



Staff Report of Investigation

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In the Matter of an Application by American
Municipal Power – Ohio, Inc. for a Certificate
Of Environmental Compatibility and Public
Need to Construct an Electric Generating
Facility in Meigs County, Ohio.

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Case No. 06-1358-EL-BGN

THE OHIO POWER SITING BOARD

EQUAL OPPORTUNITY EMPLOYER AND SERVICE PROVIDER

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Case No. 06-1358-EL-BGN

**Staff Report of Investigation
and Recommended Findings**

**Submitted to the
Ohio Power Siting Board**

BEFORE
THE POWER SITING BOARD
OF
THE STATE OF OHIO

In the Matter of an Application by American	)	
Municipal Power – Ohio, Inc. for a Certificate	)	
Of Environmental Compatibility and Public	)	Case No. 06-1358-EL-BGN
Need to Construct an Electric Generating	)	
Facility in Meigs County, Ohio.	)	

Members of the Board:

Alan R. Schriber, Chairman, PUCO	Steven Driehaus, State Representative
Lee Fisher, Director, ODD	John Hagan, State Representative
Alvin Jackson, Director, ODH	Robert Schuler, State Senator
Robert Boggs, Director, ODA	Jason Wilson, State Senator
Christopher Korleski, Director, OEPA	
Sean Logan, Director, ODNR	
Andrew M. Boatright, Public Member	

To The Honorable Power Siting Board:

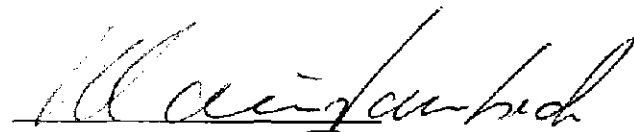
In accordance with provisions of the Ohio Revised Code (ORC) Section 4906.07 (C), and the Commission's rules, the Staff has completed its investigation in the above matter and submits its findings and recommendations in this Staff Report for consideration by the Ohio Power Siting Board (Board).

The Staff Report of Investigation and Recommended Findings has been prepared by the Staff of the Public Utilities Commission of Ohio. The findings and recommendations contained in this report are the result of Staff coordination with the Ohio Environmental Protection Agency, the Ohio Department of Health, the Ohio Department of Development, the Ohio Department of Natural Resources and the Ohio Department of Agriculture. In addition, the Staff coordinated with the Ohio Department of Transportation, the Ohio Historical Society, and the U.S. Fish and Wildlife Service.

In accordance with ORC Section 4906.07 and 4906.12, copies of this Staff Report have been filed with the Docketing Division of the Public Utilities Commission of Ohio on behalf of the Ohio Power Siting Board and served upon the Applicant or its authorized representative, the parties of record and the main public libraries of the political subdivisions in the project area.

The Staff Report presents the results of the Staff's investigation conducted in accordance with ORC Chapter 4906 and the Rules of the Board, and does not purport to reflect the views of the Board nor should any party to the instant proceeding consider the Board in any manner constrained by the findings and recommendations set forth herein.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Klaus Lambeck", written over a horizontal line.

Klaus Lambeck, Chief
Facilities, Siting, and Environmental Analysis Division

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ACRONYMS

AMPGS	AMP-Ohio Generating Station
APE	Area of Potential Effect
BACT	Best Available Control Technology
BMP	Best Management Practice
BRPA	Blue Ridge Power Agency
CCS	Carbon Capture and Storage
CEM	Continuous Emissions Monitor
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
EMF	Electric and Magnetic Fields
EPC	Engineering Procurement and Construction
ESP	Electrostatic Precipitator
FAA	Federal Aviation Administration
FGD	Flue Gas Desulfurization
GPM	Gallons Per Minute
HHEI	Headwater Habitat Evaluation Index
kV	Kilovolt
MSCPA	Michigan South Central Power Agency
MW	Megawatt
NERC	North American Electric Reliability Corporation
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OAC	Ohio Administrative Code
ODNR	Ohio Department of Natural Resources
Ohio EPA	Ohio Environmental Protection Agency
OHPO	Ohio Historic Preservation Office
OPSB	Ohio Power Siting Board or Board
ORAM	Ohio Rapid Assessment Methodology
ORC	Ohio Revised Code
PC	Pulverized Coal
PM	Particulate Matter
PSD	Prevention of Significant Deterioration
PUCO	Public Utilities Commission of Ohio

ACRONYMS Continued

SCR	Selective Catalytic Reduction
SO ₂	Sulfur Dioxide
SPCC	Spill Prevention, Control and Countermeasures
SWPPP	Storm Water Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VOC	Volatile Organic Compounds
WSMP	Wetland & Stream Mitigation Plan

I. INTRODUCTION

Ohio Power Siting Board

The Ohio Power Siting Board (Board or OPSB) was created on November 15, 1981, by amended Substitute House Bill 694 as a separate entity within the Public Utilities Commission of Ohio. The authority of the Board is outlined in Ohio Revised Code (ORC) Chapter 4906.

The Board is authorized to issue certificates of environmental compatibility and public need for the construction, operation, and maintenance of major utility facilities as defined in ORC Section 4906.01. Included within this definition are electric generating plants and associated facilities designed for or capable of operation at fifty megawatts or more, electric transmission lines and associated facilities of a design capacity greater than or equal to 125 kilovolts (kV), and gas and natural gas transmission lines and associated facilities designed for, or capable of, transporting gas or natural gas at pressures in excess of 125 pounds per square inch.

Membership of the Board is specified in ORC Section 4906.02(A). The members include: the Chairman of the Public Utilities Commission who serves as Chairman of the Board, the directors of the Environmental Protection Agency, the Department of Health, the Department of Development, the Department of Agriculture, and the Department of Natural Resources. The Governor appoints a member of the public, specified as an engineer, to the Board from a list of three nominees provided by the Ohio Consumers' Counsel. Included as ex-officio members of the Board are two members (with alternates) from each House of the Ohio Legislature.

The OPSB has promulgated rules and regulations, found in Chapter 4906 of the Ohio Administrative Code (OAC), which establish application procedures for major utility facilities. Pursuant to ORC Section 4906.07(C) and these rules, the Board's Staff (Staff) evaluates and investigates applications and reports the results of such investigations, including recommended findings and recommended conditions for certification, in the Staff Report of Investigation.

American Municipal Power - Ohio (AMP-Ohio)

In this proceeding, American Municipal Power – Ohio, Inc. (AMP-Ohio or Applicant), is seeking authority to construct an electric generating facility in Meigs County.

AMP-Ohio is a nonprofit municipal public power system, organized in 1971. AMP-Ohio was formed to own and operate electric facilities in order to provide generation, transmission and distribution of electric power to its members.

AMP-Ohio currently provides wholesale power and services to 121-member municipal electric systems in five states, including 81 in Ohio, 27 in Pennsylvania, seven in Michigan, four in Virginia, and two in West Virginia. The Applicant serves its membership by purchasing wholesale electric power and selling it to members at rates based upon purchase price, dispatch fee and service fee. AMP-Ohio receives its power from a resource mix that includes coal-fired generation, hydroelectric, wind and distributed generation using natural gas and diesel fuels.

AMP-Ohio's Board of Trustees consists of 16 communities, each of whom designates its own representative. Eight trustee communities are selected by their fellow public power communities and eight are elected at large. The Board of Trustees officers include a chairman, vice chairman, secretary, treasurer, president and general counsel. The president and general counsel are appointed by the Board of Trustees and are ex officio members.

Project Description

The Applicant proposes to construct a base-load electric generating facility. This facility would have a net demonstrated capability of 960 megawatts (MWs) (summer) with a peak maximum capability of 1,020 MW net output (winter). The Applicant's proposed site is adjacent to the Ohio River in Letart Township, Meigs County, Ohio. The site is roughly 4 miles south of Racine, Ohio (see Figure 1) near Letart Falls, Ohio. The Applicant elected not to propose an alternate site in this application.

The Applicant states that the facility would provide electric service to customers in five states, with roughly over 80% of the generating capability reserved or dedicated for 75 AMP-Ohio members located in Ohio. The remaining capacity would be provided for members/partners in WV, PA, MI, and VA. The Applicant provided the following general breakdown of planned power supply from this base-load facility: 794 MW reserved or dedicated for 75 AMP-Ohio members located in Ohio, four MW for one member in WV, 10 MW for two members in PA, 50 MW to Michigan South Central Power Agency (MI), and 100 MW to the Blue Ridge Power Agency (Virginia). The final number of participating municipal members is subject to change as contracts may be secured in the coming months. The Applicant has targeted 2013 as the commercial operation date of the facility.

Permits

Numerous permit applications have been submitted by the Applicant over the past two years, and it is expected that consideration of these permits by the appropriate entities will proceed into 2008. In addition to the Certificate of Environmental Compatibility and Public Need application before the OPSB, the Applicant has filed the following major permit applications:

- Air Permit-to-Install (PTI) application, filed with Ohio EPA, May 2006;
- National Pollutant Discharge Elimination System (NPDES) Permit application, filed with the Ohio EPA, May 2007;
- Residual Solid Waste Landfill Permit-to-Install (PTI) application, filed with Ohio EPA, May 2007;
- Section 10/404 Permit application, filed with the US Army Corps of Engineers, May 2007;
- Section 401 Water Quality Certification application, filed with Ohio EPA, May 2007.

As of the writing of this report, these permit applications were still pending. The Air PTI Draft was issued for public comment by Ohio EPA on September 13, 2007.

Site Description

The western-most boundary of the site is formed by the Ohio River, where the barge unloading and docking facility is proposed. The site is crossed on the western portion by State Route 124 (SR 124). East of SR 124 is a large agricultural area where the power generating equipment and fuel handling facilities are proposed to be installed. This area is predominately flat and presently active agricultural land. The solid waste landfill facility is proposed to be located on approximately 135 acres of land consisting of open area, some residences, woods, and streams located upland about a mile east of the power generating facility. It is proposed by the Applicant that a portion of East Letart Road (Township Road 95, or T-95) would be closed as a public road and used as the base for a primary haul road from the generating facility to the landfill facility. The haul road would be extended from the closed section of T-95 uphill and through woods on the Applicant's optioned property to the north side of the landfill. See Figures 2-4.

The Applicant's total project site includes approximately 1,600 acres in the vicinity of Letart Falls, Ohio. The primary site area, which includes the barge facility, generating plant and landfill facility, are part of roughly 1,000 acres. An additional 600 acres north of the plant site and south of the landfill will be used as a "buffer" area. The Applicant distinguishes the buffer area as portions of the project site where neither ecological nor archaeological surveys were performed. As such, the Applicant is not proposing to disturb these areas, and they will be part of the Applicant's property for this project. The Applicant has indicated to Staff that option agreements for the roughly 1,600 acre site have been secured.

Emission Control Technology

The Applicant has provided information in this application and in the various applicable permit applications for emission control technology utilizing either limestone or ammonia FGD (scrubber) systems. In June 2007, subsequent to the filing of this application, the Applicant filed supplemental information including a press release stating intention to use Powerspan emissions control technology for this project, which would employ a urea based ammonia-on-demand system.

The Applicant indicates that the Powerspan's ammonia FGD system would achieve outlet emissions at best available control technology, would produce a co-product

(ammonium sulfate, a fertilizer), would improve mercury and particulate matter (PM) control, and may allow for CO₂ capture at a future time.

Fuel

The Applicant intends to use coal as the source of fuel for its proposed generating facility. While actual sources of the coal will be dictated by economics and operating parameters, the Applicant indicates that they plan to use Ohio coal with a blend of western sub-bituminous coal or eastern bituminous coal to constitute the feedstock of both units. The Applicant is targeting coal blends that will range between 10,500 Btu/lb and 12,300 Btu/lb respectively, as received. The proposed plant would be constructed to accommodate receipt of coal by barge. The Applicant has estimated the plant to use a maximum of approximately 12,000 tons of coal per day at full capability.

The Applicant also states that natural gas will be needed principally to support startups. The Applicant is presently in discussions with natural gas pipeline companies regarding supply of natural gas to the site. Depending on the size and operating characteristics of the gas pipeline, the installation of this pipeline, and any impacts associated with it, could be the subject of a separate, future proceeding before the OPSB.

Plant Site and Facilities

The plant site and facilities would be comprised of multiple components, including the following: barge/docking facility, power generation, solid waste disposal, fuel storage, fertilizer and urea storage, cooling cells and water intake/outfall, electric switchyard, and additional buildings. See Figure 5 for a conceptual layout of the facility. A general description of these facilities is as follows:

Barge/Docking Facility

The barge/docking facility consists of three components: loaded barge docking, unloading facilities, and unloaded barge docking facility. The loaded barge dock would be the furthest south (upriver), and would involve six mooring cells capable of handling 15 barges. Six mooring cells would also be located downstream to store 15 empty barges. The unloading facility consists of a hydraulic equilibrated crane to unload the barges of either coal or urea, and would also be capable of loading fertilizer co-product processed from the plant. An enclosed conveyor system would transport coal and urea from the unloading area to the storage areas located on the west side of the plant site, across SR 124. These facilities would be designed to accommodate delivery of an estimated 2,600 barges per year. The Applicant states that barges delivering coal would

be uncovered, and barges delivering urea and loading out ammonium sulfate (fertilizer) would be covered, as these materials are water soluble. During construction of the facility, major equipment for the plant site would also be delivered via barge and unloaded at the unloading docks.

Power Generation

As proposed, the base-load electric generating plant consists of two subcritical pulverized coal boilers and steam turbines capable of generating 960 MW to the bulk power transmission system during the summer at full capability. The Applicant is targeting a plant net heat rate of 9,200-9,600 Btu/kWh and an average annual capacity factor of approximately 85%. Specific vendor equipment will be evaluated with an Engineering Procurement and Construction (EPC) contract in the next year, based upon performance-based specifications and parameters. Prior to filing this application, a technology study was performed on the Applicant's behalf to assist in determining the best suited technology and equipment for the generating facility. Factors considered in this study included projected busbar costs, available space, schedule, permitting components, contractual issues and others considerations.

Major equipment proposed for the power block of the facility includes the following:

- Two enclosed 480 MW net pulverized coal-fired boilers to generate steam;
- Two enclosed steam turbine generators;
- A gas-fired auxillary boiler for start up;
- Fabric filter bag house for particulate control on each unit;
- SCR for NO_x control on each unit;
- Wet FGD scrubber for SO₂ control on each unit (Powerspan);
- Wet ESP for H₂SO₄ and condensable particulate control;
- Two chimney stacks;
- Two fly ash silos;
- Two cooling cells.

Solid Waste Disposal

Fly ash and bottom ash are the primary solid wastes that would be produced by the facility. If a limestone-based FGD system is utilized rather than ammonia, then gypsum would also be produced and stored in the solid waste facility. The ammonia scrubber process would produce a marketable fertilizer co-product. The proposed landfill is classified as a Class III Residual Solid Waste Landfill. The landfill as proposed includes four phases, further divided into nine cells covering approximately 135 acres (see Figure

4). The Applicant filed its Residual Solid Waste Landfill PTI application with Ohio EPA in May, 2007, which is still pending a decision. In the Landfill PTI application, the Applicant requested a landfill volume of 27.355 million cubic yards, with a life expectancy of 41.4 years. These numbers are based upon utilizing a limestone FGD system. The Applicant estimates that by utilizing the ammonia-based FGD the life span of the landfill would roughly double because the marketable fertilizer co-product, ammonium sulfate, would be created and result in less landfill material.

Fuel Storage

The Applicant is proposing to use a blend of coal, which would require two radial stackers and two coal storage areas at the plant site. The Applicant plans to keep 45 days of coal supply stored on site. The coal would be conveyed to a coal crusher building and then to the boiler and turbine building.

Fertilizer and Urea Storage

With the use of Powerspan control technology, urea would be unloaded from barges and conveyed to storage facilities on site. One urea storage dome is proposed, which would be capable of holding a 30-day supply of urea. The ammonium sulfate co-product produced would be stored in two fertilizer domes with a 90-day storage capacity. The fertilizer would be processed and conveyed to the barge dock for loading. Approximately 100 barges per year would be needed for urea delivery, and approximately 200 barges per year would be loaded out with ammonium sulfate (fertilizer).

Cooling Cells and Water Intake/Outfall

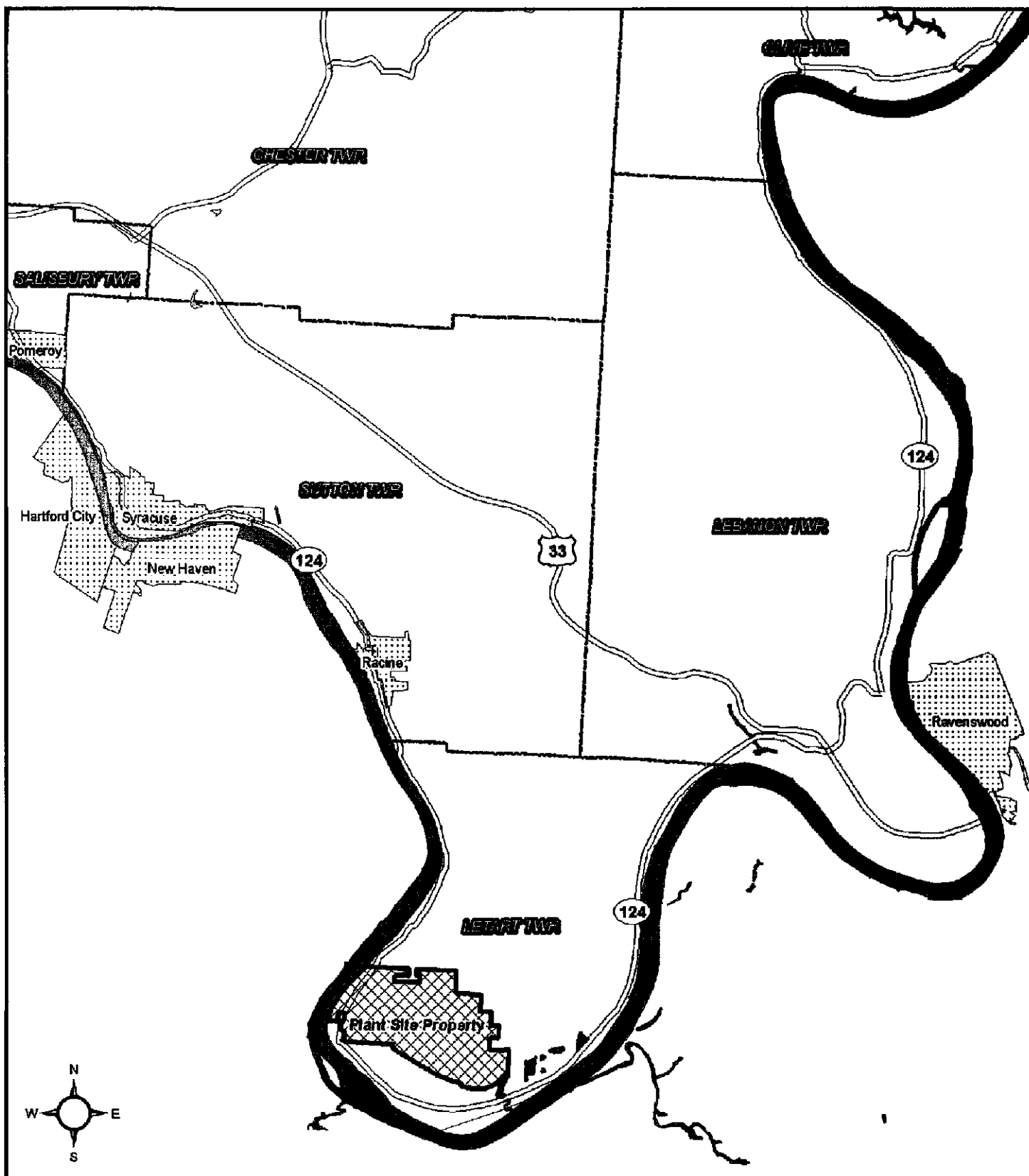
Two cooling cells are proposed for the project, and would be located west of the power plant location. The Applicant intends to meet its process water demands by withdrawing water from the Ohio River. The intake structure would consist of two offshore cylindrical wedge wire screens. These structures would be located approximately 80 feet from the riverbank, and 15 feet below the surface at normal pool levels. Once process water is used, treated wastewater would be discharged from the plant site to the Ohio River approximately 900 feet downstream of the intake via a 24-inch diameter reinforced concrete pipe.

Electric Switchyard

A step-up substation and switchyard would be included in this project. The electric switchyard at the proposed site would be a 345 kV four-breaker ring bus configuration. A new 345 kV electric transmission line would connect the proposed generating facility to the existing Sporn-Muskingum River 345 kV electric transmission line, approximately five miles north of the plant site. The new electric transmission line, and any impacts associated with it, are the subject of a separate proceeding (Case Number 06-1357-EL-BTX) before the Board.

Additional Buildings/Structures

Additional structures at the facility would include an administrative building, warehousing, and maintenance buildings. The Applicant has stated that the site will be secured by fencing around the coal storage area, substation/switchyard, and generating equipment, with guard stations at entry points.



Scale in Miles

NAD 83 State Plane Ohio South
1:120,000

Base map ESRI and ODOT
All other data provided by Applicant
Map created on Sep. 17, 2007

Figure 1
Site Location



Base map: ODOT and WV Aerials (2003)
All other data provided by Applicant

Map created on Sep. 17, 2007

Facility Property
Site Layout

0 2,000 4,000
Scale in Feet

NAD 83 State Plane Ohio South
1:24,000

Figure 2
Facility Overview



Base map ODOT & WV Aerials (2003)
All other data provided by Applicant

Map created on Sep. 17, 2007

 Facility Property
 Site Layout

0 1,000 2,000

 Scale in Feet

NAD 83 State Plane Ohio South
 1:12,000

Figure 3
Plant Detail



Base map CDOT & WV Aerials (2003)
 All other data provided by Applicant
 Map created on Sep. 17, 2007

____ Facility Property
 Site Layout

0 400 800
 Scale in Feet

NAD 83 State Plane Ohio South
 1:6,000

Figure 4
Landfill Detail



Figure provided by Applicant

Figure 5
Plant Rendering

II. HISTORY OF THE APPLICATION

Application procedures and requirements for information are specified in Section 4906.06(A) of the ORC, and are detailed in the Rules and Regulations of the Board.

Prior to formally submitting an application, the Applicant consulted with the Staff and representatives of the Board, including Ohio EPA, regarding application procedures.

On December 5, 2006, the Applicant held a public informational meeting in Meigs County regarding the proposed electric generating facility.

On May 4, 2007, the Applicant filed its application for a certificate to construct the AMP-Ohio Generating Facility in Meigs County, Ohio.

On June 11, 2007 and June 19, 2007, the Applicant filed supplemental information to the certificate application.

On June 29, 2007, the Chairman of the Board issued a letter to the Applicant stating that the application, filed on May 4, 2007 and as supplemented on June 11, 2007 and June 19, 2007, had been found to comply with the requirements of Chapter 4906-01, et seq., OAC.

On August 2, 2007, the Administrative Law Judge issued an Entry scheduling a local public hearing for this case to take place on November 1, 2007 at 6:00 p.m., at Meigs High School, 42091 Pomeroy Pike, Pomeroy, Ohio 45769. The adjudicatory hearing is scheduled to take place on November 8, 2007 at 10:00 a.m., in Hearing Room 11-C at the offices of the Public Utilities Commission of Ohio, 180 East Broad Street, Columbus, Ohio.

On September 5, 2007, the Applicant filed clarifications of the application for Staff.

On September 19, 2007, the Applicant filed the proof of publication.

On September 25, 2007, the Applicant filed supplemental information for the application pertaining to the Indiana bat survey report.

III. CRITERIA

The recommendations and conditions in this Staff Report of Investigation and Findings were developed pursuant to the criteria for certification set forth in Chapter 4906, ORC. Technical investigations and evaluations were conducted under guidance of the OPSB Rules and Regulations.

Section 4906.10(A) of the ORC reads in part:

The Board shall not grant a certificate for the construction, operation and maintenance of a major utility facility, either as proposed or as modified by the Board, unless it finds and determines:

- (1) The basis of the need for the facility if the facility is an electric transmission line or gas or natural gas transmission line;
- (2) The nature of the probable environmental impact;
- (3) That the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations;
- (4) In the case of an electric transmission line or generating facility, that the facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems and that the facility will serve the interests of electric system economy and reliability;
- (5) That the facility will comply with Chapters 3704, 3734, and 6111 of the Revised Code and all rules and standards adopted under those chapters and under Sections 1501.33, 1501.34, and 4561.32 of the Revised Code. In determining whether the facility will comply with all rules and standards adopted under Section 4561.32 of the Revised Code, the Board shall consult with the Office of Aviation of the Department of Transportation under Section 4561.341 of the Revised Code;
- (6) That the facility will serve the public interest, convenience, and necessity;
- (7) In addition to the provisions contained in divisions (A)(1) through (A)(6) inclusive of this section, and rules promulgated thereunder, what its impact will be on the viability as agricultural land of any land in an existing agricultural

district established under Chapter 929 of the Revised Code that is located within the site and alternative site of the proposed major utility facility. Rules adopted to evaluate impact under division (A)(7) of this section shall not require the compilation, creation, submission, or production of any information, document, or other data pertaining to land not located within the site and alternate site; and

- (8) That the facility incorporates maximum feasible water conservation practices as determined by the Board, considering available technology and the nature and economics of the various alternatives.

IV. NATURE OF INVESTIGATION

The Board's Staff has reviewed the application submitted by AMP-Ohio for certification of the proposed AMP-Ohio Generating Station project. With its application, the Applicant is seeking authority from the Board to construct an electric generating facility. The application was prepared and submitted pursuant to OAC Chapters 4906-1, 4906-5, and 4906-15, of the Board Rules and Regulations.

The Board's Staff, which consists of career professionals drawn from the Staff of the Public Utilities Commission of Ohio and other member agencies of the OPSB, has the responsibility to evaluate, assess, and make recommendations on applications subject to Board jurisdiction. The Staff has reviewed and evaluated the application and additional information submitted by the Applicant and other materials filed with the Board under Case Number 06-1358-EL-BGN. The investigation has been coordinated among the agencies represented on the Board and with other interested agencies such as the Ohio Department of Transportation, the Ohio Historical Society, and the U.S. Fish and Wildlife Service (USFWS).

The Recommended Findings resulting from the Staff's investigation in this Report are made pursuant to ORC Section 4906.07(C) and the Board's Rules and Regulations.

V. CONSIDERATIONS AND RECOMMENDED FINDINGS

In the matter of the application of AMP-Ohio the following considerations and recommended findings are submitted pursuant to and in accordance with ORC Section 4906.07(C).

Considerations for ORC Section 4906.10(A)(1)

Basis of Need

The basis of need as specified under 4906.10(A)(1), Revised Code, is not applicable to this electric generating project.

Recommended Findings

Staff recommends that the Board find that 4906.10(A)(1) is not applicable to this electric generating facility project. The Staff also recommends that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(2)

Nature of Probable Environmental Impact

The Staff has reviewed the environmental information contained in the record compiled to date in this proceeding and has supplemented its review with site visits to the project area and discussions with employees and representatives of the Applicant. As a result, the Staff has found the following with regard to the nature of the probable environmental impact:

- (1) The proposed project involves the construction and operation of a pulverized coal electric generating facility in Meigs County. The generating facility is proposed to have a net demonstrated capability of 960 MW (summer) with a peak maximum capability of 1,020 MW net output (winter).
- (2) The Applicant plans to operate two steam powered generating units, using pulverized coal as the heat source. Natural gas will also be utilized during startup of the units.
- (3) Air emissions during operation of the proposed facility would include nitrogen oxides (NO_x), sulfur dioxide (SO₂), particulate matter (PM), volatile organic compounds (VOCs), carbon monoxide (CO), and sulfuric acid (H₂SO₄). Continuous Emission Monitors (CEMs) will be installed in order to continually measure and monitor air emissions exiting the stacks.
- (4) Air emissions during construction would include NO_x, SO₂, CO, PM, and VOCs. Because of the relatively low volume of emissions and the temporary nature of construction activities, it is not expected that these emissions would have any significant adverse impacts on-site or beyond the site boundary.
- (5) Two cooling cell structures would be constructed west of the plant footprint. The cooling cells will dissipate waste heat from the electric generation process.
- (6) The tallest structures at the facility would be two chimney stacks, at an elevation of 625 feet above ground level and a diameter at the top of just under 25 feet. No concerns were identified during the course of Staff's coordination with the Ohio Office of Aviation. The Applicant will, however, have to file for permits with the Federal Aviation Administration (FAA) because of the stack height.

- (7) The Applicant proposes to construct a new 345 kV electric transmission line in order to connect the proposed generating facility to the existing Sporn-Muskingum River 345 kV transmission line, which is located approximately five miles north of the proposed plant site. The new transmission line, and any impacts associated with them, will be the subject of a separate proceeding before the Board (Case No. 06-1357-EL-BTX).
- (8) Depending on the FGD system utilized, wastes consisting of fly ash, bottom ash, water clarification sludge, gypsum, and FGD wastewater treatment sludge will be disposed of in a proposed landfill. The landfill will be roughly 135 acres, and build-out (including all nine cells, haul road, and perimeter access roads) will require the removal of numerous trees and other vegetation from approximately 85 acres of upland forest. The Applicant has indicated that clearing and preparation of the landfill area will be done on a cell- by-cell basis, as needed.
- (9) The haul road from the plant to the landfill is planned to utilize a portion of an existing gravel road (East Letart Road, or T-95) as a base. This road is approximately 25 feet wide presently. The Applicant is proposing to re-route this road north of the landfill and widen the existing gravel road to roughly 50 feet. While the use of an existing road is beneficial, the Applicant will need to clear vegetation in order to widen the road.
- (10) There are no state parks, nature preserves, scenic rivers, or wildlife areas within the proposed site boundary. The Letart Mudflats, an ODNR conservation site, is located approximately ½ mile south (upriver) of the proposed plant site along the Ohio River. The proposed facility is also approximately one mile northwest of the Ohio River Lock and Dam Wildlife Area. Both the Ohio River Racine Wildlife Access (4.1 miles) and the Ohio River Oldtown Creek Wildlife Access (4.9 miles) are within five miles of the proposed site. Letart Island, a component of the Ohio River Islands National Wildlife Refuge, is also located within the vicinity (about one mile from the power block) of the proposed facility.
- (11) The Applicant identified 12 wetlands on the site, all of which are associated with the proposed landfill. The aggregate size of the 12 wetlands is 2.2 acres but only approximately 1.1 acres will be filled. The Applicant anticipates filling three category 1 wetlands (0.21 acres total area), and nine category 2 wetlands (0.86 acres total area).
- (12) There are approximately 39,400 linear feet of headwater streams on the project site, the majority of which are located on the eastern portion where the landfill is

proposed. The Applicant anticipates filling approximately 10,359 linear feet of headwater channels. The different types of impacted streams are as follows:

Class (HHEI)	Linear feet
III	2,196
II	2,590
Modified II	3,038
I	2,087
Modified I	448

Due to the extent of the proposed disturbance and the quality of some of the headwater streams (Class III being the highest class), the impact to headwater habitat is one of the most significant ecological impacts associated with the proposed project.

- (13) Construction of the project will require clearing about 95 acres of trees. Seventy-nine acres of clearing will be required for the landfill, six acres for the haul road, and ten acres along the Ohio River barge facility. Minimal clearing is required for the plant site, which is predominately agricultural. The impacts of tree removal include the loss of food and habitat for wildlife, increased potential for erosion and sedimentation, and aesthetic impacts.
- (14) The project area, and particularly the proposed landfill location, contains habitat supporting numerous common reptile, amphibian, bird, and mammal species. These species will likely be impacted, both directly and indirectly, during the construction and operation of the proposed facility. Faunal impacts will include the loss of habitat, increased habitat fragmentation, increased disturbance (i.e., noise, lighting, human activity), temporary and permanent displacement, and direct mortality due to construction activities.
- (15) Threatened or endangered species historically in or near the project site include:
 - (a) Plants: Records indicate the historical presence of the following three plant species of concern near the project study area: mud-plantain (*Heteranthera reniformis*), common prickly pear (*Opuntia humifusa*), and the smooth buttonweed (*Spermacoce glabra*). The Applicant's field investigations did not identify any of these plant species at the site.

- (b) Birds: No protected bird species are recorded by ODNR or USFWS as being in the project area nor were any observed during the Applicant's field surveys.
- (c) Reptiles and amphibians: The eastern spadefoot toad (*Scaphiopus holbrookii*), a state endangered species, is found in sandy soils near river valleys. A survey for the eastern spadefoot found both adults and tadpoles on the site and on adjacent properties. Construction of the facility would result in both direct and indirect impacts to the eastern spadefoot populations located on or near the site.
- (d) Mammals: The historical range for the black bear (*Ursus americanus*) and the bobcat (*Felis rufus*), both state endangered species, includes the project site. No evidence of these species was identified during field reconnaissance. The project site also falls within the historical range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. To construct the facility, the Applicant expects to remove approximately 95 acres of trees principally along the river and within the proposed landfill site. This tree clearing could represent the loss of habitat for the Indiana bat, if present at the site. A site assessment found suitable habitat for the Indiana bat at several locations within the site. A mist net survey conducted by BHE Environmental in the summer of 2007 did not capture any Indiana bats at the project site.
- (e) Aquatic species: Three state-listed fish species historically have been documented within the vicinity of the project site, including the goldeye (*Hiodon alosoides*) which is state endangered; the speckled chub (*Macrhybopsis aestivalis*), a state endangered species; and the channel darter (*Percina copelandi*), a state threatened species. In addition, the project site is within the historical range of four listed mussel species, including the threehorn wartyback (*Obliquara reflexa*), a state threatened species, and the following three state and federally endangered mussel species: pink mucket pearly mussel (*Lampsilis abrupta*), fanshell mussel (*Cyprogenia stegaria*), and sheepnose mussel (*Plethobasus cyphus*). To evaluate the potential presence of these particular species, as well as other mollusk species, the Applicant hired EA Engineering to conduct a survey in the summer of 2006 for the segment of the Ohio River for which dredging and construction is planned. During the survey, a total of six live mussels were collected with five different species represented. No federally listed species were captured during the survey; however, one

threehorn wartyback was located. Construction and maintenance activities could negatively impact any mussels near the project site through increased siltation from construction activities or direct mortality during dredging activities.

- (16) The Applicant expects to meet its process water needs by withdrawing water from the Ohio River. This withdrawal is planned to occur at a point upstream of the Racine Locks & Dam, near Ohio River mile marker 237. The system will be designed to achieve a maximum makeup water withdrawal of approximately 12,500 gallons per minute (gpm). Average makeup water withdrawal is estimated at approximately 8,300 gpm with the ammonia-based FGD system, 8,600 gpm if limestone FGD is used. Withdrawal at the maximum rate is expected to constitute approximately 0.5% of the 7Q10 low flow along this stretch of river. The Applicant further states that no ground water is anticipated to be used and no aquifers are expected to be directly affected by this project.
- (17) The water intake structures would consist of two offshore cylindrical wedge wire screens. These structures would be located approximately 80 feet from the riverbank, and 15 feet below normal pool levels.
- (18) The plant will include a water storage tank sized to provide one hour of makeup supply, plus 250,000 gallons to be reserved for fire protection located west of the plant. Fire hydrants and on-site fire protection will be provided privately by the Applicant, and the Applicant plans to coordinate local EMS services with the Village of Racine.
- (19) The Applicant intends to obtain its potable water supply for the facility from the local Tupper's Plains - Chester Water District that currently serves the Letart Falls area. The Applicant estimates potable water needs during operation of the facility at 10,000 gallons per day. During construction, with a greater number of personnel on site, the needs are estimated at approximately 12,500 gallons per day.
- (20) The facility will employ an oil/water separator in order to remove oil from water which comes in contact with the power block. The oil will be collected and sent off-site for disposal, while the remaining water will be routed to an on-site settling basin prior to discharge to the Ohio River.
- (21) Construction activities are expected to produce both solid and hazardous waste materials. Hazardous wastes are expected to include waste oils, waste vehicle

fluids, paints, thinners, solvents, oily rags, oil absorbent materials, welding materials and lead acid batteries. Hazardous waste products, such as waste oils and paints, will need to be disposed of by an authorized hazardous waste management company.

- (22) The facility will include the construction of a packaged sewage treatment plant on-site in order to treat sanitary wastewater prior to discharge to the Ohio River.
- (23) Storm water runoff will be routed into ditches and directed into sediment control ponds prior to discharge to the Ohio River. During construction, the use of best management practices (BMPs) such as silt fencing, reseeding, and straw bales will help control storm water discharges. A storm water pollution prevention plan (SWPPP) will be developed prior to construction.
- (24) Dredging is expected to be necessary during the construction of the barge docking and unloading facilities. Construction of the barge unloading facility will require dredging approximately 70,000 cubic yards of material from within the Ohio River. This material will be disposed of at an on-site pond located in an upland area. The Applicant has also requested from the U.S. Army Corps of Engineers (USACE) permission to dredge an additional 20,000 cubic yards of material for maintenance purposes over a 10-year period.
- (25) The Applicant estimates that 329 acres of vegetable crops and 105 acres of field corn were in production within the proposed facility boundary in 2007. A total of 434 acres of actively-farmed land will be impacted by the project. No Agricultural District properties were identified on the site. Five greenhouses on the plant site and one additional greenhouse on the landfill property will be removed permanently. There is no plan to resume agricultural activities within the facility boundary after construction.
- (26) The majority of the plant site (including major generating equipment) is outside of the 100-year flood zone. The barge facilities and water intake pump house located west of SR 124 will be located within the 100-year flood zone. The Applicant has indicated that structures like the pump house will be elevated above the flood elevation.
- (27) The Applicant states that approximately 75,000 square feet of sheet piling and 20,000 cubic yards of aggregate material in the cells below the ordinary high water mark in the Ohio River will be used in construction of the barge fleet area. Approximately 1,800 linear feet of the upstream fleet area is to be excavated and

backfilled with approximately 45,000 cubic yards of stone protection for river bank stabilization. No riverbank excavation or stabilization is proposed for the downstream facility or unloading facility. A channel will be constructed for the unloading facility in-river.

- (28) Twelve mooring cells (six upstream and six downstream), with diameters ranging from 20 to 30 feet, will be installed off-shore to accommodate the approximately 2,600 barges that would be docked and unloaded at the site per year. Six unloading cells, with diameters ranging from 30 to 40 feet will be used to moor barges and mount a crane and conveyor hoppers. The Applicant has filed information with the USACE regarding the number of barges, turning points and dock alignment in its USACE permit application. The Applicant will continue to coordinate with USACE to minimize impacts associated with river navigation and traffic control.
- (29) There are potential traffic impacts associated with construction of the proposed facility, particularly with increases in traffic on routes leading to the site due to the delivery of equipment and materials. Traffic coordination and management will be required to minimize impacts associated with ingress and egress points, road or lane closures, increased traffic, slow moving truck traffic, air emissions, and dirt and dust.
- (30) Three conveyors connecting the barge loading/unloading facility with the plant are proposed. One conveyor would move coal exclusively to the coal storage area. Another conveyor would move urea, and the third conveyor will take ammonium sulfate (fertilizer) from the plant site to the barges to be loaded. The Applicant is considering combining the urea unloading conveyor and the ammonium sulfate conveyor into one bi-directional conveyor. All conveyors would be enclosed and at a height above SR 124 so as to not impact vehicular traffic. The Applicant will have to obtain a MR505 Road Crossing Permit from the Ohio Department of Transportation for the proposed above-grade conveyor facilities.
- (31) The construction of this generating facility will change the current general aesthetic characterization from a rural setting to industrial in nature. Industrial facilities are not uncommon along the Ohio River.
- (32) There are sensitive land uses in proximity to the proposed plant, such as residences and cemeteries. The nearest residential property in Letart Falls is located over 1,800 feet away from any major plant feature. While plant features

would be visible to nearby residents, distance from major components will limit potential impacts. The Applicant will make reasonable efforts to minimize adverse visual impacts by installing fencing and landscaping around its facility.

- (33) Two cemeteries are located within a one-mile radius. A small family cemetery is located approximately 4,000 feet northwest of the facility and the Letart Falls Cemetery is located approximately 2,000 feet south of the facility. The Applicant has agreed to leave current vegetative screening in place at the family cemetery and to provide a substantial amount of additional screening for the Letart Falls Cemetery.
- (34) The Applicant intends to permanently close a portion of East Letart Road (T-95) and Hill Road (T-96). Additionally, some local roads may require substantial restoration following the construction process. The Applicant will be required to coordinate these efforts with the Meigs County Engineer and the Ohio Department of Transportation.
- (35) The only commercial land uses in proximity to the plant are greenhouse buildings and a gravel pit. Both of these commercial uses are compatible with the proposed generating facility and they may remain in operation after construction.
- (36) The construction and operation of the plant is not expected to have any significant negative impact on institutional facilities such as schools or churches, as schools are not in close proximity to the proposed plant and the Applicant will limit construction activities on Sunday.
- (37) The Applicant has completed a noise study of potential impacts expected from construction and operation of the facility. Operational noise is expected to be below 55 dBA at the fence line, which is within generally accepted federal and state standards for sensitive land uses such as nearby residential facilities. Therefore, additional noise mitigation should not be required for normal plant operation. Construction noise levels will be temporary in nature but higher than during plant operation. Pile driving would be the most extreme noise producing activity during construction, at approximately 72 dBA at the nearest sensitive receptor. To help mitigate negative effects of construction noises, the Applicant intends to limit general construction activity to daylight hours.
- (38) The Applicant has conducted cultural resource studies on the site. The Applicant's September 11, 2006 Phase I Archaeology Survey investigated a 505

acre portion of the proposed facility referred to as the Lower Terrace Project Area. An addendum to the study was submitted on November 1, 2006. This addendum covers 495 acres that constitutes the Upper Landfill Project Area. The study found that no archaeological site or structure within the Upper Landfill Project Area is potentially eligible for inclusion on the National Register of Historic Places. With the exception of eight specified sites, no further investigation is recommended for the Lower Terrace Project Area. The Applicant will be required to coordinate further studies of those eight sites with the State Historic Preservation Office. If the sites prove to be eligible for inclusion on the National Register of Historic Places (NRHP), then the Applicant will be required to recover and document artifacts from the sites, or to avoid impacts to those sites during construction and operation of the proposed facility.

- (39) In addition to the archeological site work performed on behalf of the Applicant, architectural reconnaissance investigations (a visual impact study) were performed on and around the site in 2007. The architectural survey found no residential properties within the Area of Potential Effect (APE) that are eligible for listing on the NRHP.
- (40) The Applicant estimates that the total labor payroll for construction of the proposed facility will exceed \$560 million. Construction will generally require 800-1,000 workers, but may employ up to 1,600 workers during peak periods. Operation of the facility will generate annual wages of approximately \$10 million and require about 150 employees. Additional direct and indirect economic benefits are expected in the region during construction and operation of the facility, including purchases of construction materials from local vendors and the use of local goods and services by facility personnel. The Applicant estimates that the facility will generate additional state and local tax revenues in excess of \$1 million annually.
- (41) The project is expected to have a positive impact on regional development. Construction costs for the proposed facility are expected to exceed \$2.3 billion.
- (42) The Applicant anticipates a four-year construction phase, starting in 2009. The Applicant has targeted having the first unit operational in the spring of 2013, and the second unit operational in the fall/winter of 2013, pending various regulatory approvals.

Recommended Findings

The Staff recommends that the Board find that the nature of the probable environmental impacts has been determined for the proposed facility. Further, the Staff recommends that any certificate issued by the Board for the proposed facility includes the conditions specified in the section of the report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(3)

Minimum Adverse Environmental Impact

The Staff has studied the Applicant's description and analysis of the ecological, social, and economic impacts which could result from the construction and operation of the proposed electric generating facility at the proposed site. The Staff requested and received additional information from the Applicant necessary to complete its review of the proposed project. Additionally, Staff conducted field visits to supplement the information contained in the Applicant's filings.

Site Selection Study

The Applicant had a regional siting study performed in the early stages of plan development in 2004. The site and states in the regional site selection study were considered viable locations to economically supply power to the Applicant's member municipalities. These locations included all of Ohio and portions of adjacent states, with being within 50 miles of the Ohio border the primary initial selection criteria. The Applicant states that additional sites in Virginia were identified by outside parties but eliminated due to technical issues. The study initially identified 17 potential sites in five states. The list of sites was further narrowed to nine sites (eight in Ohio and one in WV) after factoring out sites located in air quality non-attainment areas.

The next site screening narrowed the nine sites to three based on their ability to support two net 480 MW units. The criteria used at this stage of the evaluation included environmental and technical characteristics for site suitability. These criteria were characterized as required conditions, desired conditions, and intangible factors.

Evaluation of the remaining three highest scoring sites included numeric weighting of quantifiable parameters and other intangible factors. Fifty-nine specific site characteristics were evaluated, including topography, land acquisition, distance from supporting facilities, interconnection access, delivered cost of fuel, geological and flood considerations, tax and labor conditions, cultural resources, nearby airports, wetland and natural habitat impacts and water impact potential, among others.

Air Emissions

The proposed facility would create air emissions during both the construction and operational phases. Construction-related emissions will result primarily from the use of

construction vehicles/equipment, with disturbed areas also contributing to particulate emissions (i.e., fugitive dust).

The use of dust suppression techniques, including water sprays, would help to control dust creation during construction. In addition, construction vehicles would be maintained in good working order and restricted in speed to prevent unnecessary emissions related to inefficient operation.

During operation, the coal handling system would be a source of fugitive dust emissions. The Applicant intends to control fugitive dust emissions from the coal handling system through the use of enclosed conveyors, enclosed transfer points, dust suppression methods such as water spray, forced air dust collection systems, and good compaction and handling practices on the coal pile.

Emissions created during operation will originate from several sources, including pulverized coal boilers, auxiliary natural gas boiler, cooling cells, coal and limestone receiving/handling/storage facilities, fertilizer plant, coal crusher system, gypsum and fly ash conveying/handling/storage systems, roadways and the landfill.

Meigs County is designated as attainment or unclassified for all criteria pollutant ambient standards. The Applicant indicates that a Class I analysis was completed as part of the Prevention of Significant Deterioration (PSD) filing. Class I areas included in the model analysis were Otter Creek Wilderness Area, Dolly Sods Wilderness Area, Shenandoah National Park, and James River Race Wilderness Area. The Applicant states that the project will not negatively impact any Class I areas.

On September 13, 2007, Ohio EPA issued a Draft Air PTI for comment. Compliance with the Air PTI, as well as other required air permits, would help ensure that the facility's air emissions are minimized. As covered in the Air PTI, the Applicant proposes to limit air emissions by using an SCR unit for NO_x control, fabric filter bag house to capture and reduce fly ash particulate, wet FGD to reduce SO₂ emissions, and wet ESP to reduce fine particulates.

Sequestration Potential

The facility will also emit carbon dioxide (CO₂). Emissions of CO₂ are not currently regulated; however, emissions of CO₂ have been associated with climate change, and therefore options are being evaluated world-wide to reduce the amount of CO₂ that is emitted into the atmosphere. One such option is carbon capture and storage (CCS), a process in which CO₂ is captured prior to exiting the stack and piped to some medium

for long-term storage or sequestration. As proposed, the facility would not immediately address emissions of CO₂. However, the Applicant indicates that the facility will be designed to incorporate carbon capture equipment in the future. To accommodate this, the initial plant layout will include space for future carbon capture equipment.

The Applicant believes that the region may contain geologic features that are suitable for carbon sequestration. As a participant in the Midwest Regional Carbon Sequestration Partnership, the Applicant intends to continue monitoring research into the topic of carbon storage.

In anticipation of the potential decision to address CO₂ at this proposed facility, the Powerspan CO₂ scrubber technology is planned to be tested at FirstEnergy's R.E. Burger plant near Shadyside, Ohio. The test of this ammonia-based process is scheduled to commence in late 2007.

Staff expects that a separate OPSB application specific to the CCS equipment, process, and pipeline would be required prior to construction in the event that the Applicant elects to begin CCS at this facility.

Water Intake

The Applicant intends to meet its process water demands by withdrawing water from the Ohio River. The intake structure would consist of two offshore cylindrical wedge wire screens. These structures would be located approximately 80 feet from the riverbank, and 15 feet below the surface at normal pool levels. The area beneath the screens will be rip-rapped for stabilization. The Applicant states that the design and location of the screens are intended to minimize potential impacts on aquatic life in the Ohio River.

The pump house associated with the water intake will not be located on the river bank but on fill material to an elevation five feet above the 100-year flood level. The fill material will be protected with rip-rap sloping away from the structure.

Maximum water withdrawal rates anticipated for the facility are expected to be approximately 11,800 gpm for the limestone FGD system and 11,500 gpm for the ammonia FGD system. Annual average withdrawal rates are expected to be about 8,600 gpm for the limestone FGD configuration, or approximately 8,300 gpm for the ammonia FGD system. It will be necessary for the Applicant to obtain a water withdrawal permit from ODNR prior to operation of the facility.

Water Discharge

The facility would discharge process waters to either on-site tributaries and/or directly to the Ohio River. These discharges could potentially introduce pollutants, sediment, and thermal pollution to the aquatic environment, all of which could negatively impact water quality. To address these issues, the Applicant proposes to treat process waters prior to discharge through several processes, including the use of oil/water separators, settling basins, and metals precipitation. The water discharges would have to comply with the terms of an NPDES permit, which the Applicant would obtain from Ohio EPA. Such compliance would ensure that the impacts from these water discharges are minimized.

A package sewage treatment plant is planned for use during operation of the facility to treat sanitary wastewater discharges. The primary wastewater discharge to the Ohio River will be located approximately 900 feet downstream of the intake facility in order to eliminate recirculation of the wastewater. The discharge will be routed from the plant site with a 24-inch diameter reinforced concrete pipe. The wastewater will exit a baffled outlet structure into an open rip-rapped ditch, and conveyed to the Ohio River.

Barge Mooring Facility

Constructing the upstream barge mooring facility will require construction activities, such as dredging, both along the bank and in the river. Such activities have the potential to negatively impact aquatic species that are present in the area. In order to minimize these impacts, the Applicant intends to stabilize the riverbank along the upstream barge mooring facility through approximately 1,800 linear feet of excavation slope design and by installing approximately 45,000 cubic yards of rip-rap. No riverbank excavation or stabilization is expected for the downstream barge mooring facility or unloading facility.

Construction of the river facilities would require the removal of approximately 70,000 cubic yards of bank and substrate in the Ohio River. Dredged material will be pumped to an on-site upland dredge spoil decant pond on the plant site. Dredged material will be transported via temporary piping, except at SR 124, where permanent steel piping will go under the road to minimize disturbance of road surface and traffic.

Wetlands

Out of a total of 2.22 acres of onsite wetlands, there are 1.21 acres of wetlands that should not be impacted by construction of the proposed project. The Applicant proposes to preserve and protect these onsite wetlands.

The Applicant does anticipate impacting the remaining 1.01 acres of wetlands. In order to mitigate for the loss of wetlands, the Applicant proposes to create 1.77 acres of onsite mixed emergent and forested wetlands.

Streams

The Applicant anticipates filling approximately 10,359 linear feet of headwater channels. In an effort to minimize impacts, the Applicant proposes to enhance the non-impacted portions of the streams by planting additional vegetation and stabilizing the banks.

The Applicant also proposes to preserve 1,240 linear feet of Stream BS-13, which is a Class III headwater stream. Also, instead of filling stream AN-S1, the Applicant proposes to relocate it into a new channel.

The Staff is concerned that additional measures are needed to further avoid and minimize these potential stream impacts, particularly to Class III headwater streams and to the large, ecologically important stream and riparian network in the southeast portion of the landfill site. Possible means to minimize stream impacts include relocating or reducing the size of the proposed storm water catch basins, especially basin #2 associated with cell 2 of the landfill, and phasing the landfill construction in such a way that these most environmentally-sensitive areas are the last ones to be built and placed into operation.

The Applicant has proposed a draft stream mitigation plan which includes a Bottomland Hardwood Mitigation Plan to enhance a riparian section along the Ohio River. The plan involves planting 15-20 acres of native forest species along the Ohio River. Enhancing the physical habitat around the river would reduce nutrient loading, erosion and sedimentation. The tree species would also provide shade and detritus.

The Applicant's draft mitigation plan also includes off-site mitigation activities, potentially focusing on acid mine drainage, for up to 20,200 linear feet within the nearby Leading Creek watershed.

In addition to the specific mitigation measures proposed, more generic construction practices to help reduce sediment runoff would include the use of BMPs such as silt fences and straw bales to avoid construction storm water impacts to the remaining headwater streams.

Landfill

The Applicant proposes to construct a facility landfill, approximately 135 acres in size, in a partially wooded upland area approximately one mile east of the power facility. The purpose of the proposed landfill will be primarily for disposal of coal combustion and air pollution control system byproducts which can not be sold by the Applicant. These byproducts would include (depending on the FGD system utilized) fly ash, bottom ash, water clarification sludge, gypsum and FGD wastewater treatment sludge.

In the Applicant's PTI filing with Ohio EPA, 27.355 million cubic yards and a life expectancy of 41.4 years were specified as requirements for the proposed landfill facility. These numbers are based on using a limestone FGD system. The Applicant estimates that with ammonia based FGD, the life span would roughly double, as less waste would be generated and required to be disposed of in the landfill, thus extending its useful life.

Prior to construction of the landfill, the Applicant will be required to obtain a permit to install an industrial solid waste landfill, pursuant to Chapter 3745-30, OAC, which will help ensure minimal impacts and compliance with applicable laws and regulations.

To help minimize impacts associated with a haul road to the landfill, the Applicant is proposing to utilize an existing gravel road (East Letart Road) as the base for access. In order to accommodate heavy truck traffic, some widening which would include clearing, will be necessary. The Applicant intends to create a new portion of the haul road on its property north of the landfill, which also involves tree clearing.

Tree Removal

Construction of the landfill and associated facilities, as well as a small portion of the proposed power plant site and barge facilities, will require clearing about 95 acres of woodland, of which 79 acres are in the landfill. Impacts of the tree removal would include the loss of food and habitat for wildlife, increased potential for erosion and sedimentation, and aesthetic impacts.

In an effort to mitigate for the loss of river bank vegetation, the Applicant has proposed a Bottomland Hardwood Mitigation Plan which would enhance a riparian section along the Ohio River. The plan involves planting 15-20 acres of native forest species along the Ohio River. Enhancing the physical habitat around the river will reduce nutrient loading, erosion and sedimentation. The tree species will also provide shade and detritus.

The Applicant's plan to preserve undisturbed wooded areas elsewhere on the project site will also have a long-term beneficial impact.

Wildlife

The project area hosts numerous wildlife species, including commercial and recreational species. The construction and operation of the proposed facility will likely negatively impact these species in the form of habitat loss, increased habitat fragmentation, increased disturbance (i.e., noise, lighting, human activity), temporary and permanent displacement, and direct mortality due to construction activities. To address these impacts, the Applicant has attempted to locate the plant footprint so as to avoid many of the more environmentally-sensitive areas. The Applicant indicates that roughly 600 acres of the proposed site is a buffer area. In the area of the landfill, much of this buffer is wooded with headwater streams. Final plans for this buffer have not yet been determined. However, maintaining at least a portion of the buffer in an undeveloped stage may offer suitable habitat for some species displaced by the facility's construction and operation.

The proposed facility is within the range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. By removing approximately 95 acres of trees from the site property, as is currently planned, the Applicant may be removing potential habitat for the Indiana bat if present at the site. A habitat survey conducted on the site identified several locations for which suitable Indiana bat habitat exists. However, a mist net survey conducted in the summer of 2007 did not capture any Indiana bats. Although the Applicant does intend to remove trees for the project, particularly near the landfill area, several hundred acres of trees will remain adjacent to the proposed landfill. These remaining trees could offer suitable habitat for the Indiana bat. Preserving the remaining wooded areas will help to minimize potential impacts to the Indiana bat, if present at the site. Conducting any necessary tree clearing outside of the Indiana bat's typical summer roosting season would help to minimize potential direct impacts to the Indiana bat, too.

In conjunction with its 401 Water Quality Certification application, the Applicant has also proposed a bottomland hardwood reforestation plan of approximately 15 to 20 acres along the Ohio River. Based on the tree species proposed for this reforestation effort (i.e., hickory, oak, sycamore, etc), this could represent potential habitat for the Indiana bat and other wildlife species.

The proposed facility is also located within the range of the state endangered Eastern spadefoot toad (*Scaphiopus holbrookii*). As suitable habitat for this species was located on site, the Applicant had a survey performed to determine if the Eastern spadefoot toad would be directly impacted by the proposed facility. This survey, conducted during the spring and summer of 2007, found both adult spadefoot toads and tadpoles within and adjacent to the proposed project site. It is expected that construction and operation of the facility would have a direct negative impact on the spadefoot toad population located within the property boundary, due to the permanent loss of at least one, and possibly two known breeding pools.

To mitigate for expected impacts to on-site populations of eastern spadefoot toads, the Applicant has proposed a spadefoot mitigation plan. This plan consists of constructing two new breeding pools on-site in an area identified as high quality habitat. Tadpoles in existing breeding pools would be captured and relocated to the newly-constructed pools. This will require some limited earth-moving and other mitigation work at the proposed project site well in advance of formal initiation of project construction. It will also require considerable follow-up monitoring work, both during and after construction, to help ensure successful relocation and survival of the at-risk populations.

The Applicant has also identified another location on-site near Adams Road which will remain undeveloped in the event that it is needed to support the mitigation efforts. The Applicant or its consultants would monitor the new breeding pools for 5 years, with annual reports provided to the ODNR. The mitigation sites would receive long-term protection in the form of deed restrictions.

The mussel survey conducted by EA Engineering in the summer of 2006 located a total of six mussels. It therefore does not appear that construction and maintenance activities for the proposed barge unloading facility will significantly impact Ohio River mussel populations. To control against erosion and sedimentation, the Applicant proposes to install stone protection for bank stabilization, as well as utilize silt screening. Additional tree planting near the bank, as proposed by the Applicant, would further aid in the reduction of siltation to the surrounding area.

Parks and Preserves

The proposed site does not contain any state parks, preserves, or wildlife areas. One conservation area, the Letart Mudflats, is located approximately ½ mile from the site, while the Ohio River Lock and Dam Wildlife Area is approximately one mile from the proposed site. Letart Island, part of the Ohio River Islands National Wildlife Refuge, is approximately one mile from the facility. No significant direct impacts to these sensitive land use areas are expected as a result of the proposed facility. The use of best management practices should help to further reduce any potential minor impacts.

Land Considerations

The overall proposed property is approximately 1,600 acres. The Applicant has options on all 1,600 acres which includes the barge area, plant site, landfill location, and surrounding buffer. The primary land use features on the site are agricultural, wooded and open areas. There are some residences and small commercial operations, consisting primarily of agricultural support facilities (barns, greenhouses). The site includes 125 acres west of SR 124 for the barge facilities and water intake/outfall facilities. This area is basically flat, and has the lowest elevation of the project site at around 580 feet. East of SR 124 the terrain slopes slightly upwards and then levels off where current agricultural operations exist. This area consists of roughly 475 acres, and is where the power block, operating units, storage facilities, coal piles, and potential future CO₂ capture equipment would be located. Upland and adjacent to the proposed power block site are roughly 1,000 acres, 135 acres of which is land designated for the solid waste landfill area. Connecting the power block and the landfill area is East Letart Road, which the Applicant is proposing to use as the truck haul road for landfill material. The landfill site consists of scattered residential use, some agricultural production, open space and wooded areas with streams.

The Applicant had a preliminary geotechnical study performed for the power plant portion of the project in the Spring of 2006. This study evaluated site suitability for both shallow and deep foundations and was intended to provide parameters for future consideration by the Applicant when finalizing engineering plans. Recommendations for different types of foundation were provided. The Applicant will evaluate these recommendations in addition to economic factors and design requirements when preparing final engineering plans for the plant.

Floodplain

The highest elevation of the wooded area at the landfill site is approximately 850 feet above sea level, and the plateau area at the plant site is approximately 600 feet above sea level. The normal pool waterline of the Ohio River is at approximately 560 feet above sea level. The FEMA Flood Insurance Rate Map shows the 100 year flood-zone at 585 feet above sea level.

Impacts to the 100-year flood-zone and floodway can be expected from construction of the barge unloading facilities. The Applicant states that material to be removed from within the floodway includes dredge material for the barge facility, trench material for the water discharge channel, and a portion of the river bank to allow heavy equipment to be unloaded during construction. The Applicant further asserts that initial estimates of this material to be removed would be greater than the volume to be added, therefore it is not anticipated that the material balance will adversely affect the Ohio River still water level. The Applicant will coordinate modeling and hydrologic analysis with ODNR- Division of Water, to minimize impacts to this portion of the Ohio River as well as upstream. Any site development or construction work for this facility that occurs in the 100-year floodplain or floodway will need to comply with ORC 1521.13.

In the Applicant's USACE Section 10 Permit application, it is stated that construction along the Ohio River will be mitigated by the planting and maintenance of a 50 foot wide riparian buffer, and bank stabilization to help limit riverbank erosion.

Social Impacts

The construction of this facility will permanently alter the view shed of the surrounding area. Aesthetic impacts will be mitigated in part by distance from sensitive land uses such as residences and cemeteries. Additionally, the Applicant will make reasonable efforts to further reduce negative visual impacts by employing landscaping, vegetative screening and fencing measures.

Permanent road closures will be coordinated through the County Engineer and the Ohio Department of Transportation. The Applicant's above-grade conveyor facilities will have to be permitted and designed in accordance with the Ohio Department of Transportation's safety standards. The Applicant will be responsible for the financial and design burden for any future engineering changes that may be required due to road expansion, terrain slippage or highway rule changes at this location. The use of the Ohio River to transport coal, reagents, and co-products, will help to alleviate additional strain on road and highway arteries.

Additional noise mitigation should not be required during normal plant operation. The Applicant intends to limit general construction activity to daylight hours. Staff recommends that pile driving operations be limited (i.e. not allowed on weekends or into evening hours).

The Applicant will have to conduct further cultural resource studies to determine if any identified sites are eligible for inclusion on the National Register of Historic Places. If such sites cannot be avoided by the Applicant, then the Applicant will be required to coordinate artifact recovery with the State Historic Preservation Office.

The proposed facility is not expected to present any significant negative impact to commercial, institutional or residential land uses. Any residential structures that are acquired and removed by the Applicant will be negotiated with the affected property owners. Local employment, tax-base growth and regional economic development are expected to be positively enhanced as a direct result of construction and operation of the plant.

Other Impacts

The Ohio Department of Development estimated the population of Meigs County to be 23,092 in 2006. The proposed facility is entirely within Letart Township, which has a 2006 estimated population of 640.¹ The county had a labor force of 9,100 workers in 2006, with an unemployment rate of 8.5% (the current Ohio average is 5.5%). The taxable value of all industrial property in Meigs County was \$19.8 million in 2005.² Considering the Applicant's estimates of up to 1,600 workers employed during construction of the facility, 150 permanent employees during operation of the facility, and over \$1 million in annual property taxes generated, the proposed facility would have a significant positive impact on the economy of Meigs County and the region.

Conclusion

Staff concludes that the project, as proposed, would introduce both temporary and permanent impacts to the site and surrounding areas. These impacts include social, cultural, and environmental factors. In order to address and minimize these impacts,

¹ Ohio Department of Development. June 2007. *2006 Population Estimates for Cities, Villages & Townships*. Retrieved September 17, 2007 from ODOD Web site <http://www.odod.state.oh.us/cms/uploadedfiles/Research/p103000004.pdf>

² Ohio Department of Development. June 2007. *Ohio County Indicators*. Retrieved September 17, 2007 from ODOD Web site <http://www.odod.state.oh.us/cms/uploadedfiles/Research/s100.pdf>

Staff has included several conditions, compliance with which should be required as part of the issuance of any certificate for this case. With the Staff recommended conditions, Staff believes that minimum adverse impacts will be realized at the project site.

Recommended Findings

The Staff recommends that the Board find that the proposed site represents the minimum adverse environmental impact provided that any certificate issued by the Board for the proposed facility includes the conditions specified in the section of the report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(4)

Electric Grid

AMP-Ohio proposes to build a 960 MW net electric generation facility, consisting of two generating units with each unit producing a net output of 480 MW. The Applicant states that the proposed facility will be interconnected to the regional bulk power transmission system by adding a new interconnection substation on AEP's existing Sporn-Waterford 345 kV transmission line and building a new double circuit 345 kV transmission line between the interconnection substation and the new generating facility. The proposed new transmission line is being proposed in a separate transmission application to the Board under Case No. 06-1357-EL-BTX.

Several independent studies demonstrate that under the current dispatch of generation resources by the regional transmission operators, Ohio, as well as the surrounding region, is in need of additional generation capacity in order to maintain reserve margins. Electric reserve margins are at historical lows. AMP-Ohio, a nonprofit wholesale power provider and a service provider for municipal electric systems, is in need of additional generating capacity. The construction of the proposed facility will enable AMP-Ohio to better meet the future energy demands of its customers and members.

Power flowing from the proposed facility to the electric bulk power grid can cause system operating reliability issues on the grid. The facility's impact on transmission system reliability is discussed in section 4906.10(A)(6) of this report entitled Public Interest, Convenience, and Necessity.

Recommended Findings

The Staff recommends that the Board find that the proposed generation facility is sited to be consistent with plans for expansion of the regional power grid as evidenced by the system impact interconnection study performed by the regional system operator and will serve the interests of electric system economy and reliability by providing additional power to the regional grid to meet the growing demand of the Applicant's customers served by the electric power grid. Further, the Staff recommends that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(5)

Air, Water, and Solid Waste

The Staff has reviewed the Applicant's description of compliance requirements under ORC Chapters 3704, 3734, and 6111 for the proposed facility. In addition, the Staff has investigated the compliance requirements of the proposed facility under Sections 1501.33 and 1501.34 of the ORC.

Air

Air quality permits, issued pursuant to Ohio Revised Code Chapter 3704 (air pollution control), will be required for construction and operation of the proposed facility. Because the proposed facility will use pulverized coal as a fuel source, it will be subject to Prevention of Significant Deterioration (PSD) review under federal Clean Air Act regulations. The Applicant submitted a PSD permit application, on May 15, 2006, to Ohio EPA. The permit application included the Applicant's best available control technology analysis for the following pollutants: NO_x, CO, SO₂, PM, PM₁₀, H₂SO₄, and VOC. Ohio EPA issued its draft permit on September 13, 2007, with the public hearing about the permit scheduled for October 25, 2007. Additional air pollution related permits identified by the Applicant as being necessary for operation of the facility include an Acid Rain permit, a NO_x Budget permit, potential Mercury Rule permits, a Title V Operating Permit, and potential Clean Air Interstate Rule permits.

Particulate emissions from the facility during operation will be subject to Ohio particulate emission regulation under OAC 3745-17 (particulate matter standards). The Applicant has identified potential particulate emission sources during operation of the facility to include the following: pulverized coal boilers, auxiliary natural gas boiler, cooling cells, coal and limestone receiving/handling/storage facilities, fertilizer plant, coal crusher system, gypsum and fly ash conveying/handling/storage systems, roadways and the landfill. Consideration of these particulate emission sources is included in the Applicant's PTI application mentioned above.

Fugitive dust rules adopted pursuant to the requirements of ORC Chapter 3704 will be applicable to construction and operation of the proposed facility. The Applicant has indicated that it expects fugitive dust to be the primary potential emission during construction of the facility. The Applicant intends to control fugitive dust emissions during construction through vehicle speed restrictions and water spray suppression (or other approved spray suppressant), minimizing material drop heights and covering dust sources when feasible. During operation, the coal and limestone

receiving/handling/storage facilities, gypsum and fly ash conveying/handling/storage systems, fertilizer barge loading operations, roadways, and landfill, would be potential sources of fugitive dust emissions. The Applicant intends to control fugitive dust emissions from these sources through the use of enclosed conveyors, enclosed transfer points, minimize drop heights at transfer points, dust suppression methods (such as water spray), wind screens and pneumatic conveying systems (for fly ash).

Water

Operation of the proposed facility will require the use of significant amounts of water, sourced from the Ohio River, therefore requirements under ORC Sections 1501.33 and 1501.34 (withdrawal of waters of the state) are applicable to this project. The Applicant's water withdrawal system will be designed to achieve a maximum water intake capacity of approximately 12,500 gpm. Water intake at this rate would represent 0.5% of the 7Q10 low flow rate of the Ohio River at the location of the facility. However, actual maximum water withdrawal rates anticipated for the facility are expected to be approximately 11,800 gpm for the limestone FGD system and 11,500 gpm for the ammonia FGD system. Annual average withdrawal rates are expected to be about 8,600 gpm for the limestone FGD configuration, and approximately 8,300 gpm for the ammonia FGD system. It will be necessary for the Applicant to obtain a water withdrawal permit from ODNR prior to operation of the facility.

Construction of the facility as proposed by the Applicant will have both temporary and permanent impacts on wetlands and surface waters. This will necessitate compliance with requirements of ORC Chapter 6111 (water pollution control), including application for an individual Clean Water Act Section 401 Water Quality Certification from Ohio EPA, by the Applicant. Because the power facility will be located on existing agricultural land, few streams or wetlands will be impacted by its construction. However, over an acre of wetlands and approximately 10,400 linear feet of streams will be filled for construction of the landfill. During construction, the Applicant intends to manage potential water pollution through compliance with an NPDES construction storm water permit and its storm water pollution prevention plan (SWPPP). The Applicant has indicated that the plan will include the use of runoff diversion and collection devices, and the use of sedimentation basins to hold and treat runoff prior to discharge to the Ohio River. Construction contractors will be required to maintain spill prevention, control and countermeasure plans (SPCC). A package sewage treatment plant that is planned for use during operation of the facility may be available for use during construction. Until the sewage treatment plant is available, sanitary waste will be handled through portable restroom facilities, with off-site disposal.

The Applicant additionally will need to obtain an NPDES permit for handling process wastewater and storm water discharges during operation of the facility. The Applicant intends to manage storm water and process waste water discharges during operation through ten outfall systems for eventual discharge to the Ohio River. The primary outfall, from a water volume perspective, will handle process wastewater, including cooling cell blowdown, treated water from the wastewater pond, and sewage treatment plant effluent. The wastewater pond will receive wastewater flows from boiler operations, the reverse osmosis system, oil/water separators, coal storage pile runoff, landfill leachate, and other facility operations. The primary outfall will discharge directly to the Ohio River. A separate outfall will handle water to be returned to the Ohio River from dredging operations. Storm water runoff from the developed areas of the power plant site will flow through a third outfall. Three separate outfalls will handle storm water runoff from undeveloped plant areas, and five outfalls will be used for storm water runoff from the solid waste landfill. The Applicant anticipates that the combined treated wastewater discharge would average approximately 820,000 gallons per day under the ammonia based FGD configuration. This compares with an anticipated discharge rate of 1,530,000 gallons per day under the limestone based FGD configuration. Equipment to be used to comply with the NPDES permit requirements during operation of the facility includes oil/water separators, settling ponds, a cooling cell blowdown dechlorination system, a sewage plant treatment system, a heavy metals reduction system, and sludge dewatering filter presses. Water treatment solids will be disposed of in the facility's solid waste landfill, while sanitary wastewater treatment solids will be disposed of in an off-site municipal landfill.

Solid Waste

The Applicant intends for its contractors to be responsible for compliance with solid and hazardous waste requirements under ORC Chapter 3734 during construction of the facility. The Applicant will require its contractors to properly store accumulated solid waste, and to dispose of solid wastes to local landfills on a weekly basis. Contractors will also be required to include recycling of wastes when possible. Disposed non-hazardous waste would include items such as packaging materials, waste concrete, lumber, scrap metal, paper, glass, scrap, and empty containers.

Staff anticipates that construction of the power block and related facilities will also result in the generation of hazardous waste materials. Hazardous wastes are expected to include items such as waste vehicle fluids, paints, thinners, solvents, oily rags, oil absorbent materials, welding materials and lead acid batteries. On-site treatment of such wastes would be limited to neutralization of corrosive wastes. Hazardous wastes will be shipped to a licensed hazardous waste facility for timely disposal.

Because the power block and related facilities are proposed to be constructed in an existing agricultural area, minimal woody material will need to be removed from the site during construction. However, the Applicant proposes to construct a facility landfill, approximately 135 acres in size, in a partially wooded upland area approximately one mile east of the power facility. The purpose of the proposed landfill will be primarily for disposal of coal combustion and air pollution control system byproducts which can not be sold by the Applicant. These byproducts could include (depending on the FGD system utilized) fly ash, bottom ash, water clarification sludge, gypsum and FGD wastewater treatment sludge. All of these wastes are considered non-hazardous wastes. In addition to impacts on streams and wetlands, mentioned previously, development of the landfill would require the removal of numerous trees and other vegetation from approximately 79 acres of upland forest. The Applicant intends to sell any marketable timber removed from the landfill site as lumber or firewood. The remaining woody material would either be chipped and left on site, or pushed into adjacent woodlands.

Prior to construction of the landfill, the Applicant will be required to obtain a permit to install an industrial solid waste landfill, pursuant to chapter 3745-30, OAC. As of the time of preparation of this report, the Applicant had filed its application for the landfill permit, and the permit application was under review with Ohio EPA.

As mentioned previously, fly ash, bottom ash, gypsum, and FGD wastewater treatment sludge will be the primary solid wastes generated during operation of the facility. The Applicant projects that the production rates for these solid wastes during operation of the facility would be: 660 tons per day of fly ash, 165 tons per day of bottom ash, 1,350 tons per day of gypsum, and 81 tons per day of FGD wastewater treatment sludge. The gypsum and FGD wastewater treatment sludge waste streams would only be applicable if the Applicant were to use the limestone based FGD system. Elimination of the gypsum and FGD wastewater treatment sludge waste streams by using the ammonia based FGD system, which produces a saleable fertilizer instead of gypsum, would reduce the solid wastes going to the landfill by more than 60%, on a tonnage basis. Additional solid wastes, some potentially hazardous, will be generated in lesser quantities by operation of the facility. These wastes would include filters, oils/greases, antifreeze, solvents, paints, batteries and refuse from offices and plant operations. The Applicant intends to dispose of these wastes through an authorized waste management organization.

Spent catalysts will be returned to the manufacturer for processing. Carbon filter media, containing mercury recovered in the ammonia based scrubber system, will be

shipped to a licensed hazardous waste facility for disposal. Fly ash and wastewater settling pond sludge, potentially containing mercury, will be disposed in the on-site landfill, in accordance with the landfill permit.

Airports

Located near the proposed facility site is the Ravenswood/Jackson County Airport, located approximately 5.5 miles east of the project site in West Virginia. Pursuant to ORC 4561.32, Staff coordinated with the Ohio Department of Transportation Office of Aviation during review of this application in order to evaluate potential impacts the facility might have on local airports. No concerns with Ohio airports have been identified. However, because the two chimney stack structures at the facility have been listed at 625 feet above ground level, it will be necessary for the Applicant to file for permits from the Federal Aviation Administration (FAA) prior to construction of the facility. The FAA will coordinate with the West Virginia Aeronautics Commission regarding potential impacts on public airports in West Virginia.

Recommended Findings

The Staff finds that the proposed facilities will comply with the requirements specified in ORC Section 4906.10(A)(5). Further, the Staff recommends that any certificate issued by the Board for the certification of the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(6)

Public Interest, Convenience, and Necessity

The American Municipal Power Generating Station would serve the public interest, convenience, and necessity by providing reliable electric generating capacity to the Applicant's customers and members. A review of several independent studies demonstrates that Ohio, as well as the surrounding states, is in need of additional generation capacity. AMP-Ohio, a wholesale power supplier and service provider for 121 municipal electric systems in and around Ohio, is also in need of additional generating capacity to serve its load and has determined that it's in the members' best interests to develop the proposed American Municipal Power Generating Station (AMPGS) to be located in Meigs County, in southeast Ohio.

Electric Power Grid

The purpose of this section is to review studies of interconnecting the proposed American Municipal Power Generating Station Project into the existing regional electric transmission system.

PJM Interconnection Analysis

The Applicant proposes to construct a new interconnect transmission substation on AEP's Sporn-Waterford-Muskingum River 345 kV transmission line to create a Sporn-P54-Waterford-Muskingum River line. This line is part of the regional bulk electric transmission system operated by PJM Interconnection L.L.C (PJM) to interconnect the proposed plant. PJM is charged with the operation of the regional transmission system and administers the interconnection process of new generation to the system. New generation wanting to interconnect to the bulk electric transmission system located in the PJM service area are required to submit an interconnection application to PJM for their review of system impacts. AMP-Ohio, a member of PJM, submitted the proposed project to PJM on January 30, 2006. The application along with the new substation on the Waterford-Muskingum River 345 kV line was given a queue number P54 by PJM. PJM has completed the Feasibility Study and System Impact Study, which includes Stability and Short Circuit Analysis. These studies looked at the impacts of adding the proposed facility to the regional bulk power system and identified any transmission system upgrades that will be required to maintain the reliability of the regional transmission system. As of September 21, 2007, the only study that has not been released is the Facilities Study, which identifies specific equipment necessary to maintain system reliability along with the estimated costs. AMP-Ohio has not yet

signed a Construction Service Agreement for the upgrades identified in the studies or an Interconnection Service Agreement with PJM for the proposed facility. Signatures on these two agreements will need to be obtained before PJM will allow the applicants to interconnect the proposed facility to bulk electric transmission system.

Staff reviewed the System Impact Study report prepared by PJM. The study summarized network impacts that may occur when the proposed 960 MW facility is connected to the bulk power system in year 2011. Staff notes that PJM conducted their studies with a net plant output of 1035 MW, as the exact plant output was unknown at the time AMP-Ohio submitted their application to PJM. PJM's policy allows for a reduction in electrical output prior to the execution of an Interconnection Service Agreement. A base case power flow model and short circuit model for 2011 was used to evaluate the impacts. These studies revealed that some existing transmission lines would become overloaded with the addition of the new generating facility connected to the system under normal base case operating conditions and also under contingency outage conditions.

North American Electric Reliability Corporation Standard Requirements

The North American Electric Reliability Corporation (NERC) is responsible for the development and enforcement of the federal government's approved reliability standards, which are applicable to all owners, operators, and users of the bulk power system. NERC requires planners of the bulk electric transmission system to meet reliability standards TPL-001-0 through TPL-004-0 under transmission outage conditions for categories A, B, C, and D contingencies. A contingency is an event, usually involving the loss or failure of one or more elements, which affects the power system at least momentarily. Under category A (i.e. no contingencies) and category B (i.e. single contingency outage), the planning authority shall demonstrate that the interconnected transmission system can operate to supply projected customer demands and firm transmission service at all demand levels over the range of forecast system demand. Under category C (i.e. multiple contingency outages), the planning authority shall demonstrate that the interconnected transmission system can operate to supply projected customer demands and firm transmission service at all demand levels over the range of forecast system demand and may rely upon the controlled interruption of customers or curtailment of firm transmission service. Finally, under category D (i.e. extreme events resulting in multiple contingencies), the planning authority shall demonstrate that its portion of the interconnected transmission system is evaluated for the risks and consequences of a number of each of the extreme contingencies that are listed in the standard. PJM analyzed the bulk electric system for all of the above categories with the proposed new facility interconnected to the bulk power system. In

addition, PJM conducted a feasibility study and system impact study of the possibility of delivering the full 1,035 MW output from the proposed facility to the rest of the PJM regions during 2011 peak load periods. The results of these were as follows:

Category A:

No Contingencies

- Under normal system conditions, the American Electric Power Elliot Tap-Poston 138 kV line overloads. This overload can be alleviated by rebuilding approximately 3 miles of the line between the Poston Station and the Elliot Tap.

Category B:

Single Contingency

- An outage of the Waterford-Muskingum River 345 kV line causes the P54-Sporn 345 kV line to overload and exceed its emergency rating. Loading on the line increases from 73.7% to 127.1%. This overload can be alleviated by replacing risers and switches at the Sporn Station and by rebuilding approximately four miles of the 345 kV line between the Sporn Station and the new P54 Interconnect Station.
- An outage of the P54-Sporn 345 kV line causes the Waterford-Muskingum River 345 kV line to overload. Loading on the line increases from 60.4% to 102%. In addition to the upgrade on the Elliot Tap-Poston line under Category A, this overload can be alleviated by rebuilding approximately four miles of 345 kV line between Muskingum River and Waterford Stations.

Category C and Category D:

Multiple Contingencies

- A tower line outage of the Tidd-Collier and Tidd-Wylie Ridge 345 kV lines causes the Tidd-Carnegie 138 kV line to overload. Loading on the line increases from 96.71% to 101.55%. This can be alleviated by Allegheny Power reconductoring 1.21 miles of the Tidd-Carnegie 138 kV line.
- A bus fault outage of the Back Fork-Cowen and Cowen-Crupperneck 138 kV lines causes the Heaters-French Creek 138 kV line to overload. Loading on the line increase from 96.34% to 102.83%. This overload can be alleviated by Allegheny Power reconductoring 25.11 miles of the line.

Double Contingencies

- An outage of the Muskingum River-Waterford 345 kV line and Sporn 345 kV Station circuit breaker "CC" or "CC1" causes the reciprocal Sporn circuit breaker to overload and exceed its emergency rating. The overloads can be alleviated by replacing breakers "CC" and "CC1".
- An outage of the P54-Sporn 345 kV line and:
 - * An outage of Waterford circuit breaker "52-A";
Overloads Waterford circuit breaker "52-B.
 - * An outage of Waterford circuit breaker "52-A";
Overloads Waterford circuit breaker "52-C.
 - * An outage of Waterford circuit breaker "52-B";
Overloads Waterford circuit breaker "52-A.

The overloads can be alleviated by replacing breakers "52-A", "52-B", and "52-C" and their associated switches.

- An outage of the P54-Sporn 345 kV line and:
 - * An outage of Muskingum River circuit breaker "SE";
Overloads Muskingum River circuit breaker "SD" and its disconnect switches.
 - * An outage of Muskingum River circuit breaker "SD";
Overloads Muskingum River circuit breaker "SE" and its disconnect switches.
 - * An outage of Muskingum River circuit breaker "SD";
Overloads Muskingum River circuit breaker "SF" and its disconnect switches.

The overloads can be alleviated by replacing breakers "SD", "SE", and "SF" and their associated switches.

Short Circuit Analysis

The short circuit analysis evaluates the interrupting capabilities of circuit breakers located at the proposed plant site and other circuit breakers impacted by the proposed generation addition. The results showed no problems.

Stability Analysis

The stability analysis evaluates the proposed generating units' ability to perform satisfactorily during post contingency power oscillations damping. This is to verify that the system will remain stable during contingency conditions with the generator connected to the bulk electric grid. The study was run at 2011 summer light load conditions and peak load conditions with the plant at maximum output. Results of this study showed that under normal system conditions with all transmission facilities in service, dynamic performance of the system is acceptable. However, with the pre-disturbance outage of N42-Waterford 345 KV line, Waterford-Muskingum River 345 KV line, Sporn-Kyger Creek 345 KV line and Sporn 345KV/SpornB 138KV #4 Transformer several faults would result in instability of the two P54 generators as well as several generators in the area. To avoid the instability, the study indicates the output of P54 will need to be restricted during one of the above pre-disturbance outages.

Previously Identified Overloads

In addition to the overloads directly caused by the interconnection of the proposed power plant to the grid, PJM has identified four additional previously identified overloads. These overloads were initially caused by other projects, but with the addition of this project, the AMP-Ohio generating Station also contributes to the overload. AMP-Ohio will have to contribute to the cost of these previous identified overloads.

- Belmont-Harrison 500 kV line overload. Terminal equipment will be replaced to bring the circuit loadability up. AMP-Ohio share is 95%.
- Hatfield-Ronco 500 kV overload. 1.42 mile of the line needs to be reconductored. AMP-Ohio share is 95%.
- Kammer 765/500 kV transformer overload. A breaker needs to be installed in the Harrison-Belmont line cross bus at Belmont Station. AMP-Ohio share is 25.6%.
- Waterford-Muskingum River 345 kV line overloaded. 1 mile of the line near Waterford will be reconductored and the lines risers near Muskingum River will be replaced. AMP-Ohio share is 89.43%.

Staff concurs with the results of the PJM System Impact Study.

Conclusion

The studies indicate that several transmission system upgrades will be required with the addition of the proposed facility to the bulk power system in order to maintain

transmission system reliability during normal operating conditions as well as during periods when there are transmission outages. In addition to the overloads directly caused by the connection of this plant to the grid, PJM has identified four additional previously identified overloads for which AMP-Ohio will be required to pay a portion of the upgrade. There were no problems found from the Short Circuit study and with all transmission facilities in-service, the Stability study was acceptable.

The Staff believes that with the upgrades identified in the PJM studies, the proposed facility is expected to provide reliable generation to the bulk electric transmission system. The proposed facility is consistent with plans for expansion of the regional power system, and will serve the interests of electric system economy and reliability. The facility will serve the public interest, convenience, and necessity by providing additional electrical generation to the regional transmission grid. A review of several independent studies demonstrates that Ohio, as well as the surrounding states, is in need of additional generation capacity. AMP-Ohio, a nonprofit wholesale power provider and a service provider for municipal electric systems, is not exempt from the need of additional generating capacity. The construction of this proposed facility will enable AMP-Ohio to better meet the future energy demands of their customers.

Noise

In order to evaluate the effect of construction and operational noise on the potential receptors in the surrounding area, the Applicant conducted a reconnaissance of the area to identify site boundaries and local noise sensitive-areas (NSAs). The Applicant identified nine potential NSAs. The ambient noise level was measured at seven of those sites. The locations of measurements were selected which had no or minimal obstructions between that location and the noise generator. The measured time-weighted day-time and night-time (L_{dn}) were all less than 55 dBA. (The World Bank Group has established 55 dBA noise levels from new thermal power projects as the upper limit for projects that they fund.) NSA Location 9 is the closest site and would also be the site most impacted. Location 9 was not accessible for measurements, however, Locations 6 and 7 which were accessible may be used. Location 9 was selected for the site to model the noise levels for both construction and operation.

During construction, noise would vary considerably depending on type, number and duration of machines operated during different phases of construction. The Applicant has identified six phases of construction: site preparation and excavation (earthmoving equipment), pile driving, concrete pouring (truck traffic and pouring equipment), erection of steel framing, mechanical and electrical installation (peak work force, with large crawler cranes, semi-trucks hauling materials), and clean up. The Applicant has

stated that noise associated with the construction will be intermittent, as the equipment will only be operated as needed and only during the construction phase. Pile driving and other major construction noise generators will be limited to 6 days a week and only during daylight hours.

An analysis was made of the operational sound levels emanating from the continuous major sound-producing equipment. It is noted that this equipment would be enclosed in each of its respective shelters, greatly reducing the sound energy emanating from the facility. The site is sparsely populated, with the NSA Location 9, being approximately 1,500 feet from the nearest noise generator. The Applicant's calculations demonstrate that with the expected increase in sound levels to the nearest NSA the sound levels will remain below 55 dBA at the nearest NSA.

The major sound-producing equipment will be contained within closed structures. The noise emanating from the turbine, boiler and water treatment buildings is assumed to be controlled to less than 90 dBA. The noise levels will be attenuated by sound absorbing materials, mufflers and damping techniques incorporated into the basic design of the facility. The noise levels generated by the coal handling equipment were estimated using assumptions from the Edison Electric Institute "Electric Power Plant Environment Noise Guide". The greatest noise generators are the coal crushers, which will be enclosed by sound absorbing walls which should attenuate the sound levels by 25 dBA. The noise-levels emanating from the cooling cells will be minimized by oversizing the towers. Other noise generators incorporated into the model included increased road traffic, increased barge traffic, and the unloading of the barges.

EMF

Elevated electric and magnetic fields (EMF) would be confined to the site and would be attenuated to near background levels at the battery limits. The two 345 kV transmission loops transporting the power from the facility will have increased levels of EMF. However, the circuit in the near vicinity of the project is not located close to residential, commercial or institutional buildings. The discussion of the EMF emanating from the transmission lines will be covered in a separate case before the Board (case number 06-1357-EL-BTX).

Recommended Findings

The Staff recommends that the Board find that the proposed facility will serve the public interest, convenience and necessity. Further, the Staff recommends that any

certificate issued by the Board for the proposed facility include the conditions specified in the section of this Report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(7)

Agricultural Districts

Classification as Agricultural District land is achieved through an application and approval process that is administered through local county auditor offices. The Applicant has determined that there is no Agricultural District land within the facility boundary, nor any that will be impacted by construction activities.

The Applicant has indicated that the property boundary encompasses approximately 434 acres of agricultural land that will be removed from cultivation, in addition to six greenhouses that will be removed. The Applicant currently does not have plans to return this land to cultivation after construction is completed. Nineteen greenhouses are located in a potential buffer area south of Adams Road. Long-term plans for this area have not been finalized, but the Applicant is considering allowing continued operation of these nineteen greenhouses during and after construction of the facility.

Recommended Findings

The Staff recommends that the Board find that the impact of the proposed generation station project on the viability of existing farmlands and Agricultural Districts has been determined, and will be minimal. Further, the Staff recommends that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(8)

Water Conservation Practice

The Applicant intends to withdraw water from the Ohio River in order to supply its process water needs. This withdrawal is planned to occur at a location just upriver from mile post 237, in an area of the river planned for storage of empty barges. Although the system will be designed to achieve a maximum water intake capacity of approximately 12,500 gpm, average annual water withdrawal is expected to be approximately 8,600 gpm under the limestone FGD configuration, or approximately 8,300 gpm under the ammonia FGD system. Peak flow water consumption rates would be 11,800 gpm for the limestone FGD system or 11,500 gpm for the ammonia FGD system. The river water will be clarified and primarily used to supply the evaporative cooling cells, with lesser amounts being used for other water consuming processes throughout the system (FGD system, demineralizer, and electrostatic precipitator, for example).

In addition, potable water will be needed for personal use by employees, and other purposes at the facility. During construction, potable water needs are estimated by the Applicant to be approximately 12,500 gallons per day. During operation of the facility, potable water consumption is estimated at approximately 10,000 gallons per day. The Applicant anticipates that potable water will be supplied by connection with a local water district.

The Applicant intends to incorporate water conservation practices into the technology selected for this project. Water utilization will be minimized in the cooling cells by recycling cooling cell water five times through the system. Cooling cell blowdown water will be re-used, in part, as make-up water for the bottom ash conveying system and the FGD system. If the Applicant were to use the limestone based FGD system, all other non-sanitary-wastewater would be re-used as FGD make-up water. FGD blowdown would be treated and released to the Ohio River. Under the ammonia based FGD system, all other non-sanitary-wastewater would be treated and released to the Ohio River, but there would be no FGD blowdown. Under either FGD system, the Applicant intends to use a portion of the storm water runoff from the facility within the facility's water consuming processes.

Recommended Findings

The Staff recommends that the Board find that the proposed facility will comply with ORC Section 4906.10(A)(8). Further, the Staff recommends that any certificate issued by

the Board for the certification of the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

VI. RECOMMENDED CONDITIONS OF CERTIFICATE

Following a review of the application as supplemented by AMP-Ohio and the record compiled to date in this proceeding, the Staff recommends that a number of conditions become part of any certificate issued for the proposed facility. These recommended conditions may be modified as a result of public or other input provided subsequent to issuance of this report. At this time the Staff recommends the following conditions:

- (1) That the facility be installed at the Applicant's proposed site as presented in the application filed on May 4, 2007, and as further clarified by the Applicant's supplemental filings.
- (2) That the Applicant shall utilize the equipment and construction practices as described in the application, and as clarified in supplemental filings, replies to data requests, and recommendations Staff has included in this Staff Report of Investigation.
- (3) That the Applicant shall implement the mitigative measures described in the application, any supplemental filings, and recommendations Staff has included in this Staff Report of Investigation.
- (4) That the Applicant shall obtain and comply with all applicable permits and authorizations as required by federal and state entities for any activities where such permit or authorization is required prior to the commencement of construction and/or operation of the facility, as appropriate. These permits would include, but not be limited to the following air, water and solid waste pollution control requirements from the Ohio EPA:
 - (a) an air PTI and a Title V permit (also known as a Title V Operating permit, application for which must be submitted within 12 months after commencing operation);
 - (b) an NPDES permit for process discharge/cooling tower blow down;
 - (c) a 401 permit for stream and wetland impacts and mitigation;
 - (d) general/individual NPDES storm water permit coverage for construction and operation;
 - (e) a PTI for sanitary wastewater treatment facilities construction;

- (f) a permit for Class III residual waste landfill (fly ash); and
- (g) a plan approval for potable water system connection/installation;

As well as the following authorizations from other agencies/entities:

- (h) a section 10/404 permit from the U.S. Army Corps of Engineers;
 - (i) water withdrawal permits from the Ohio Department of Natural Resources;
 - (j) any necessary approvals from the Federal Aviation Administration;
 - (k) a signed Interconnection Agreement with PJM Interconnection, which would include the construction, operation and maintenance of system upgrades necessary to reliably and safely integrate the proposed generating facility into the regional transmission system, and
 - (l) any other necessary permits and/or approvals to implement the project.
- (5) That a copy of each permit or authorization, including a copy of the original application (if not already provided) and any associated terms and conditions, shall be provided to the Board Staff within seven days of issuance or receipt by the Applicant.
 - (6) That the Applicant shall file a separate OPSB application specific to the carbon capture and storage (CCS) equipment and process prior to construction in the event that the Applicant elects to begin CCS for this facility.
 - (7) That the Applicant shall conduct a pre-construction conference prior to the start of any project work, which Staff shall attend, to discuss how environmental and other concerns will be satisfactorily addressed.
 - (8) That the Applicant perform a final geotechnical analysis of the site (including additional borings, testing and evaluation) prior to the commencement of construction. Findings of final analysis shall be provided to Staff within seven days of issuance, prior to the pre-construction conference.

- (9) That the Applicant shall file an amendment before the OPSB and obtain approval prior to construction if it elects to use a sulfur control technology other than Powerspan.
- (10) That the Applicant shall properly install and maintain erosion and sedimentation control measures at the project site in accordance with the following requirements:
- (a) During construction of the facility, seed all disturbed soil, except within cultivated agricultural fields that will remain in production following project completion, within seven (7) days of final grading with a seed mixture acceptable to the appropriate County Cooperative Extension Service. Denuded areas, including spoils piles, shall be seeded and stabilized within seven (7) days, if they will be undisturbed for more than twenty-one (21) days. Reseeding shall be done within seven days of emergence of seedlings as necessary until sufficient vegetation in all areas has been established.
 - (b) Inspect and repair all such erosion control measures after each rainfall event of one-half of an inch or greater, and maintain controls until permanent vegetative cover has been established on disturbed areas.
 - (c) Obtain NPDES permits for storm water discharges during construction of the facility. A copy of each permit or authorization, including terms and conditions, shall be provided to the Staff within seven (7) days of receipt. Prior to construction, the construction SWPPP shall be submitted to the Staff for review and acceptance.
- (11) That the Applicant shall employ the following construction methods in proximity to any watercourses:
- (a) All watercourses, including wetlands, shall be delineated by fencing, flagging, or other prominent means;
 - (b) All construction equipment shall avoid watercourses, including wetlands, except at specific locations where OPSB Staff has approved construction;
 - (c) Storage, stockpiling and/or disposal of equipment and materials in these sensitive areas shall be prohibited;

- (d) Structures shall be located outside of identified watercourses, including wetlands, except at specific locations where OPSB Staff has approved construction;
 - (e) All storm water runoff is to be diverted away from fill slopes and other exposed surfaces to the greatest extent possible, and directed instead to appropriate catchment structures, sediment ponds, etc., using diversion berms, temporary ditches, check dams, or similar measures.
- (12) That the Applicant shall employ best management practices (BMPs) while working on the project, particularly when working in the vicinity of environmentally-sensitive areas. This includes, but is not limited to, the installation of silt fencing (or similarly effective tool) prior to initiating construction near streams and wetlands. The installation shall be done in accordance with generally accepted construction methods and shall be inspected regularly.
- (13) That the Applicant shall dispose of all contaminated soil and all construction debris in approved landfills in accordance with Ohio EPA regulations.
- (14) That the Applicant shall have an environmental specialist on site at all times that construction (including vegetation clearing) is being performed in or near a sensitive area such as a designated wetland, stream, river or in the vicinity of identified threatened/endangered species or their identified habitat. This includes all clearing of the proposed landfill site cells.
- (15) That clearing/preparation of the landfill will only be allowed to occur on a cell-by-cell basis as needed, and that utilization of the landfill shall be performed over time in a counterclockwise manner starting with what is now identified as Cell 1, and ending with what is now identified as Cell 2 (see Figure 4).
- (16) That the Applicant shall submit a stream and wetland mitigation plan for Staff review and acceptance prior to the completion of design. This plan shall include further investigation of methods for reducing landfill impacts to riparian and aquatic habitats, particularly the proposed filling of 10,359 linear feet of streams. Examples of the types of impact minimization to be further evaluated include relocating and/or reducing the size of the proposed storm water catch basins, especially Applicant's catch basin #2. This mitigation plan shall be prepared in coordination with the solid waste permit-to-install and 401 Certification

processes. Staff shall receive regular updates as to the status of the required mitigation activities.

- (17) That the Applicant shall submit an Eastern Spadefoot Toad mitigation plan for Staff review and acceptance prior to the completion of design. This mitigation plan shall comply with all ODNR recommendations, along with identifying contingency measures in case proposed relocation activities are unsuccessful and/or if construction activities (particularly pile-driving and other earth tremor-causing activity) create problems for the relocated individuals. Staff shall receive regular updates as to the status of the required mitigation activities.
- (18) That the Applicant shall submit a terrestrial habitat mitigation plan for Staff review and acceptance prior to the completion of design. This mitigation plan shall preserve as much wooded area adjacent to the proposed landfill as possible through deed restriction or conservation agreement. This wooded area shall be at least comparable in size to the wooded area cleared for construction of the landfill and associated facilities, and shall include as much headwater stream habitat as possible. This preservation shall be assured prior to clearing of the landfill area. The plan shall also include implementation details for the Applicant's proposed Ohio River floodplain reforestation activity.
- (19) That the Applicant only remove trees representing potential Indiana Bat habitat from the site between September 16 and April 14, unless specific pre-approval is granted by Staff.
- (20) That Staff, ODNR and/or USFWS be immediately contacted if threatened or endangered (T&E) species are discovered on-site during construction.
- (21) That the Applicant shall not dock or stage barges at Letart Island or in its backchannel.
- (22) That the Applicant shall not dispose of gravel or any other construction material during or following construction of the facility by spreading such material on agricultural land outside of the facility boundary. All construction debris shall be promptly removed and properly disposed of after completion of construction activities.
- (23) Any construction work for this facility that occurs in the 100-year floodplain and floodway should be conducted in accordance with good engineering practices and in a manner consistent with the minimum flood protection criteria of the

National Flood Insurance Program. Pertinent modeling and hydrologic studies will be coordinated with ODNR and Staff prior to final engineering of the facility.

- (24) That if the Board certifies the facility, the Applicant will conduct further cultural resource studies to determine if any of the eight identified sites from the Phase I study are eligible for inclusion on the National Register of Historic Places. This survey shall be coordinated with the State Historic Preservation Office and submitted to Staff for review and acceptance at least ninety (90) days prior to construction. If the survey discloses a find of cultural significance that could be eligible for inclusion on the National Register of Historic Places, then the Applicant shall submit a site amendment, modification, or mitigation plan for Staff's acceptance. The Applicant shall consult with Staff to determine the appropriate course of action.
- (25) Any permanent road closures, road restoration or road improvements necessary for construction and operation of the proposed facility shall be coordinated with the Meigs County Engineer, the Ohio Department of Transportation, local law enforcement, and health/safety officials. Additionally, the Applicant shall obtain all required highway crossing permits, including but not limited to a MR505 Road Crossing Permit, from the Ohio Department of Transportation for proposed above-grade conveyor facilities.
- (26) General construction activities shall be limited to daylight hours Monday through Saturday. Impact pile driving operations shall be limited to weekday hours between 8:00 AM and 5:00 PM. Construction activities that do not involve noise increases above background levels at sensitive receptors are permitted when necessary.
- (27) That the Applicant shall measure the sound levels at the most critical NSAs to assure that the sound levels emanating from the facility during operation will not increase the L_{dn} above 55 dBA. Should the levels be greater than 55 dBA, or greater than 3 dBA above the sound level without the facility operating, the Applicant shall submit a mitigation plan for Staff approval.
- (28) The Applicant shall submit a facility landscape plan for Staff review and approval at least ninety (90) days prior to commencement of construction. The plan shall include methods to mitigate visual and sound impacts associated with the project on Letart Falls Cemetery. The Applicant shall also maintain vegetative screening at the family cemetery northwest of the plant across SR 124.

The Applicant will consult with the SHPO for input on screening methods and techniques appropriate to minimize impacts to the adjacent cemetery.

- (29) That the Applicant provide access for the public to Letart Falls Cemetery and the family cemetery west of SR 124.
- (30) That any structures acquired by the Applicant shall be maintained or removed from the property.
- (31) That at least ninety (90) days before the pre-construction conference, the Applicant shall submit to the Staff, for review and approval, one set of detailed drawings for the proposed project so that the Staff can determine that the final project design is in compliance with the terms of the certificate.
- (32) That the Applicant shall provide to the Staff the following information as it becomes known:
 - (a) The date on which construction will begin;
 - (b) The date on which construction was completed;
 - (c) The date on which the facility began commercial operation.
- (33) That the certificate shall become invalid if the Applicant has not commenced a continuous course of construction of the proposed facility within five (5) years of the date of journalization of the certificate.

APPENDIX

Docketing Record

CASE NUMBER: 06-1358-EL-BGN

CASE DESCRIPTION: AMERICAN MUNICIPAL POWER – OHIO, INC.

ATTORNEY EXAMINER: Gregory Price

ATTORNEY GENERAL: William Wright, John Jones

- 11/20/2006** In the matter of the application of American Municipal Power – Ohio, Inc. for a Certificate of Environmental Compatibility and Public Need for the American Municipal Power Generating Station Project in Meigs County, Ohio.
- 11/29/2006** Proof of publication (Meigs County), filed on behalf of American Municipal Power – Ohio, Inc. by J. Bentine.
- 12/05/2006** Notice regarding fully developed information for any alternate site filed by J. Bentine, Esq. on behalf of American Municipal Power – Ohio, Inc.
- 5/04/2007** Application of American Municipal Power – Ohio, Inc. (AMP-Ohio) requesting a Certificate of Environmental Compatibility and Public Need for the construction of an electric generating facility in Meigs County, Ohio by J. Bentine. (Part 1 of 5)
- 5/04/2007** Application of American Municipal Power – Ohio, Inc. (AMP-Ohio) requesting a Certificate of Environmental Compatibility and Public Need for the construction of an electric generating facility in Meigs County, Ohio by J. Bentine. (Part 2 of 5)
- 5/04/2007** Application of American Municipal Power – Ohio, Inc. (AMP-Ohio) requesting a Certificate of Environmental Compatibility and Public Need for the construction of an electric generating facility in Meigs County, Ohio by J. Bentine. (Part 3 of 5)
- 5/04/2007** Application of American Municipal Power – Ohio, Inc. (AMP-Ohio) requesting a Certificate of Environmental Compatibility and Public Need for the construction of an electric generating facility in Meigs County, Ohio by J. Bentine. (Part 4 of 5)
- 5/04/2007** Application of American Municipal Power – Ohio, Inc. (AMP-Ohio) requesting a Certificate of Environmental Compatibility and Public Need for the construction of an electric generating facility in Meigs County, Ohio by J. Bentine. (Part 5 of 5)
- 5/22/2007** Response letter to Elisa Young on behalf of OPSB Board by K. Lambeck.
- 6/11/2007** Supplement to American Municipal Power – Ohio, Inc.’s application for a Certificate of Environmental Compatibility and Public Need for the construction of an electric generating facility in Meigs County, Ohio by B. Singh.
- 6/11/2007** Supplement to American Municipal Power – Ohio, Inc.’s application (Appendix 07-2 and Appendix 07-4) for a Certificate of Environmental Compatibility and Public Need for the construction of an electric generating facility in Meigs County, Ohio by B. Singh.
- 6/19/2007** Additional information for American Municipal Power – Ohio, Inc.’s application for a Certificate of Environmental Compatibility and Public Need for the

- construction of an electric generating facility in Meigs County, Ohio by B. Singh.
- 6/29/2007** Correspondence letter to Mr. Scott Kiesewetter (AMP-Ohio) stating the application has been found to comply with Chapters 4906-01, et seq. the Ohio Administrative Code.
- 7/12/2007** Notice of substitution of Counsel on behalf of American Municipal Power – Ohio, Inc. filed by J. Bentine.
- 7/20/2007** Letters of service of the application of American Municipal Power – Ohio, Inc. filed by N. Orosz.
- 7/23/2007** Application fee associated with American Municipal Power – Ohio, Inc.’s Project in Meigs County, Ohio, filed by N. Orosz.
- 8/02/2007** Entry ordering that the public hearing will be held November 1, 2007 at 6:00 p.m., at Meigs High School, 42091 Pomeroy Pike, Pomeroy, Ohio 45769; and that the adjudicatory hearing will commence on November 8, 2007 at 10:00 a. m., in Hearing Room 11-C, at the offices of the Public Utilities Commission of Ohio, 180 East Broad Street, Columbus, Ohio 43215-3793.
- 8/03/2007** Service Notice
- 9/05/2007** AMP-Ohio response to OPSB’s August 2, 2007 clarifications for Staff investigation filed by N. Orosz. (Part 1 of 2)
- 9/05/2007** AMP-Ohio response continued.(Part 2 of 2)
- 9/19/2007** Proof of publication filed by Applicant.
- 9/25/2007** Supplemental information to the application pertaining to the Indiana Bat survey report.
- 10/04/2007** Notice of appearance filed by N. Orosz on behalf of American Municipal Power-Ohio, Inc.