



MAR 29 2024

PUBLIC SERVICE COMMISSION

March 29, 2024

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

Re: Bluegrass Station Annual Report; Case No. 2015-00267

Dear Ms. Bridwell:

Pursuant to the Commission's December 1, 2015 Order in Case No. 2015-00267, in which the Commission approved East Kentucky Power Cooperative Inc's. ("EKPC") requests to acquire the Bluegrass Station and to assume the evidences of indebtedness associated with the acquisition, enclosed please find a copy of EKPC's 2023 Bluegrass Station Annual Operation Report. Please file this in the post-case correspondence file and return a file-stamped copy to my office.

This is to certify that the electronic document has been transmitted to the Commission on March 29, 2024 and that there are currently no parties in this proceeding that the Commission has excused from participation by electronic means. Pursuant to the Commission's July 22, 2021 Order in Case No. 2020-00085 no paper copies of this filing will be made.

If you have any questions, please call me.

Thank You,

Chris Adams Director, Regulatory and Compliance Services

Enclosure

4775 Lexington Road, POB 707 Winchester, KY 40392 859-744-4812

Bluegrass Generating Station 2023 Annual Operating Report

In 2023, East Kentucky Power Cooperative's, Inc's. (EKPC) Bluegrass Generating Station (Bluegrass) successfully operated for 276.22 hours, produced 36,757 gross megawatts and 36,465 net megawatts of generation; experienced 4.93 unplanned outage hours; and performed to an overall average net heat rate of 11,782.86 (BTU/KWH).

Bluegrass Unit 1 successfully operated 113.24 hours, generated 14,741 gross megawatts and 14,611 net megawatts; experienced 4.00 hours of unplanned outage hours; performed to an average net heat rate of 11,792.27 (BTU/KWH); and successfully started 24 times with no failed starts. Bluegrass Unit 1 experienced one (1) unplanned/forced outage event:

- Unplanned, maintenance outage of 4.00 hours due to installing a DCS security patch required for NERC compliance.

Bluegrass Unit 2 successfully operated 77.27 hours, generated 11,063 gross megawatts and 11,006 net megawatts; experienced 0.0 hours of unplanned outage hours; performed to an average net heat rate of 11,682.95 (BTU/KWH); and successfully started 19 times with no failed starts. Bluegrass Unit 2 experienced no unplanned/forced outage events.

Bluegrass Unit 3 successfully operated 85.71 hours, generated 10,953 gross megawatts and 10,848 net megawatts; experienced 0.93 hours of unplanned outage hours; performed to an average net heat rate of 11,871.66 (BTU/KWH); and successfully started 23 times with one (1) failed start. Bluegrass Unit 3 experienced one (1) unplanned outage event:

- Unplanned, forced outage for 0.93 hours due to a failed start resulting from an erroneous Excitation Alarm (Excitation Transformer Over-Temperature Trip).

Bluegrass budgeted \$12.0 million and incurred \$8.7 million in 2023 for capital expenditures. The overall variance was due to the deferment of a project in combination with the acceleration of a

Bluegrass Generating Station 2023 Annual Operating Report

winterization project to support reliability. EKPC has budgeted \$16.0 million for capital expenditures for equipment in 2024. This capital budget includes the following projects: Bluegrass Fuel Oil Storage Addition \$10.0 million, Bluegrass Unit 2 Generator Rewind \$5.9 million and Bluegrass Centrifuge/Waste Oil Area Access Road \$0.1 million.

Bluegrass budgeted \$5.5 million (excluding fuel) in 2023 for O&M expenses, and had expenditures of \$4.48 million. The variance was due to deferring projects, as well as cost savings ideas and competitively bidding projects. Bluegrass has budgeted \$4.2 million (excluding fuel) for O&M expenses in 2024. Bluegrass budgeted \$13.5 million for fuel in 2023 and had expenditures of \$1.49 million. Bluegrass' budget for fuel in 2024 is \$\$12.5 million.

Bluegrass performed various maintenance activities to increase the availability and reliability of the facility. These maintenance activities included, but were not limited to the annual spring and fall reliability outages, which included the painting of the firewater tank for preservation, turbine borescope inspections on all three units, and cold weather hardening of all systems. The plant successfully test ran all three units on diesel fuel after the spring and fall outages to insure full system capability.

Environmental Update

Bluegrass Station is in compliance with the requirements of the Clean Air Act amendments of 1990 (CAA), and the Clean Water Act (CWA). Moreover, fossil fuel applicable only;

- New Source Performance Standards (NSPS);
 - NSPS GHG for New, Modified and Reconstructed Fossil Fueled Units;
- Title IV of the CAA and the rules governing pollutants that contribute to Acid Deposition (Acid Rain program);

- Title V operating permit requirements (Title V) as a synthetic minor;
- Summer ozone trading program requirements promulgated after EPA action on Section 126 petitions and the Ozone SIP Call (Summer Ozone program);
- Stationary Combustion Turbines: National Emission Standards for Hazardous Air Pollutants (NESHAP);
- Stationary Gas and Combustion Turbines: New Source Performance Standards (NSPS);
- Cross State Air Pollution Rule (CSAPR);
- National Ambient Air Quality Standards (NAAQS) for Sulfur Dioxide (SO₂), Nitrogen Dioxide (NO2), Carbon Monoxide (CO), Ozone, Particulate Matter (PM), Particulate Matter 2.5 microns or less (PM 2.5) and Lead; Oldham County is in attainment for ozone.
- Clean Water Act, and
 - National Pollution Discharge Elimination System (NPDES) as delegated by the EPA to Kentucky Pollution Discharge Elimination System (KPDES).
 - EPA Spill Control and Counter Measure (SPCC) plans