BEFORE THE POWER SITING BOARD OF THE STATE OF OHIO

In the Matter of the Letter of Notification Application of Ohio River Partners Shareholder LLC for the Hannibal Port Power Project	**)** **)** **)**	**17-1091-EL-BLN**

Members of the Board:

Chairman, Public Utilities Commission
Director, Development Services Agency
Director, Department of Health
Director, Department of Agriculture
Director, Environmental Protection Agency
Director, Department of Natural Resources
Public Member
Ohio House of Representatives
Ohio Senate

To the Honorable Power Siting Board:

Please review the attached Staff Report of Investigation, which has been filed in accordance with Ohio Power Siting Board (Board) rules. The accelerated certificate application in this case is subject to an automatic approval process as required by Section 4906.03 of the Ohio Revised Code.

Staff recommends the application for automatic approval on July 28, 2017 unless suspended by the Board's chairperson or an administrative law judge. If suspended, the Board must render a decision on the application within 90 days from the date of suspension.

Please present any concerns you or your designee may have with this case to my office at least four business days prior to July 28, 2017, which is the automatic approval date.

Sincerely,

Patrick Donlon
Director, Rates and Analysis
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, Ohio 43215
(614) 644-8932

OPSB STAFF REPORT OF INVESTIGATION

Case Number:	17-1091-EL-BLN
Project Name:	Hannibal Port Power Project
Project Location:	Monroe County
Applicant:	Ohio River Partners Shareholder LLC
Application Filing Date:	April 28, 2017
Filing Type:	Letter of Notification
Inspection Date:	June 5, 2017
Report Date:	July 21, 2017
Recommended Automatic Approval Date:	July 28, 2017
Applicant's Waiver Requests:	none
Staff Assigned:	J. Whitis, G. Zeto, J. Cross, A. Conway

Summary of Staff Recommendations (see discussion below):

Application: ☐ Approval ☐ Disapproval ☒ Approval with Conditions

Waiver: ☐ Approval ☐ Disapproval ☒ Not Applicable

Project Description

Ohio River Partners Shareholder LLC (Applicant) proposes to build a 485 megawatt (MW) natural gas-fired combined cycle electric generating facility and a switchyard. The project includes a high efficiency combustion turbine, a heat recovery steam generator (HRSG), a steam turbine and an electric generator. The project would be located near multiple sources of natural gas including Dominion Energy, Inc., Columbia Gas Transmission, Rockies Express, Texas Eastern Transmission, and Tennessee Gas Pipeline Company. The natural gas pipeline interconnection request would be made in a separate filing.

The proposed facility and switchyard would be constructed on property owned by the Applicant. The Applicant proposes to begin construction in October 2017 and place the facility in service by June 2020. The Applicant estimates the total cost of the project to be $1.17 billion.

Site Description

The project area is situated between State Route 7 and the Ohio River and is located in Hannibal, Ohio in Monroe County. Construction of the project would occur on previously disturbed industrial land and would not result in any adverse ecological and cultural resources impacts.

The project site is located in the vicinity of an existing superfund site, the Ormet Corporation Superfund site. Contamination found in the area prompted the U.S. Environmental Protection Agency (U.S. EPA) to list the site in 1987. Construction of the site cleanup remedy was completed in 1998, and monitoring of the site is ongoing.

The proposed project would not have an impact on the Superfund site. The project is separated by approximately 0.4 mile from the Superfund site. The Applicant would own the project site and some of the adjoining land, while a separate entity that is responsible for remediation, Hannibal Development Partners, LLC, would maintain ownership of the Superfund site.

The proposed project site, however, does contain monitoring wells associated with the remedy of the Superfund site. The Applicant is contractually bound to provide access to infrastructure that Hannibal Development Partners has used to execute the active remediation plan and to cooperate with it. The Applicant is obligated to provide access to monitoring wells located within the project site and to work with Hannibal Development Partners and the U.S. EPA to relocate or possibly eliminate monitoring wells located where project construction activities are planned.

Public Interaction

The Applicant held a public informational meeting on March 27, 2017, to inform interested individuals about the project and obtain feedback from the public. According to the Applicant, approximately 30 individuals attended the meeting. The Applicant has established an e-mail point of contact for questions about the project, info@hannibalportpower.com, and would develop a public information program for providing notification to the public and local officials about ongoing project developments. To date, no public comments have been filed in the docket for this case.

Public Services, Facilities, and Safety

The Applicant intends to ensure worker safety during construction and operation of the facility by following Occupational Safety and Health Administration requirements and National Fire Protection Association standards. Additionally, the Applicant intends to consult with local emergency responders in the development of an emergency response plan to be used during both construction and operation of the facility. The design of the facility includes safety equipment, such as monitoring systems with warning alarms and a fire protection system with a fire water storage tank, fire water pumps, hydrants and sprinkler systems. Public access would be restricted by security fencing and a security guard, and visitors would be required to participate in safety briefings prior to entering the facility.

Noise

Both construction and operation of the proposed facility would cause additional noise impacts in the vicinity of the facility. In order to evaluate potential noise impacts, the Applicant hired a consultant to conduct an ambient sound level survey and to model noise levels for both construction and operation of the facility. The consultant's sound survey was conducted over five survey locations, showing ranges of daytime equivalent continuous noise level (L_{eq}) sound levels from 38 to 73 decibel A-weighting (dBA) and nighttime L_{eq} sound levels from 32 to 51 dBA. Construction noise level calculations showed anticipated noise levels that would vary with the type of construction activities taking place at a given time, ranging from 45 to 53 dBA at the sound level survey locations. The consultant provided noise mitigation recommendations to be followed during construction of the facility. Following these recommendations would help minimize noise related impacts associated with construction activities. Operational noise level modeling showed anticipated night time noise level increases of 2 dBA at the quietest survey location and increases of less than 1 dBA at all other locations. Based upon these results, operational noise impacts are anticipated to be minimal. However, Staff recommends that the Applicant maintain a complaint

resolution procedure during operation of the facility to be used to address any noise related complaints raised by area residents.

Electric Grid Interconnection

The proposed facility would interconnect to the electric grid through the existing American Electric Power Kammer substation.

The North American Electric Reliability Council (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. As an owner, operator, and/or user of the bulk power system, the Applicant would be subject to compliance with various NERC reliability standards, including but not limed to those related to transmission planning for contingency events.

The Applicant submitted a generation interconnection request for the Hannibal Port Power Project to PJM Interconnection (PJM) on April 26, 2016. PJM gave the application a queue position of AB2-093.[1] The System Impact Study was released by PJM in May 2017.

PJM analyzed the bulk electric system with the Hannibal Port Power Project interconnected to the bulk power system. A 2020 summer peak power flow model was used to evaluate the regional reliability impacts. The study revealed overloads during single and multiple contingencies. The results of the PJM System Impact Study for the PJM regional footprint are as follows.[2]

PJM REGIONAL SYSTEM IMPACTS

Generator Deliverability - System Normal and Single Contingency Outage

Overloaded Element	Required System Reinforcement
Kammer-George Washington 138 kV line	• Reconductor 0.08 mile of Falcon conductor section 2

Category C and D - Multiple Contingency Outages

Overloaded Element	Required System Reinforcement
Kammer-George Washington 138 kV line	• Reconductor 0.08 mile of Falcon conductor section 2 • Replace George Washington wavetrap • Replace Kammer wavetrap

PJM studied overloading where the proposed Project will contribute to contingency overloads on earlier generation or transmission interconnection projects in the PJM queue. The study identified no problems.

1. PJM Interconnection, LLC is the regional transmission organization charged with planning for upgrades and administrating the generation queue for the regional transmission system in Ohio. Generators wanting to interconnect to the bulk electric transmission system located in the PJM control area are required to submit an interconnection application for review of system impacts. The interconnection process provides for the construction of expansions and upgrades of the PJM transmission system, as needed to maintain compliance with reliability criteria with the addition of generation in its footprint.

2. PJM Interconnection, LLC, "System Impact Study, Queue Number AB2-093," accessed June 6, 2017, http://pjm.com/planning/generation-interconnection/generation-queue-active.aspx.

PJM studied overloading initially caused by prior queue positions with additional contribution to overloading by this project. This project may be responsible for a percent allocation of costs for certain system upgrades. The study revealed that the specific timing of the in-service date of the facility would be significant. If the Hannibal Port Power Project comes online before certain baseline and network upgrades are placed in service, an additional interim study may be required to calculate the cost allocation percentage.

A short circuit analysis study, which is part of the System Impact Study, evaluated the interrupting capabilities of circuit breakers impacted by the proposed generation addition. The study identified no problems.

PJM analyzed impacts to the bulk electric system, with Hannibal Port Power Project interconnected to the transmission grid, for compliance with American Transmission Systems, Inc., NERC, and PJM reliability criteria. The PJM system studies indicated reliability violations during single and multiple contingencies. In order to correct these violations and meet the required compliance, PJM would require that the Applicant provide funding for conductor and wavetrap upgrades.

Air

The air permit-to-install application for the project was submitted to Ohio Environmental Protection Agency (Ohio EPA) on May 31, 2017. The dispersion modeling data was provided by the Ohio EPA. In the application, dispersion modeling details were provided on the facility, to demonstrate compliance with air quality standards. The permit-to-install serves as the air construction permit and the initial operating permit. The Applicant would be required to apply for a Title V air operating permit within 12 months after initial startup. Additionally, the Applicant would need to submit a Title IV Acid Rain Program permit application for emissions of sulfur dioxide and nitrogen oxides. The Title IV permit must be submitted to the Ohio EPA at least 24 months prior to beginning operation.

Construction impacts on air quality primarily consist of relatively minor emissions from the construction equipment and from fugitive dust emissions. Construction vehicles would emit insignificant amounts of volatile organic compounds, sulfur dioxide, carbon monoxide, nitrogen oxides, and particulate matter. These emissions are not expected to cause any significant adverse impacts to air quality. Fugitive dust rules adopted pursuant to the requirements of Ohio Revised Code (R.C.) Chapter 3704 (air pollution control laws) are applicable to the proposed facility. Fugitive dust would be controlled, where necessary, through best management practices.

Water

Construction of the proposed facility would not require the use of significant amounts of water. However, operation of the proposed facility would require the use of a significant amount of water. A Water Withdrawal Facility Registration has already been issued in association with the existing infrastructure on the industrial property project site. Water would be obtained from the Ohio River through an existing water intake structure. As this project qualifies as a major utility facility subject to regulation under R.C. Chapter 4906, a consumptive use permit (as specified in R.C. 1501.33) is not required.

The Applicant intends to submit a Notice of Intent for coverage under Ohio EPA's National Pollutant Discharge Elimination System (NPDES) general permit for storm water discharges

associated with construction and industrial activities. The Applicant would develop a storm water pollution prevention plan (SWPPP) for the project pursuant to Ohio EPA regulations and the Ohio Department of Natural Resources Rainwater and Land Development Manual. Prior to operation of the facility, the Applicant would obtain a general NPDES permit for stormwater discharges associated with operation, if necessary.

Stormwater flows from the developed site would be controlled through the use of a detention pond and other best management practices which would be identified in the SWPPP. The preliminary design reflects discharge of clean stormwater runoff from the stormwater collection pond into the Ohio River.

Sanitary wastewater sources would be discharged directly to the sewer collection system for the Hannibal Partners wastewater treatment plant. All other wastewater streams would be collected in a wastewater collection sump before discharge to the Ohio River. The facility would discharge to the Ohio River in accordance with applicable water quality standards. The Applicant indicates that its NPDES application is pending.

Pursuant to R.C. 4906.10(A)(8), the proposed facility must incorporate maximum feasible water conservation practices, considering available technology and the nature and economics of the various alternatives. During operation, the facility would consume up to 3.9 million gallons of water per day, which would be approximately 0.06 percent of the minimum flow of the Ohio River. The proposed facility design incorporates significant water conservation measures. The cooling water system has been designed to cycle cooling water from five to ten times in the cooling tower to reduce water intake requirements. Also, another measure incorporated in the cooling tower to conserve water would be the use of low mist design/cooling tower drift elimination. The cooling tower would include high efficiency drift eliminators to remove as many water droplets as practical from the air before exiting the cooling tower. The facility would also incorporate recirculation of process water in order to maximize water conservation

Solid Waste

Solid waste would be generated during construction and operation of the facility. During construction, solid waste would consist of demolition debris, packing materials, scrap construction materials, trash, and cleaning materials. During operation, solid waste would consist of office waste, spent chemicals and oils, spent SCR catalyst, and spare part packaging. Spent SCR catalyst would be returned to the vendor for re-use or disposal. During both construction and operation, the Applicant intends to segregate potentially hazardous wastes from other waste material, and dispose of all waste by the use of licensed contractors.

Surface Waters

No streams or wetlands are present within the proposed project area. The project area is located approximately 300 feet from the Ohio River. The project would use existing water outfall and intake structures. No significant adverse surface water impacts would occur.

Threatened and Endangered Species

As the project is located in an existing industrial site devoid of surface waters, trees, and other wildlife habitat, no impacts to federal or state listed species would occur.

Agricultural Districts

The proposed facility site is in an existing industrial area, and does not include any agricultural district lands or any land that is currently being used for agricultural purposes.

Conclusion

Staff's review of the application included consideration of the requirements listed in R.C. 4906.10. Based on Staff's review, the application meets the necessary criteria for granting a certificate. Staff recommends automatic approval of this case on July 28, 2017, provided that the following condition is satisfied.

Recommended Conditions:

(1) The Applicant shall not commence construction of the project until it has a signed Interconnection Service Agreement with PJM Interconnection, which includes construction, operation, and maintenance of system upgrades necessary to reliably and safely integrate the proposed generating facility into the regional transmission system. The Applicant shall provide to Staff a copy of the signed Interconnection Service Agreement or a letter stating that the agreement has been signed.

(2) Prior to construction activities in areas which require permits or authorizations by federal or state entities, the Applicant shall obtain and comply with all such applicable permits and authorizations, including any permits necessary for aviation clearance. Copies of such permits and authorizations, including all supporting documentation, shall be provided to Staff to ensure compliance with this condition.

(3) The Applicant shall develop an emergency response plan prior to commencing construction or operation activities that require such a plan, and the Applicant shall provide a copy to Staff to ensure compliance with this condition.

(4) In order to ensure that noise impacts associated with construction and operation of the proposed facility are minimized, the Applicant shall comply with the construction noise mitigation recommendations provided by its consultant and shall maintain complaint resolution procedures during both construction and operation of the facility to be used to address any noise related complaints raised by area residents. Prior to commencement of construction activities, the Applicant shall provide a copy of its complaint resolution procedures to Staff for review, in order to ensure that they comply with the requirements of this condition.

Summary: Staff Report of Investigation electronically filed by Mr. Matt Butler on behalf of Staff of OPSB