

Legal Department

American Electric Power 155 W Nationwide Blvd Columbus, OH 43215 AEP.com

April 15, 2016

Barcy F. McNeal Docketing Division Chief Public Utilities Commission of Ohio 180 East Broad Street Columbus, OH 43215

Re: In the Matter of the Annual Environmental Control Plan under Rule 4901:1-41-03(B), Ohio Administrative Code, by AEP Generation Resources Inc. Case No. 16-0806-EL-ECP

Dear Ms. McNeal:

Please find enclosed the 2016 Annual Environmental Control Plan ("ECP") filed on behalf of AEP Generation Resources Inc. ("AEPGR"). AEPGR is not a public utility as defined in Section 4905.02, Revised Code, and its facilities are not owned or operated by a public utility subject to the jurisdiction of the Ohio Public Utilities Commission. The Company submits the attached ECP out of an abundance of caution, and without waiving its arguments as to the Commission's jurisdiction.

Respectfully submitted,

Anne M. Vogel

Attorney for AEP Generation Resources Inc.

Attachments

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AEP Generation Resources Inc. Environmental Control Plan

Introduction

AEP Generation Resources Inc. ("AEPGR") is committed to protecting the environment while delivering safe, reliable electricity. AEPGR is an affiliate of American Electric Power Company ("AEP"). From 2000 through 2015 AEP made environmental investments totaling \$8.1 billion, with an additional \$353 million in environmental investments planned for 2016.¹ These upgrades to AEP's plants, along with the addition of natural gas-fired power plants to our fleet, are projected to reduce emissions of sulfur dioxide, nitrogen oxides, and mercury by 91%, 88%, and 85%, respectively, from 1990 through 2017.² CO₂ emissions are steadily decreasing as the size of our coal-fired generation fleet decreases and the use of less carbon-intensive natural gas increases, resulting in projected 2017 CO₂ emissions 39% below 2000 levels.²

Current Conditions, Planned Activity and Goals

Exhibit A summarizes the installation status of SO_2 , NO_x , and mercury control equipment at AEPGR generating units as of March 2016. The control equipment listed represents existing and planned installations through 2025 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, the Cross State Air Pollution Rule ("CSAPR") the Mercury and Air Toxics Standards ("MATS") Rule, as well as the New Source Review ("NSR") Consent Decree.

On February 13, 2012, AEP Ohio retired the 450 MW Sporn Unit 5 and on December 31, 2012, the 165 MW Conesville Unit 3. Exhibit B summarizes the roughly 2,500 megawatts ("MW") of AEP Generation Resources unit retirements that occurred on June 1, 2015 as a result of the MATS Rule.

¹Slide 11,

 $http://www.aep.com/investors/eventspresentations and webcasts/documents/2016 Barclays Power Utility Credit ConfH and out-March_1_2016.pdf$

Greenhouse Gas ("GHG") Control

System-wide, AEP is currently focused on taking practical, short-term actions to reduce carbon emissions, such as improving energy efficiency, investing in the development of cost-effective and less carbon-intensive technologies and evaluating our assets – power plants, office buildings, and mobile fleet – across a range of reasonable scenarios. The transformation of our generation business is expected to reduce our reliance on coal and lignite from 88% of our generating capacity in 1999 to approximately 51% in 2016³ AEP affiliates are heavily invested in renewable energy resources, and highly successful energy efficiency programs.

While many of the actions described above are initiated at a broader level, the net results are achieved through AEP Generation Resources and the AEP operating companies in the form of emission reductions and increased operational experience in managing carbon emissions. These efforts will continue as federal regulations and/or legislation for carbon reduction progress.

As reflected in the Commission's Opinion and Order in Case No. 14-1693-EL-RDR, issued March 31, 2016, there are multiple activities that have the potential to affect the greenhouse gas emissions of AEPGR in future years. These include the potential to co-fire Conesville Units 5 and 6 with natural gas, as well as the eventual conversion to 100% natural gas, repowering, or retirement of Conesville Units 5 and 6 and Cardinal Unit 1 in 2029 and 2030, respectively.

 2 Slide 12,

 $http://www.aep.com/investors/events presentations and we bcasts/documents/2016 Barclays Power Utility Credit Conf Handout-March_1_2016.pdf$

 $^{^3}$ Slide 10,

 $http://www.aep.com/investors/eventspresentations and webcasts/documents/2016 Barclays Power Utility Credit ConfH and out-March_1_2016.pdf$

Exhibit A

AEP Generation Resources ^A Unit Control Equipment Installed or Planned to be Installed for Air Emission Control for CAA ^B									
Plant Name & Unit #	SO2	Installation Date [†]	NOx (Combustion Controls)	Installation Date [†]	NOx (SCR/SNCR)	Installation Date [†]	Hg	Installation Date [†]	
Beckjord 6 ^{C, D}									
Cardinal 1	FGD	Installed ('08)	Low NOx Burners	Installed ('98)	SCR	Installed ('03)	SCR/FGD ^G	03/08	
Conesville 4 ^E	FGD	Installed ('09)	T-Fired Unit Simulated OFA / Concentric Firing System	Implemented / ('04)	SCR	Installed ('09)	SCR/FGD ^G		
Conesville 5	FGD Upgrade	Installed ('06) ^F	T-Fired / OFA with upgrades	Installed ('04)			Gore ^H	05/16	
Conesville 6	FGD Upgrade	Installed ('08) ^F	T-Fired / OFA with upgrades	Installed ('04)			Gore ^H	06/15	
Gavin 1	FGD	Installed ('96)	Low NOx Burners / CCV Burners	Installed ('98)	SCR	Installed ('01)	SCR/FGD ^G	01/96	
Gavin 2	FGD	Installed ('96)	Low NOx Burners / CCV Burners	Installed ('99)	SCR	Installed ('01)	SCR/FGD ^G	01/96	
Kammer 1 ^D			Over Fire Air / upgrades	Installed ('99 / '03)					
Kammer 2 ^D			Over Fire Air / upgrades	Installed ('98 / '04)					
Kammer 3 ^D			Over Fire Air / upgrades	Installed ('99 / '03)					
Mitchell 1	FGD	Installed ('07)	Low NOx Burners / with water injection	Installed ('93 / '03)	SCR	Installed ('07)	SCR/FGD ^G	07/07	
Mitchell 2 ^I	FGD	Installed ('07)	Low NOx Burners	Installed ('94)	SCR	Installed ('07)	SCR/FGD ^G	07/07	
Muskingum R 1 ^D			Over Fire Air	Installed ('99)					
Muskingum R 2 ^D			Over Fire Air	Installed ('00)					
Muskingum R 3 ^D			Over Fire Air / upgrades	Installed ('99 / '03)					
Muskingum R 4 ^D			Over Fire Air / upgrades	Installed ('99 / '03)					
Muskingum R 5 ^D			Low NOx Burners	Installed ('93)	SCR	Installed ('05)			
Picway 5 ^D			Low NOx Burners	Installed ('95)					
Sporn 2 ^D			Low NOx Burners w/ Interjectory Air / upgrades	Installed ('97 / '04)					
Sporn 4 ^D			Low NOx Burners w/ Interjectory Air / upgrades	Installed ('97 / '04)	SNCR	Installed ('08)			
Stuart 1 ^C	FGD	Installed ('08)	Low NOx Burners	Installed ('11)	SCR	Installed ('04)	SCR/FGD ^G	04/08	
Stuart 2 ^C	FGD	Installed ('08)	Low NOx Burners	Installed ('11)	SCR	Installed ('04)	SCR/FGD ^G	04/08	
Stuart 3 ^C	FGD	Installed ('08)			SCR	Installed ('04)	SCR/FGD ^G	04/08	
Stuart 4 ^C	FGD	Installed ('08)			SCR	Installed ('04)	SCR/FGD ^G	04/08	
Zimmer ^C	FGD	Installed ('91)	Low NOx Burners	Installed	SCR	Installed ('04)	SCR/FGD ^G	04/91	

^A Consistent with AEP Ohio's Commission-approved corporate separation plan, effective January 1, 2014, AEP Ohio transferred the generating units and associated assets identified herein to AEP Generation Resources (AEPGR)

^B This Exhibit reflects installed or planned installations as of May 2016

^c AEPGR owns a portion of this generating unit, which is/was operated by another party

^D Plant and/or Unit retired on or before June 1, 2015

^E AEPGR owns a portion of this generating unit, and is responsible for its operation

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

^G SCR/FGD co-benefit removal of mercury anticipated to meet requirments of the Mercury and Air Toxics Standards

^H Gore mercury control system uses a proprietary material to capture gaseous mercury emissions

¹ Ownership of the Mitchell Plant was transferred to Kentucky Power Company (50% transferred on January 1, 2014) and Wheeling Power Company (50% transferred on January 31, 2015)

[†] In-service by end of the year listed

Exhibit B

AEP Generation Resources Generating Unit Retirements

Retired by June 1, 2015

Plant	Location	Unit	MW
Beckjord ^A	New Richmond, OH	6	53
Kammer Plant	Moundsville, WV	1,2,3	630
Muskingum River	Beverly, OH	1,2,3,4,5	1425
Philip Sporn	New Haven, WV	2,4	300
Picway	Lockbourne, OH	5	100

^A Beckjord operated by Duke Power Company prior to retirement. AEP owned 53 MWs.

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Case No(s). 16-0806-EL-ECP

Summary: Correspondence -Annual Environmental Control Plan under Rule 4901:1-41-03 (B), Ohio Administrative Code. electronically filed by Anne M Vogel on behalf of AEP Generation Resources