

April 15, 2010

Ms. Renee J. Jenkins
Secretary of the Commission
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, Ohio 43215-3793

Steven T. Nourse
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RE: *In the Matter of the Annual Environmental Control Plan Under Rule 4901:1-41-03(B), Ohio Administrative Code, by Columbus Southern Power Company, Case No. 10-482-EL-ECP and In the Matter of the Annual Environmental Control Plan Under Rule 4901:1-41-03(B), Ohio Administrative Code, by Ohio Power Company, Case No. 10-483- EL-ECP.*

Dear Ms. Jenkins:

I am submitting the enclosed 2009 Environmental Control Plan (ECP) on behalf of Columbus Southern Power Company and Ohio Power Company (collectively, “AEP Ohio”), pursuant to Rule 4901:1-41-03(B), Ohio Administrative Code (OAC). I have sent a copy of AEP Ohio’s 2009 ECP to the Director of the Ohio Environmental Protection Agency, in accordance with Rule 4901:1-41-03(B), OAC.

Thank you for you attention to this matter.

Respectfully Submitted,

/s/ Steven T. Nourse

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AEP Ohio Environmental Control Plan

Criteria Pollutants

Exhibit A summarizes the status of installation of SO₂ and NO_x, and mercury control equipment at the AEP Ohio generating units as of December 2009. The control equipment listed represents installed or planned installations through 2019 that are currently required for compliance with the Clean Air Act (CAA), including the Clean Air Act Amendments of 1990 (CAAA), NO_x SIP Call, and the Clean Air Interstate Rule (CAIR).

AEP entered into a New Source Review (NSR) Consent Decree with the Department of Justice to settle all complaints filed against AEP and its affiliates including AEP Ohio. With respect to generating facilities owned by AEP Ohio, these companies are bound by the decree and its schedule for the installation and operation of Selective Catalytic Reduction (SCR) and Flue Gas Desulphurization (FGD) systems on certain units, including Amos Unit 3, Cardinal Unit 1, Conesville 4, Gavin Units 1 and 2, Mitchell Units 1 and 2, and Muskingum River 5. The consent decree also requires AEP Ohio to continuously operate overfire air on Kammer Units 1-3, and to continuously operate low NO_x burners on Picway Unit 5. AEP Ohio is required to retire, repower, or retrofit Best Available Control Technology (BACT) environmental controls on Conesville Unit 3 by December 31, 2012, on Sporn Unit 5 by December 31, 2013, and on Muskingum River Units 1-4 by December 31, 2015. Finally, AEP is required to retire, repower, or retrofit BACT environmental controls on a total of at least 600 MW from several units, including Sporn Units 1-4, and/or Kammer Units 1-3 by December 31, 2018.

Carbon Dioxide Control

AEP Ohio, along with the other operating company members of AEP, plans to continue reducing its greenhouse gas (GHG) emissions using a variety of market-based mechanisms and technology-based CO₂ mitigation options. The deployment of these options will depend on availability, risk and relative economics. The amount of GHG emission reductions required from AEP Ohio will be likely predicated upon federal legislation or regulation. As such, AEP Ohio, as one of the operating company members of AEP, is an active participant in ongoing discussion related to federal climate policy to assure that federal action supports economic growth and appropriate technology development funding and development timelines. Furthermore, AEP Ohio, as part of AEP, has been actively involved in a number of organizations setting the stage for climate change legislation. As a founding member of the Chicago Climate Exchange (CCX), AEP committed to cumulatively reduce or offset 48 million metric tons of CO₂ emissions from 2003 to 2010. Through 2009, AEP reduced or offset more than 70 million metric tons of CO₂ — exceeding the target. AEP has done this in a number of ways, such as improving power plant efficiency, replacing or retiring less efficient and higher emitting units, increasing our use of renewable power, reducing emissions of SF₆ (a potent GHG which is found in some electrical equipment) and investing in forestry projects in the United States and abroad.

AEP's experience with purchases and sales of allowances among other members of the exchange provides insights into the market for carbon emissions. AEP is also an active member of the International Emissions Trading Association (IETA) which seeks to develop cost-effective market based solutions to environmental concerns. In the absence of federal legislation or regulation these efforts will continue; however AEP has also begun developing

a multi-faceted approach with which to address the likely range of GHG reduction requirements.

AEP has made significant progress in reducing SF₆. When AEP joined the Environmental Protection Agency's (EPA) SF₆ Emission Reduction Partnership in 1999, the SF₆ leakage rate for the company was 10 percent. In 2008, this rate had been reduced to 0.38 percent based on total system capacity, falling well below a self-imposed goal to achieve a maximum 2.5 percent leak rate. This was done by employing a combination of technologies, such as, replacing SF₆ insulated circuit breakers on lines to lower leakage rates.

AEP's post-2010 strategy is to voluntarily reduce or offset an additional 5 million tons of CO₂ per year by purchasing offsets from projects such as forestry, reducing methane from agriculture, adding more renewable energy in our portfolio and improving the efficiency of our power plants. The efficiency AEP has built into its coal-fired plants, as well as additional investments, has made AEP's coal-fired power plants more efficient than the national average for coal plants. AEP has signed contracts to add 903 MW of wind capacity in the past two years — about 90 percent of our original goal toward adding 1,000 MW of wind by 2011. In light of the increasing number of state mandates and potential federal legislation, as well as the upcoming expiration of the Production Tax Credit (PTC), AEP has doubled its goal and now plans to add a total of 2,000 MW of renewable energy by the end of 2011, providing it has regulatory support for recovery of associated costs. This will help us to further diversify our fuel portfolio. This integrated resource plan contains a 10 percent renewable energy target by 2020.

While many of the actions described above are initiated at the broader corporate level, the net results are achieved through AEP Ohio and other operating companies in both

realized reductions in carbon footprint and increased operational experience in managing carbon emissions. As discussed in the following section, additional actions, including a future carbon capture and storage program, will be fundamental in further reducing in AEP's carbon footprint, as will be likely required under a federal GHG regulatory program.

The first tier of GHG reduction involves AEP Ohio meeting the renewable energy and energy efficiency targets as laid forth in S.B. 221. Achieving the renewable energy and energy efficiency benchmarks will have the secondary benefit of directly reducing AEP Ohio's CO₂ emissions. Additional renewable energy resources directly displace fossil-based generation and increasing levels of end-use energy efficiency reduce the total amount of energy (mostly fossil-fuel based) needed to serve AEP Ohio's customers, both achieving a net CO₂ benefit. AEP Ohio retains the option to expand these programs beyond current state requirements should the economics warrant such actions to address GHG regulation.

AEP Ohio has been active on a number of fronts in addressing the requirements of SB 221. Early this year, AEP Ohio signed a 20-year agreement with Wyandot Solar LLC to purchase the entire a 10.08-megawatt (MW) solar energy facility to be built in Ohio to help satisfy the solar requirements over the next few years. Additionally, AEP Ohio signed two 50 MW wind power purchase agreements with the Fowler Ridge Wind Farm located in Indiana. To meet other in-state renewable energy requirements AEP has issued RFPs for both renewable energy resources as well as for biomass fuel sources which could be turned in to renewable energy at AEP Ohio's facilities. All of these projects will directly reduce the amount of fossil energy, and thus GHG emissions, associated with serving AEP Ohio's customers.

Additionally, AEP Ohio has been actively investing in Energy Efficiency measures to directly reduce energy consumption within Ohio. These measures can be significant as a MWh not produced also means a reduction in the amount of CO₂ produced. These energy efficiency measures will ramp up over coming years in conjunction with the requirements of S.B. 221. Additional, benefits from energy may be achieved in coming years with increased deployment of “Smart Grid” technology. AEP currently is undertaking a pilot project in N.E. Columbus and will expand the technology as appropriate assuming proper regulatory recovery of investments.

In addition to renewable energy and energy efficiency, AEP Ohio is projecting to also invest in projects which will directly reduce CO₂ emissions from its generating fleet. Depending on the ultimate rules drafted to regulate GHGs, deployment of Carbon Capture and Storage (CCS) could prove to be a very promising technology for keeping large amounts of GHG from reaching the atmosphere while allowing cheap, abundant coal to remain part of Ohio’s energy future. A pilot project at an AEP-owned generation facility in West Virginia is the first in the country to combine CO₂ from a coal-based electric generating unit with geologic sequestration of the carbon. Depending on financial incentives and the pace of technology development, AEP Ohio could potentially install similar carbon capture technology on one or more of its coal-fired units within the next decade. These investments on fossil generation could be enhanced by additional energy efficiency improvements at the plants to reduce the amount of CO₂ output per MWh produced. Additionally, AEP Ohio may examine broadening its fuel diversity by investing in lower emitting generating sources such natural gas combined cycle units.

AEP Ohio, as one of the operating company members of AEP, is also investigating investments in emission offsets credits, which are generated through GHG emission reductions from activities that are not likely to be covered under federal legislation or regulation. These “offsets” could include carbon credits generated from agricultural, coal-mine or landfill methane destruction, forest carbon sequestration and soil carbon sequestration. These credits could be directly used to offset a portion of AEP Ohio’s allowance requirement relating to fossil-emissions and may be potential be available at a discount to other technology options.

Exhibit A

Plant Name / Unit Number	AEP-Ohio Generating Unit Control Equipment Installed or Planned to be Installed for Air Emission Control for CAA *					
	SO2	Installation Date ^{††}	NOx (Combustion Controls)	Installation Date ^{††}	NOx (SCR/SNCR)	Installation Date ^{††}
Amos 3	FGD	Installed ('09)	Low NOx Burners / CCV Burners	Installed ('98)	SCR	Installed ('02)
Beckjord 6						
Cardinal 1	FGD	Installed ('08)	Low NOx Burners	Installed ('98)	SCR	Installed ('03)
Conesville 3			Low NOx Burners	Installed ('94)		
Conesville 4	FGD	Installed ('09)	T-Fired Unit Simulated OFA / Concentric Firing System	Implemented / ('04)	SCR	Installed ('09)
Conesville 5	FGD Upgrade	Installed ('06)**	T-Fired -No Change / OFA with upgrades	Installed ('04)	SCR	post 2010
Conesville 6	FGD Upgrade	Installed ('08)**	T-Fired -No Change / OFA with upgrades	Installed ('04)	SCR	post 2010
Gavin 1	FGD	Installed ('95)	Low NOx Burners / CCV Burners	Installed ('98)	SCR	Installed ('01)
Gavin 2	FGD	Installed ('95)	Low NOx Burners / CCV Burners	Installed ('99)	SCR	Installed ('01)
Kammer 1			Over Fire Air / upgrades	Installed ('99 / '03)		
Kammer 2			Over Fire Air / upgrades	Installed ('98 / '04)		
Kammer 3			Over Fire Air / upgrades	Installed ('99 / '03)		
Mitchell 1	FGD	Installed ('07)	Low NOx Burners / with water injection	Installed ('93 / '03)	SCR	Installed ('07)
Mitchell 2	FGD	Installed ('06)	Low NOx Burners	Installed ('94)	SCR	Installed ('07)
Muskingum R 1			Over Fire Air	Installed ('99)		
Muskingum R 2			Over Fire Air	Installed ('00)		
Muskingum R 3			Over Fire Air / upgrades	Installed ('99 / '03)		
Muskingum R 4			Over Fire Air / upgrades	Installed ('99 / '03)		
Muskingum R 5	FGD [†]	2015	Low NOx Burners	Installed ('93)	SCR	Installed ('05)
Picway 5			Low NOx Burners	Installed ('95)		
Sporn 2			Low NOx Burners w/ Interjectory Air / upgrades	Installed ('97 / '04)		
Sporn 4			Low NOx Burners w/ Interjectory Air / upgrades	Installed ('97 / '04)	SNCR	Installed ('08)
Sporn 5			Low NOx Burners	Installed ('99)		
Stuart 1	FGD	Installed ('08)			SCR	Installed ('04)
Stuart 2	FGD	Installed ('08)			SCR	Installed ('04)
Stuart 3	FGD	Installed ('08)			SCR	Installed ('04)
Stuart 4	FGD	Installed ('08)			SCR	Installed ('04)
Zimmer	FGD	Installed ('91)	Low NOx Burners	Installed	SCR	Installed ('04)

* This Exhibit reflects installed or planned installations through 2019, as of December 2009 (Fleet Compliance Proposed Retrofits). Terms of NSR settlement Consent Decree are reflected.

** Upgrade existing FGD to meet 95% 30-day rolling average removal efficiency

[†] Future installation required by NSR settlement Consent Decree

^{††} In-service by end of year

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Case No(s). 10-0482-EL-ECP, 10-0483-EL-ECP

Summary: Report --AEP Ohio Environmental Control Plan electronically filed by Mr. Steven T Nourse on behalf of Columbus Southern Power Company and Ohio Power Company