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***VIA HAND DELIVERY***

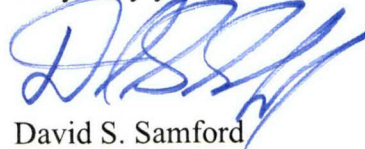
Ms. Talina Mathews, Ph.D.  
Executive Director  
Kentucky Public Service Commission  
P.O. Box 615  
211 Sower Boulevard  
Frankfort, KY 40602

Re: PSC Case Nos. 2015-00267 – Bluegrass Station Annual Report

Dear Dr. Mathews:

On behalf of East Kentucky Power Cooperative, Inc. ("EKPC"), please find a copy of the 2016 Bluegrass Generating Station Annual Operating Report enclosed. This Report is being tendered in conformity with the Commission's December 1, 2015 Order in Case No. 2015-00267, in which the Commission approved EKPC's requests to acquire the Bluegrass Generating Station and to assume the evidences of indebtedness associated with the acquisition.

Very truly yours,



David S. Samford

Enclosure

## **Bluegrass Station 2016 Annual Operating Report**

Bluegrass Station successfully operated 346.17 hours in 2016 generating 53,300 gross megawatts and 52,956 net megawatts. The plant experienced 171.77 hours of unplanned outage hours during 2016. The station also performed to an average net heat rate of 11,080.58 (BTU KWH). Bluegrass Station budgeted \$3,000,000 for capital expenditures in 2016, but spent only \$20,682 of this allocation for capital equipment. This reduction was due to a renegotiated contract for deferred delivery of capital components to the time of the project in 2017. Bluegrass Station has budgeted \$4,777,904 for 6 capital projects in 2017. The Station had budgeted \$11,779,416 in 2016 for O&M expenses and had expenditures of \$3,530,373 in 2016. Bluegrass has budgeted \$11,285,511 for O&M expenses in 2017.

Bluegrass Unit 1 successfully operated 85 hours in 2016 generating 11,796 gross megawatts and 11,727 net megawatts. The unit experienced 26.77 hours of unplanned outage hours during 2016. Bluegrass Unit 1 also performed to an average net heat rate of 11,053.94 (BTU KWH). Unit 1 successfully started 16 times in 2016 but did have 1 failed start in January. The failed start was attributed to cold temperatures. The unit's lube oil reservoir temperature was adjusted for cold weather operation along with the development of a lube oil cooler pre-start warm-up procedure as corrective measures. Unit 1 experienced 3 forced outages in 2016. The first forced outage was attributed to the failed cold weather start, another was caused by a failed Distributed Control System backplane, and the last was due to a gas supply interruption. The gas supply interruption was due to a failed pumping station on the Texas Gas Transmission System.

Bluegrass Unit 2 successfully operated 55.32 hours in 2016 generating 8,658 gross megawatts and 8,609 net megawatts. The unit experienced 24.75 hours of unplanned outage hours during 2016. Bluegrass Unit 2 also performed to an average net heat rate of 11,018.13

(BTU KWH). Unit 2 successfully started 17 times in 2016 with no failed starts. The Unit did experience two unit trips during cold weather tuning in January. Unit 2's lube oil reservoir temperature was adjusted for cold weather operation along with the development of a lube oil cooler pre-start warm-up procedure as corrective measures. Bluegrass 2 experienced three forced outages in 2016. The first two forced outages were attributed to the cold weather maintenance tuning in January. The third forced outage was caused by a gas system interruption. The gas supply interruption was due to a failed pumping station on the Texas Gas Transmission System.

Bluegrass Unit 3 successfully operated 205.86 hours in 2016 generating 32,844 gross megawatts and 32,620 net megawatts. The unit experienced 120.25 hours of unplanned outage hours during 2016. Bluegrass Unit 3 also performed to an average net heat rate of 11,010 (BTU KWH). Unit 3 successfully started 37 times in 2016 with nine failed starts. The Unit experienced two failed starts and three unit trips in January of 2016. The two failed starts and three unit trips were due to maintenance tuning for cold weather operation. The unit's lube oil reservoir temperature was adjusted for cold weather operation along with the development of a lube oil cooler pre-start warm-up procedure as corrective measures. Unit 3 experienced seven failed starts and eleven forced outages in June and July due to faulty Fuel Gas Pilot Nozzles. It was diagnosed by EKPC and third party expertise that the Pilot Nozzles installed in the 2015 Combustion Inspection, by the previous owner of Bluegrass Station, were inadequately repaired prior to installation. A properly repaired set of Pilot Nozzles were acquired and installed by EKPC and the issue was corrected.

Cold weather tuning was performed on all three units' combustion systems in January to increase starting and operational reliability. Prior to 2016, the units had predominately run in the summer months and were tuned for hot weather operation. In the future, EKPC will attempt to

tune the units twice per year, once for summer, hot weather, operation and once for winter, cold weather, operation.

**Environmental update**

Bluegrass Station is in compliance with its Title V / conditional major air permit. The table below demonstrates the requirements and compliance for carbon monoxide and nitrous oxides.

Unit	Parameter	Program	Year	Reporting	Emissions	Units	Emission
				Interval			Limit *
Plant Wide	NOx	Title V	2016	12 Month Rolling	19.5	Tons	95
Plant Wide	CO	Title V	2016	12 Month Rolling	64.4	Tons	245

\*Emission Limit is 12 month rolling tons; the emissions reported are for the 12 month rolling period of December 2016

In addition to measuring compliance, EKPC closely monitors and evaluates the impact of the following regulatory developments of its electric power generating assets. In particular, EKPC is monitoring any changes to the Cross State Air Pollution Rule (CSAPR), National Ambient Air Quality Standards (NAAQS), the Clean Power Plan, and the National Pollution Discharge Elimination System (NPDES), all of which could have a future impact on Bluegrass Station.

Mercury Air Toxics Rule (MATs), Coal Combustion Residual (CCR), and National Effluent Limitation Guidelines (ELG) do not apply to Bluegrass Station because the units

combust natural gas and do not produce steam. The Clean Water Act Section 316(b) rule will not have a regulatory impact on Bluegrass Station because none of the units has a cooling water intake structure.

The Trump Administration has suggested that certain Obama-era EPA regulations will be rolled back, including the Clean Power Plan, Greenhouse Gas Endangerment Finding, 2015 Ozone NAAQs, Stream Protection Rule, Waters of the United States Rule, National Environmental Policy Act Guidance, and Risk Management Plan (RMP) amendments. To date, the Trump Administration has taken specific action to evaluate the Stream Protection Rule, the Waters of the United States Rule, and RMP amendments.

The following discussion provides a summary of the current status of the regulations with possible future impacts on Bluegrass Station.

### CSAPR

The Cross-State Air Pollution Rule (CSAPR I) was intended to help states downwind of power plants meet the 1997 National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter (PM 2.5) by requiring nitrous oxide (NOx) and sulfur dioxide (SO2) reductions from upwind states. Phase 1 implementation of the rule began on January 1, 2015, and Phase 2 was scheduled to begin in 2017. The United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) litigation delayed implementation of the schedule. Phase 2 is not scheduled to begin until 2018.

As a result of the litigation, EPA then published a new rule, CSAPR II, on October 26, 2016. CSAPR II responded to the D.C. Circuit remand order issued in April 2014 relating to the NOx reductions required in CSAPR I for 11 states to meet the 1997, 8-hour ozone NAAQS.

CSAPR II imposed NOx emission reduction requirements for 11 other states that failed to submit State Implementation Plan (SIP) provisions, or for states for which EPA did not accept their SIP provisions, for the 2008 ozone NAAQS.

In December 2016, environmental groups, several states, and industry filed sixteen petitions for review of CSAPR II in the D.C. Circuit. Several states have also moved to intervene. The court has consolidated the petitions into a single case (No. 16-1406), styled *State of Wisconsin, et al. v. EPA*. No briefing schedule has been set.

#### Ozone Transport Challenge

On December 9, 2013, Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New York, Pennsylvania, Rhode Island, and Vermont (the NE States), filed a petition to EPA Administrator pursuant to Clean Air Act Section 176A requesting that EPA add several states, including Kentucky, to the Ozone Transport Region (OTR). Ohio, Kentucky, Indiana, West Virginia and Michigan sent a letter to EPA on May 16, 2016, finding that the technical analysis of the Section 176A petition was outdated, technically-flawed and failed to support the petition. Ultimately, EPA denied the NE States' petition, under Section 176A, to add Kentucky and other states based on EPA's assertion "...that the statute provides other, more effective means of addressing the impact of interstate ozone transport on states within the OTR with respect to the 2008 ozone NAAQS." 82 Fed. Reg. 6509, 6520 (Jan. 19, 2017).

On February 21, 2017, the Kentucky Cabinet filed a letter supporting EPA's denial of the petition, stating that there are several other existing national mobile source rules designed to achieve the emission reductions from on-road vehicles through 2025 and beyond that are better suited to address air quality in the NE States.

## NAAQS

On October 1, 2015, EPA issued a rule that reset the ozone NAAQS for ground level ozone emissions from 75 ppb to 70 ppb. State designations were due October 1, 2016 and must be finalized by EPA by October 1, 2017. The rule is being challenged before the D.C. Circuit. Oral argument is currently scheduled for April 19, 2017. On November 2, 2016, EPA proposed nonattainment classification thresholds and implementation requirements for the 2015 ozone NAAQS. The extended comment period closed on February 13, 2017. EKPC believes that the new Administration is unlikely to finalize the 2015 ozone standard proposed rule.

On March 2, 2015, EPA signed a Court-Ordered Consent Decree to re-examine violations of the 1-Hour SO<sub>2</sub> NAAQS under new triggers and criteria. Sixty-eight facilities were alleged to be in violation. However, EKPC Bluegrass Station is not on this list.

Other facilities are working to demonstrate attainment of the standard. EPA and the States are working with the sixty-eight facilities across the country to work through up to four rounds of attainment demonstrations by December 31, 2020.

By December 2017, EPA plans to issue the final designations for the majority of the country. Should some states be designated to have nonattainment of the SO<sub>2</sub> standard, those states will submit attainment plans by August 2019. EPA plans to designate the remainder of the country not yet designated by August 2020. All states must be in attainment with the new SO<sub>2</sub> standard no later than February 2026.

## Clean Power Plan

On August 3, 2015, EPA announced the final rule on the emission guidelines (Clean Power Plan (CPP)) for states to follow in developing plans to reduce greenhouse gas emissions

from existing fossil fuel-fired electric generating units. The final version of the rule became effective on December 22, 2015. Under the CPP, by 2030, carbon emissions in the power industry are to be reduced by approximately 32 percent from 2005 levels. The CPP allows states to develop their own compliance plans to meet certain CO2 emissions requirements, but the states would also still need to comply with existing federal and state emissions regulations. States were required, at a minimum, to submit an initial plan by September 6, 2016 and finalize plans by September 6, 2018. On February 9, 2016, the Supreme Court stayed implementation of the CPP pending judicial review. Oral argument was held before eight judges of the D.C. Circuit on September 27, 2016. The court has not yet issued a decision.

On January 17, 2017, EPA denied all pending administrative petitions for reconsideration of the CPP (including an administrative petition for reconsideration filed by EKPC, Hoosier Energy Rural Electric Cooperative, Inc. and Minnkota Power Cooperative, Inc.). On March 6, 2017, 13 petitions for review of EPA's denial, including one filed by EKPC, Hoosier Energy and Minnkota Power, were filed. On March 6, 2017, the court consolidated the petitions into a single case and ordered docketing statements and statements of issues due April 5, 2017.

The Trump Administration has stated its intent to "roll back" the CPP. Parties are anticipating EPA, through the Department of Justice (DOJ), to request the court to pause these proceedings while it reconsiders the rule. DOJ has not yet filed this request. In the meantime, the CPP remains stayed during its challenges in court. In Kentucky, the state cancelled all of its stakeholder meetings and issued an "all pencils down" order from the newly elected Governor after the November 2016 elections to halt state implementation development.

EKPC will continue to monitor the developments to EPA regulations as it applies to its facilities.