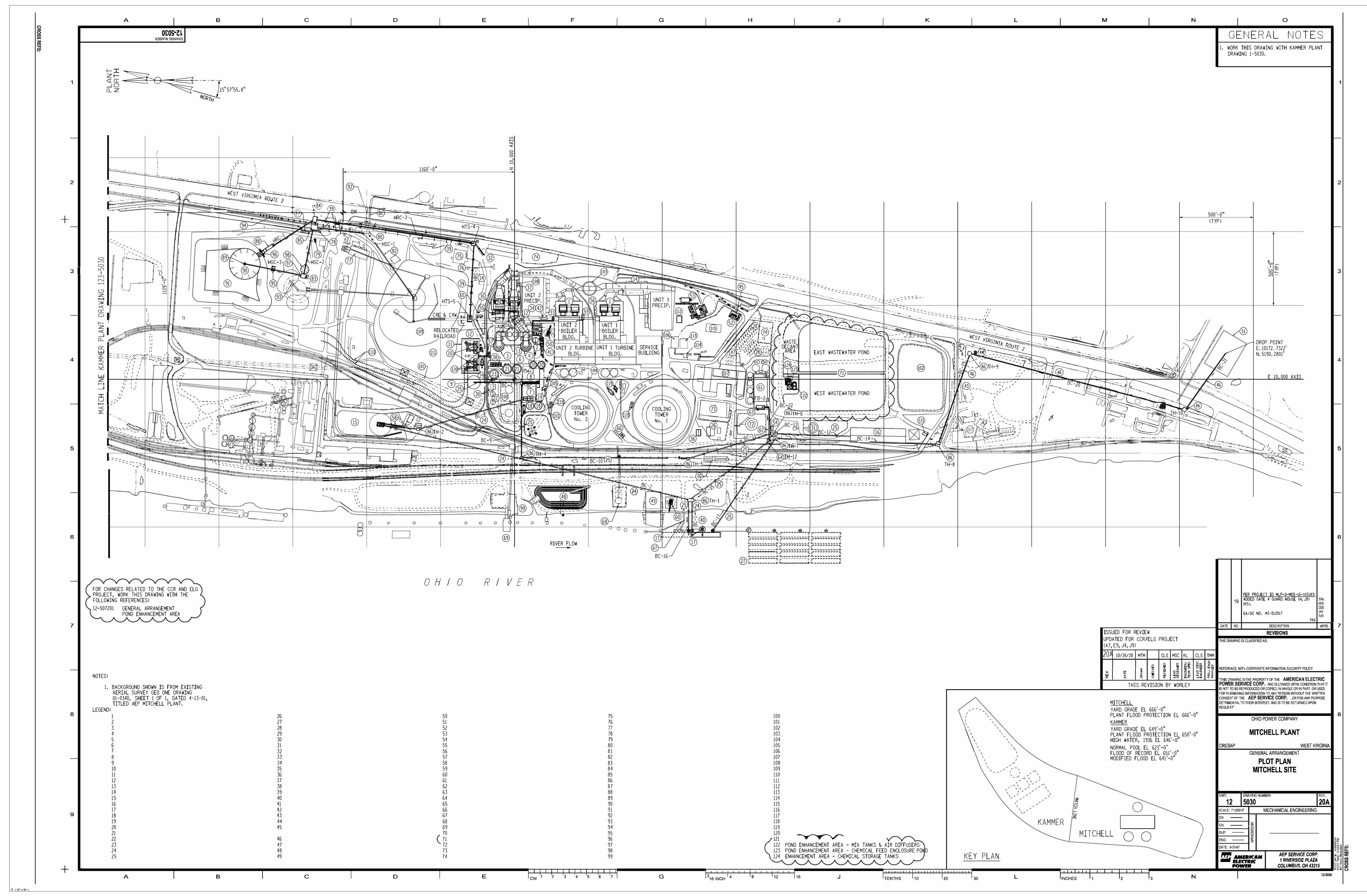
The application, tariff filings, testimony, and related filings also will be available for public inspection between the hours of 8:00 a.m. to 4:30 p.m., Monday through Friday, at the Commission's offices located at 211 Sower Boulevard, Frankfort, Kentucky when the offices of the Commission reopen to the public. The application, tariff filings, testimony, and related filings also may be found on the Commission's website: http://psc.ky.gov once filed.

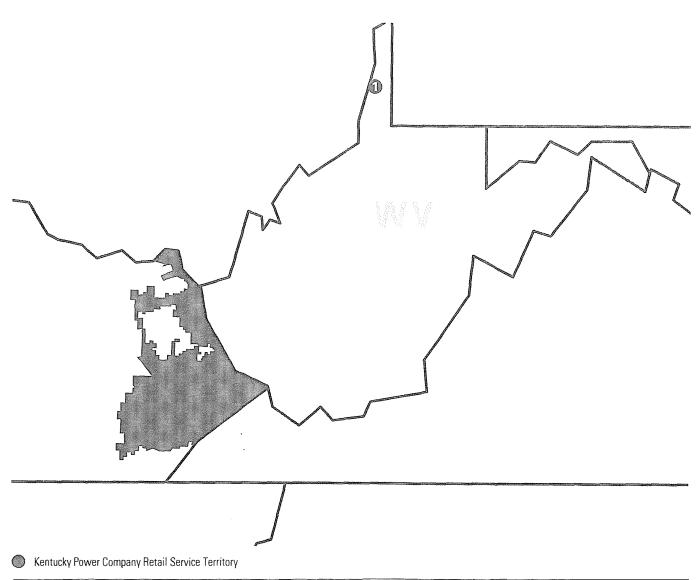
Written comments on Kentucky Power's application and the proposed tariff changes may be submitted to the Commission by mail to Public Service Commission, P. O. Box 615, Frankfort, Kentucky 40602-0615 or via the Commission's website: http://psc.ky.gov. Comments should reference Case No. 2021-00004.

Any person, corporation, association, or body politic may submit a timely written request for intervention in this case. The motion shall be submitted to the Public Service Commission, P. O. Box 615, Frankfort, Kentucky 40602-0615, and shall establish the grounds for the request, including the status and interest of the party. If the Commission does not receive a written request for intervention within thirty (30) days of the initial publication of this notice, the Commission may take final action on the application.

^{**} Number of lamps, not customers

Kentucky Power Company filed an application in Public Service Commission Case No. 2021-00004 to add a project (Project 22) to its environmental compliance plan. The environmental surcharge factor is estimated to increase to 8.7738% for residential customers and 13.8257% for all other customers when the project is placed in service in its entirety in 2024.





Plant Location

Mitchell Moundsville, WV

Kentucky Power Company's Previously Approved Environmental Compliance Projects

Project	Plant	Pollutant	Description	In-Service Year
1	Mitchell	NO _X , SO ₂ , and SO ₃	Mitchell Units 1 and 2 Water Injection, Low NO _X Burners, Low NO _X Burner Modification, SCR, FGD, Landfill, Coal Blending Facilities and SO ₃ Mitigation	1993-1994-2002-2007
2	Mitchell	SO_2 , NO_{X} and Gypsum	Mitchell Plant Common CEMS, Replace Burner Barrier Valves and Gypsum Material Handling Facilities	1993-2004-2007
3	Rockport	SO ₂ / NO _X	Continuous Emission Monitors (CEMS) - Rockport Plant	1994
4	Rockport	NO _x , Fly Ash, and Bottom Ash	Rockport Units 1 and 2 Low NOX Burners, Over Fire Air, and Landfill	2003-2008
5	Mitchell and Rockport	SO ₂ /NO _X /Particulates/V OC and etc.	Title V Air Emission Fees at Mitchell and Rockport Plants	Annual
6	Big Sandy, Mitchell, and Rockport	NO_X	Costs Associated with Nox Allowances	As-Needed
7	Big Sandy, Mitchell, and Rockport	SO_2	Costs Associated with SO ₂ Allowances	As-Needed
8	Big Sandy, Mitchell, and Rockport	SO ₂ /NO _X	Costs associated with the CSAPR Allowances	As-Needed
9	Mitchell	Particulates	Precipitator Modifications - Mitchell Plant Units 1 and 2	2007-2013
10	Mitchell	Particulates	Bottom Ash and Fly Ash Handling - Mitchell Plant Units 1 and 2	2008 & 2010
11	Mitchell	Mercury	Mercury Monitoring (MATS) - Mitchell Plant Units 1 and 2	2014
12	Mitchell	Selenium	Dry Fly Ash Handling Conversion - Mitchell Plant Units 1 and 2	2015
13	Mitchell	Fly Ash, Bottom Ash, Gypsum, and WWTP Solids	Coal Combustion Waste Landfill - Mitchell Plant Units 1 and 2	2014 & 2015
14	Mitchell	Particulates	Electrostatic Precipitator Upgrade - Mitchell Plant Unit 2	2015
15	Rockport	Particulates	Precipitator Modifications - Rockport Plant Units 1 & 2	2004-2009
16	Rockport	Mercury	Activated Carbon Injection (ACI) and Mercury Monitoring - Rockport Plant Units 1 & 2	2009-2010
17	Rockport	HAPS	Dry Sorbent Injection - Rockport Plant Units 1 and 2	2015
18	Rockport	Fly Ash and Bottom Ash	Coal Combustion Waste Landfill Upgrade To Accept Type 1 Ash Rockport Plant	2013 and 2015
19	Rockport	NO_X	Unit 1 SCR	2017
20	Rockport and Mitchell	Consumables	Costs associated with the use of consumables used in conjunction with approved ECP projects. These costs include the return on inventory of consumables as well as consumption of consumables. These consumables include but are not limited to sodium bicarbonate, activated carbon, anhydrous ammonia, trona, lime hydrate, limestone, polymer, and urea.	As-Needed
21	Rockport	NO_X	Unit 2 SCR	2020

Kentucky Power Company's Proposed Environmental Compliance Projects

Project	Plant	Pollutant	Description	In-Service Year
22	Mitchell	Fly Ash, Bottom Ash, Gypsum, and Waste Water Discharge	Costs associated with CCR and ELG compliance at the Mitchell Plant.	2023 and 2024

P.S.C. KY. NO. 12 1st REVISED ORIGINAL SHEET NO. 29-3

CANCELLING P.S.C. KY. NO. 121 1st REVISED ORIGINAL SHEET NO. 29-3

TARIFF E.S. (Cont'd) (Environmental Surcharge)

RATE (Cont'd)

 OE KP(C)
 =
 Monthly Pollution Control Operating Expenses for Mitchell.

 RB IM(C)
 =
 Environmental Compliance Rate Base for Rockport.

 ROR IM(C)
 =
 Annual Rate of Return on Rockport Rate Base; Annual Rate divided by 12 to restate to a Monthly Rate of Return.

 OE IM(C)
 =
 Monthly Pollution Control Operating Expenses for Rockport.

 AS
 =
 Net proceeds from the sale of Title IV and CSAPR SO2 emission allowances, ERCs, and NOx emission allowances, reflected in the month

"KP(C)" identifies components from Mitchell Units – Current Period, and "IM(C)" identifies components from the Indiana Michigan Power Company's Rockport Units – Current Period.

of receipt.

The Environmental Compliance Rate Base for both Kentucky Power and Rockport reflects the current cost associated with the 1997 Plan, the 2003 Plan, the 2005 Plan, the 2015 Plan, the 2017 Plan, and the 2019 Plan, and the 2021 Plan. The Environmental Compliance Rate

Base for Kentucky Power should also include construction work in progress until assets are placed in service. The Operating Expenses for both Kentucky Power and

Rockport reflects the current operating expenses associated with the 1997 Plan, the 2003 Plan, the 2005 Plan, the 2007 Plan, the 2015 Plan, — the 2017 Plan, and the 2019 Plan, and the 2021 Plan.

The Rate of Return for Kentucky Power is 9.10% rate of return on equity as authorized by the Commission in its Order Dated January 13, 2021, Case No. 2020-00174.

The Rate of Return for Rockport should reflect the requirements of the Rockport Unit Power Agreement.

Net Proceeds from the sale of emission allowances and ERCs that reflect net gains will be a reduction to the Current Period Revenue Requirement, while net losses will be an increase.

The Current Period Revenue Requirement will reflect the balances and expenses as of the Expense Month of the filing.

(Cont'd on Sheet No. 29-4)

DATE OF ISSUE: XXXX XX, XXXX

DATE EFFECTIVE: Bills Rendered On And After September 28, 2021

ISSUED BY: /s/ Brian K. West

TITLE: Vice President, Regulatory & Finance

By Authority Of an Order of the Public Service Commission

In Case No. 2021-00004 Dated XXXX XX, XXXX

TARIFF E.S. (Cont'd) (Environmental Surcharge)

RATE (Cont'd)

6. Environmental costs "E" shall be the Company's costs of compliance with the Clean Air Act and those environmental requirements that apply to coal combustion wastes and by-products, as follows:

Total Company:

- return on Title IV and CSAPR SO₂ allowance inventory
- over/under recovery balances between the actual costs incurred less the amount collected through the environmental surcharge
- costs associated with any Commission's consultant approved by the Commission
- costs associated with the consumption of Title IV and CSAPR SO₂ allowances
- costs associated with the consumption of NO_x allowances
- return on NO_x allowance inventory
- costs associated with maintaining approved pollution control equipment including material and contract labor (excluding plant labor)
- costs associated with consumables used in conjunction with approved environmental projects.
- return on inventories of consumables used in conjunction with approved environmental projects.
- return on environmental compliance rate base including construction work in progress.

(Cont'd on Sheet No. 29-6)

DATE OF ISSUE: XXXX XX, XXXX

DATE EFFECTIVE: Bills Rendered On And After September 28, 2021

ISSUED BY: /s/ Brian K. West

TITLE: Vice President, Regulatory & Finance

By Authority Of an Order of the Public Service Commission

In Case No. 2021-00004 Dated XXXX XX, XXXX

Т

CANCELLING P.S.C. KY. NO. 12 ORIGINAL 114 REVISED SHEET NO. 29-6

TARIFF E.S. (Cont'd) (Environmental Surcharge)

RATE (Cont'd)

The Company's share of costs associated with the following environmental equipment at the Rockport Plant:

- Continuous Emissions Monitors
- Air Emission Fees
- Costs Associated with the Rockport Unit Power Agreement
- Activated Carbon Injection
- Mercury Monitoring
- Precipitator Modifications
- Dry Sorbent Injection
- Coal Combustion Waste Landfill
- Low NOx burners, over Fire Air Landfill
- Selective Catalytic Reduction Technology

The Company's share of costs associated with the following environmental equipment at the Mitchell Plant:

- Mitchell Unit Nos 1 and 2 Water Injection, Low NO_x burners, Low NO_x burner Modification, SCR, FGD, Landfill, Coal Blending Facilities and SO₃ Mitigation
- Mitchell Plant Common CEMS, Replace Burner Barrier Valves and Gypsum Material Handling Facilities
- Air Emission Fees
- Precipitator Modifications and Upgrades
- Coal Combustion Waste Landfill
- Bottom Ash and Fly Ash Handling
- Mercury Monitoring (MATS)
- Dry Fly Ash Handling Conversion
- Dry Fly Ash Handling System (ELG)
- Wastewater Ponds (CCR)
- Water Biological Treatment System with Ultrafiltration (ELG)

(Cont'd on Sheet No. 29-7)

DATE OF ISSUE: XXXX XX, XXXX

DATE EFFECTIVE: Bills Rendered On And After September 28, 2021

ISSUED BY: /s/ Brian K. West

TITLE: Vice President, Regulatory & Finance

By Authority Of an Order of the Public Service Commission

In Case No. 2021-00004 Dated XXXX XX, XXXX

ES FORM 3.13

Kentucky Power Company Mitchell Environmental Costs SAMPLE ONLY

Ln.				
No.	Cost Component	Non-FGD Costs	FGD Costs	Total Costs
1	Utility Plant at Original Cost	х	х	х
2	Less Accumulated Depreciation	Х	Х	Х
3	Less Accumulated Deferred Income Tax	Х	Χ	Х
4	Net Utility Plant	Х	Х	Х
5	*SO2 Emission Allowance Inventory	Х	Х	Х
6	*CSAPR S02 Emission Allowance Inventory	Х	Х	Х
7	*CSAPR NOx Emission Allowance Inventory (Seasonal)	Х	Χ	Х
8	*CSAPR AN Emission Allowance Inventory (Annual)	Х	Χ	Χ
9	Limestone Inventory (1540006)	Х	Χ	Χ
10	Urea Inventory (1540012)	Х	Χ	Χ
11	Limestone In-Transit Inventory (1540022)	Х	Χ	Χ
12	Urea In-Transit Inventory (1540023)	Х	Χ	Χ
13	Construction Work in Progress (CWIP)	Х	Χ	Χ
14	Total Rate Base	Х	Х	Х
15	Weighted Average Cost of Capital X			
16	Monthly Weighted Avg. Cost of Capital	Х	Χ	Х
17	Monthly Return on Rate Base	Х	Χ	Х
18	Monthly Disposal (5010000)	Х	Χ	Х
19	Monthly Fly Ash Sales (5010012)***	Х	Χ	Х
20	Monthly Urea Expense (5020002)	Х	Χ	Х
21	Monthly Trona Expense (5020003)	Х	Χ	Х
22	Monthly Lime Stone Expense (5020004)	Х	Χ	Х
23	Monthly Polymer Expense (5020005)	Х	Х	Х
24	Monthly Lime Hydrate Expense (5020007)	Х	Х	Х
25	Monthly WV Air Emission Fee	Х	Χ	Х
26	SO2 Consumption **	Х	Χ	Х
27	CSAPR S02 Consumption **	Х	Χ	Χ
28	CSAPR Annual NOx Consumption	Х	Χ	Χ
29	CSAPR Seasonal NOx consumption	Х	Χ	Χ
30	Total Monthly Operation Costs	Х	Х	Х
31	Monthly FGD Maintenance Expense	Х	Х	Х
32	Monthly Non-FGD Maintenance Expense	Χ	Χ	Χ
33	Total Monthly Maintenance Expense	Х	Х	Х
34	Monthly Depreciation Expense	Х	Χ	Х
35	Monthly Catalyst Amortization Expense	Х	Χ	Х
36	Monthly ELG/CCR Depreciation Expense	Х	Χ	Х
37	Monthly Property Tax	Χ	Χ	Χ
38	Total Monthly Other Expenses	Х	Χ	Х
39	Total Monthly Operation, Maintenance, and Other Expenses	Х	Х	Х
40	O&M for corresponding month of test year	Х	Х	Х
41	Difference in Test Year Month O&M & Current Month O&M	Х	Х	Х
42	Gross-up for Uncollectible Expense & KPSC Maint Fee (Ln 42 * .006093)	Х	Х	Х
43	Total Revenue Requirement	х	х	х

^{*} Inventory Includes Total Kentucky Power allowances inventory.

^{**} Includes Consumption for Rockport and Mitchell plants only.