

THE OHIO POWER SITING BOARD

IN THE MATTER OF THE APPLICATION OF
BORDER BASIN I, LLC FOR A
CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED.

CASE NO. 21-277-EL-BGN

OPINION, ORDER, AND CERTIFICATE

Entered in the Journal on February 16, 2023

I. SUMMARY

{¶ 1} The Ohio Power Siting Board issues a certificate of environmental compatibility and public need to Border Basin I, LLC for the construction, operation, and maintenance of the solar-powered electric generation facility, subject to the conditions set forth in the stipulation and consistent with this Opinion, Order, and Certificate.

II. PROCEDURAL BACKGROUND

{¶ 2} All proceedings before the Board are conducted according to the provisions of R.C. Chapter 4906 and Ohio Adm.Code Chapter 4906-1, et seq.

{¶ 3} Border Basin I, LLC (Border Basin or Applicant) is a person as defined in R.C. 4906.01.

{¶ 4} Pursuant to R.C. 4906.04, no person shall construct a major utility facility without first having obtained a certificate from the Board. In seeking a certificate, applicants must comply with the filing requirements outlined in R.C. 4906.06, as well as Ohio Adm.Code Chapters 4906-2 and 4906-4.

{¶ 5} On March 29, 2021, Border Basin filed a motion for waiver requesting an alternative method, as opposed to an in-person meeting, due to the state of emergency regarding COVID-19, for the public information meeting required pursuant to Ohio Adm.Code 4906-3-03(B) regarding a proposed solar generation facility in Hancock County, Ohio. By Entry issued on April 20, 2021, the administrative law judge (ALJ) granted Border Basin's motion for limited waiver of Ohio Adm.Code 4906-3-03(B).

{¶ 6} On April 26, 2021, Border Basin filed a preapplication notification letter with the Board proposing to construct, operate, and maintain an up to 120-megawatt (MW) solar-powered electric generation facility in Cass Township, Hancock County, Ohio. In the letter, Border Basin stated that it planned to hold its web-based and teleconference public information meeting on May 13, 2021. Applicant also explained that it expected to file its application with the Board within 90 days of its public information meeting and commence construction of the facility as early as the fourth quarter of 2022, resulting in commercial operations in the fourth quarter of 2023.

{¶ 7} Also on April 26, 2021, Border Basin filed its notice of the public information meeting, in accordance with Ohio Adm.Code 4906-3-03(B)(2), to affected property owners and tenants within the project area. Border Basin also sent the notice to local public officials, local agencies, local first responders, the local school district, and the local library.

{¶ 8} On May 11, 2021, Border Basin filed its proof of publication for the public information meeting in *The Courier* on April 30, 2021.

{¶ 9} On June 15, 2021, as supplemented on July 21, 2021, August 31, 2021, September 29, 2021, and November 12, 2021, Border Basin filed its application for a certificate to construct an up to 120 MW solar-powered electric generation facility on approximately 1,378 acres in Cass Township in Hancock County, Ohio (Project or Facility).

{¶ 10} Also on June 15, 2021, Border Basin filed a motion for protective order requesting that portions of its application be kept confidential and not part of the public record. Staff filed correspondence on July 13, 2021, indicating that it did not oppose Applicant's motion for protective order.

{¶ 11} On August 6, 2021, Applicant filed notice of its intent to hold a second public information meeting, this time in-person, on August 16, 2021, in Arcadia, Ohio. The document also served as notice, pursuant to Ohio Adm.Code 4906-3-03(B)(2), that Applicant sent, via first-class mail, a letter containing the requisite information regarding the August

16, 2021 meeting to property owners and tenants affected by the proposed facility. Applicant also sent notice to county and township public officials and agencies, local first responders, local school districts, the library, and chambers of commerce.

{¶ 12} Pursuant to Ohio Adm.Code 4906-3-06, within 60 days of receipt of an application for a major utility facility, the Chair of the Board must either accept the application as complete and compliant with the content requirements of R.C. 4906.06 and Ohio Adm.Code Chapters 4906-1 through 4906-7 or reject the application as incomplete.

{¶ 13} On August 6, 2021, and August 23, 2021, Applicant filed motions for extensions of time for determining completeness of the application. On August 11, 2021, and August 23, 2021, the ALJ granted Applicant's motions, ultimately extending the deadline for the completeness determination to September 7, 2021.

{¶ 14} On August 31, 2021, Applicant filed a second supplement to application, in which it summarized comments from the second public information meeting in accordance with the ALJ Entry on August 23, 2021.

{¶ 15} On September 7, 2021, Staff filed correspondence regarding the completeness of the application, as supplemented.

{¶ 16} On September 9, 2021, Applicant filed proof of publication for the second public information meeting in accordance with Ohio Adm.Code 4906-3-03(B).

{¶ 17} On October 15, 2021, December 21, 2021, and December 22, 2021, Jeff and Shirley Overmyer (the Overmyers), Deidra Noel, the Board of County Commissioners of Hancock County (Hancock County), and the Cass Township Board of Trustees (Cass Township) moved for or filed separate notices of intervention.

{¶ 18} On December 16, 2021, Border Basin filed both a certificate of service of the accepted, complete application on local officials and libraries and notice of payment of the application fee.

{¶ 19} On January 6, 2022, and February 18, 2022, separate motions to intervene were filed by the Richard S. Lewis Revocable Trust, Richard Scott Lewis, and Sarah Lewis (collectively, “Lewis Family”), the Ohio Farm Bureau Federation (OFBF), Steven and Tonya Miller (the Millers), and Robin L. Gardner, Robin L. Gardner Revocable Trust, Michael J. Gardner 2011 Marital Trust #1, and Gardner Brothers, LLC (collectively, the Gardners).

{¶ 20} By Entry issued January 7, 2022, the ALJ established the effective date of the application as January 7, 2022. The Entry also granted the motions to intervene filed by the Overmyers, Deidra Noel, Hancock County, and Cass Township; instituted certain filing deadlines; directed that a local public hearing be held on March 31, 2022; scheduled the evidentiary hearing to commence on April 19, 2022; and ordered Applicant to issue public notice of the application and scheduled hearings.

{¶ 21} On February 14, 2022, Border Basin filed proof of publication of the procedural schedule and accepted, complete application, in accordance with Ohio Adm.Code 4906-3-09(A)(1).

{¶ 22} By Entry dated March 8, 2022, the ALJ granted Applicant’s June 15, 2021 motion for a protective order. The Entry also granted intervention to the Lewis Family, OFBF, the Millers, and the Gardners.

{¶ 23} On March 16, 2022, Staff filed a report of investigation (Staff Report).

{¶ 24} On March 31, 2022, the local public hearing was held as scheduled, during which 17 members of the public testified.

{¶ 25} Applicant, Deidra Noel, the Lewis Family, the Overmyers, the Gardners, and Staff timely filed direct testimony. Supplemental testimony was subsequently filed by Applicant and the Overmyers.

{¶ 26} On April 13, 2022, Border Basin filed a joint stipulation and recommendation (Stipulation), which was agreed to by Border Basin, Staff, OFBF, Hancock County, and Cass

Township (Signatory Parties). In the Stipulation, Signatory Parties recommend that the Board approve Border Basin's application subject to 44 conditions.

{¶ 27} The evidentiary hearing commenced on April 19, 2022, and concluded the next day. At the hearing, Border Basin and Staff presented the testimony of 23 witnesses in support of the Stipulation. Intervenors Jeff Overmyer, Sarah Lewis, Richard Lewis, Robin Gardner, and Deidra Noel testified in opposition to the Project.

{¶ 28} On June 9, 2022, and June 10, 2022, respectively, in accordance with the briefing schedule established at the close of the hearing, the Gardners and Border Basin filed timely initial post-hearing briefs. Also on June 10, 2022, the Overmyers, the Millers, the Lewis Family, and Deidra Noel filed a document entitled "Joinder to Merits Brief," in which they express their intent to join in and incorporate by reference the brief filed by the Gardners. Subsequently, on July 1, 2022, reply briefs were filed by Border Basin, the Gardners, and Staff. Again, Deidra Noel, the Millers, the Overmyers, and the Lewis Family filed a document entitled "Joinder to Reply Brief" indicating that they support and join in the reply brief filed by the Gardners.

{¶ 29} On July 12, 2022, the Gardners filed a motion seeking to strike certain evidence and arguments from Applicant's reply brief, claiming the cited materials are not part of the record of the case. On July 27, 2022, Applicant filed a memorandum contra the motion to strike. No reply brief was filed.

III. PROJECT DESCRIPTION

{¶ 30} Border Basin seeks certification to build a 120 MW solar-powered electric generation facility in Cass Township, Hancock County, Ohio. The Project would consist of large arrays of ground-mounted photovoltaic modules, commonly referred to as solar panels, on a racking system on approximately 966 acres within a 1,378-acre project area. The Project would also include associated facilities including access roads, underground and overhead electric collection lines, weather stations, inverters and transformers, a collector

substation, and a 138 kilovolt (kV) generation interconnection (gen-tie) electric transmission line. The Project would be secured by wildlife-friendly perimeter fencing, which would be seven to eight feet tall, and accessed through gated entrances. (App. Ex. 1 at 4-11; Staff Report at 6-7, 12.)

IV. CERTIFICATION CRITERIA

{¶ 31} Pursuant to R.C. 4906.10(A), 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 all of the following:

- (1) The basis of the need for the facility if the facility is an electric transmission line or a gas or natural gas transmission line;
- (2) The nature of the probable environmental impact;
- (3) 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) The facility will comply with R.C. Chapters 3704, 3734, and 6111, as well as all rules and standards adopted under those chapters and under R.C. 4561.32;

- (6) The facility will serve the public interest, convenience, and necessity;
- (7) The impact of the facility on the viability as agricultural land of any land in an existing agricultural district established under R.C. Chapter 929 that is located within the site and alternate site of any proposed major facility; and
- (8) The facility incorporates maximum feasible water conservation practices as determined by the Board, considering available technology and the nature and economics of various alternatives.

V. SUMMARY OF EVIDENCE

{¶ 32} The Board will review the evidence presented with regard to each of the eight criteria by which we are required to evaluate applications. Any evidence not specifically addressed herein has nevertheless been considered and weighed by the Board in reaching its final determination.

A. *Public Participation/Public Input*

{¶ 33} At the local public hearing on March 31, 2022, 17 individuals testified. Of those who testified, eight opposed the Project, eight supported the Project, and one focused on gaining additional information as to the Project.

{¶ 34} Individuals opposed to the Project raised concerns primarily regarding environmental impacts, including those to wildlife (Pub. Tr. at 24-26, 29, 36-37, 44-45), impacts on property values, (Pub. Tr. at 29, 72), aesthetic concerns (Pub. Tr. at 28, 26, 75), decommissioning concerns (Pub. Tr. at 23, 37, 45-46), impacts to agricultural resources and the local agricultural economy (Pub. Tr. at 37-39, 41-42, 58, 74-78), and local resident notice

and participation rights, as well as generalized local opposition (Pub. Tr. at 22-23, 39, 41, 46, 64).

{¶ 35} Supporters of the Project cited to claimed benefits, including the importance of landowner economic rights (Pub. Tr. at 13-14, 30, 66, 68), the benefits of alternative energy (Pub. Tr. at 20-21, 62, 66-67), the economic and employment benefits (Pub. Tr. at 16-17, 19, 31-34, 66-67), and agricultural preservation (Pub. Tr. at 30, 67).

{¶ 36} In addition to testimony at the local public hearing, as of August 22, 2022, 231 documents were filed as public comments in the case docket, several of which represented the comments of more than one person.¹ The issues raised in the public comments are generally consistent with those raised by persons who testified at the local public hearing.

B. Staff Report

{¶ 37} Pursuant to R.C. 4906.07(C), Staff completed an investigation into the application, which included recommended findings regarding R.C. 4906.10(A). The Staff Report was admitted into evidence as Staff Exhibit 1. The following is a summary of Staff's findings.

1. BASIS OF NEED

{¶ 38} R.C. 4906.10(A)(1) requires an applicant for an electric transmission line or gas pipeline to demonstrate the basis of the need for such a facility. In its review of the application under R.C. 4906.10(A)(1), Staff notes that the Project is a proposed electric generation facility, not a transmission line or gas pipeline. Accordingly, Staff recommends that the Board find that this consideration is inapplicable. (Staff Ex. 1 at 9.)

¹ Additionally, many of the public comments were filed in more than one case docket to express opposition or support for this Project as well as a separate proposed solar facility in Hancock County.

2. NATURE OF PROBABLE ENVIRONMENTAL IMPACT

{¶ 39} R.C. 4906.10(A)(2) requires that the Board determine the nature of the probable environmental impact of the proposed Facility. As a part of its investigation, Staff reviewed the nature of the probable impact of the solar Facility and the following is a summary of Staff's findings:

a. *Community Impacts*

i. LAND USE

{¶ 40} According to Applicant, the main land use type that would be impacted by the Project is agricultural land and the only structures within 1,500 feet of the project area are 73 homes. Staff relates that, according to the application, the nearest non-participating residential structure is 164 feet away from the Project. Based upon this, Border Basin has committed to a minimum setback of 300 feet from any non-participating residences. Based upon its planning, Border Basin submits that all impacts will occur within the fence line of the project area, aside from access roads that will lead out from the perimeter fence. (Staff Ex. 1 at 10.)

ii. REGIONAL PLANNING

{¶ 41} Staff explains that the city of Findlay has a land use plan but that neither Cass Township nor Hancock County have land use plans or zoning restrictions on agricultural zoned lands. According to Border Basin, the City of Findlay's most recent land use plan puts forth goals for the city and surrounding area, including preserving the rural character of nearby townships and the agricultural land uses outside the city limits. Border Basin submits that the Project would coexist with agricultural land uses surrounding the project area. (Staff Ex. 1 at 10-11.)

iii. RECREATION

{¶ 42} In Applicant's study of recreation areas within 10 miles of the project area, Staff states that Border Basin identified 56 recreation areas. The identified recreational areas include recreational trails, wildlife areas, nature parks, and local community parks. According to Staff, Applicant believes that because of existing vegetative screening and distance, none of the four recreational areas within three miles of the project area are anticipated to have views of the Facility. (Staff Ex. 1 at 11.)

iv. AESTHETICS

{¶ 43} The solar panels would be installed no higher than 15 feet above ground. According to Staff, based upon Border Basin's 10-mile visual resources report the visual effect from viewpoints greater than 0.1 mile from the project area is greatly decreased with distance. To provide for further aesthetic mitigation, Staff states that Border Basin committed to a setback of at least 300 feet from non-participating residences in locations where there is a roadway between the Project. For non-participating residences in areas not separated by a roadway, Border Basin committed to a setback of at least 500 feet. In addition, Staff notes that vegetative screening at selected sensitive areas around the Facility will further mitigate aesthetic impacts. Border Basin proposes a unique vegetative screening plan, which Applicant believes will soften viewshed impacts and blend the Facility into existing vegetation. Border Basin's plan provides for the installation of evergreen tree species to provide screening of the Facility from roadways and residences. As part of this plan, trees will be six feet tall at the time of planting and are expected to grow to approximately eight feet. (Staff Ex. 1 at 11-12.)

{¶ 44} Staff believes that Border Basin should consult with a certified professional landscape architect to adjust its landscape mitigation proposal to include additional planting features of different varieties. Staff recommends that Border Basin's landscape and lighting plans incorporate design features that will reduce impacts in areas where an adjacent non-participating parcel contains a residence with a direct line of sight to the

Facility's infrastructure. Staff also recommends that any aesthetic impact mitigation planned by Applicant include native vegetative plantings, alternate fencing, "good neighbor" agreements, or other methods of mitigation resulting from consultation with affected landowners and subject to Staff's review. (Staff Ex. 1 at 12.)

{¶ 45} Staff notes that Border Basin originally proposed a chain link perimeter fence design but, in response to public feedback, is now planning to provide wildlife-friendly fencing around external fencing areas of the Facility. Staff states that with implementation of Staff's landscape-lighting and fencing conditions, the overall expected aesthetic impact would be minimal. (Staff Ex. 1 at 12.)

{¶ 46} As opposed to subjective aesthetic concerns, glare is an objective phenomenon where sunlight reflects from the solar panels to create a duration of bright light. Included in glare is the concept of glint, which is a momentary flash of bright light. The potential impacts from solar panel glare include a possible brief loss of vision, afterimage, a safety risk to pilots, and a perceived nuisance to neighbors. Border Basin commissioned a ForgeSolar Glare Hazard Analysis Tool study to investigate potential glare issues at the Facility. According to Border Basin's study, no glare from the Project is predicted to affect vehicles using the roadways or other various points around the Facility. Staff agrees with this conclusion and further notes that measures, such as those recommended by Staff as part of aesthetic mitigation measures, could also further reduce potential impacts. (Staff Ex. 1 at 14-15.)

v. CULTURAL RESOURCES

{¶ 47} Border Basin engaged a consultant to gather background information and complete cultural resources studies for the Project. A Phase I archaeological reconnaissance survey was completed and submitted to the Ohio Historic Preservation Office (OHPO) in May 2021. This report identified 25 new archaeological sites within the project area, 17 of which were classified as ineligible for listing in the National Register of Historic Places (NRHP). OHPO agreed with the consultant that eight identified archaeological sites are

potentially eligible for listing in the NRHP. Border Basin engaged another consultant to gather background information and complete historical/architectural cultural resources studies for the Project, as well as a historic architecture survey of the project area. The consultant identified four properties within the area of potential effect that may be eligible for listing in the NRHP. Of the four identified properties, one is recommended as having an adverse effect from the Project. The consultant also recommends that Applicant avoid the Baker-Hamlin cemetery, even though it is not eligible for listing in the NRHP, as it could disturb unmarked graves. OHPO concurs in these findings. (Staff Ex. 1 at 12-13.)

{¶ 48} As of the date of the Staff Report, Border Basin and OHPO were developing a memorandum of understanding (MOU) to mitigate for and/or avoid cultural resources with potential adverse effects due to the Project. Staff recommends that Border Basin finalize and execute the MOU with OHPO. With implementation of the MOU and avoidance of the Baker-Hamlin Cemetery, as recommended by the consultant, Staff determined that minimal adverse environmental impacts to cultural resources would be achieved. (Staff Ex. 1 at 13.)

vi. ECONOMIC IMPACT

{¶ 49} Staff states that Border Basin would be responsible for the ownership, operation, and maintenance of the Project, and Border Basin avers that it owns the necessary leases and agreements for all land within the project area. Staff notes that none of the landowner agreements will change the ownership status of the properties. Border Basin provided total cost comparisons between the proposed Facility and other comparable facilities, referencing a 2020 report conducted by the U.S. Energy Information Administration. Border Basin states that the estimated capital costs for this Project are below the average capital costs per kilowatt alternating current of similar projects. Staff verified Border Basin's assertion and found that the reported average cost of similar facilities is not substantially different from Applicant's estimated costs. Border Basin also asserts that its operation and maintenance expenses should not differ substantially from those at

comparable facilities, which Staff confirmed. Applicant provided estimates of the cost of delays in permitting and construction of the Facility, stating that delays could prevent it from securing financing as well as impacting equipment availability. Staff finds this characterization of the estimated costs of delays to be reasonable. (Staff Ex. 1 at 13-14.)

{¶ 50} Staff states that Border Basin retained Tetra Tech to report on the economic impact of the Project. Tetra Tech utilized the National Renewable Energy Laboratory's Jobs and Economic Development Impact model, the IMPLAN regional economic modeling system, and data from the Ohio Department of Taxation. Staff verified that the methodology utilized by Tetra Tech was appropriate, and that the impacts reported from the study are reasonable. Based upon Tetra Tech's report, Border Basin estimates that the Facility would create 329 construction-related jobs and 14 long-term operational jobs for the state of Ohio. Border Basin estimates that the Project will generate \$21.3 million in local earnings during construction and \$800,000 in annual earnings during operation of the Facility. During the construction period, wages would produce \$32.3 million in local output; operations would add an annual output of \$1.8 million for the state of Ohio. Based upon a potential payment in lieu of taxes (PILOT), Border Basin estimates that the Facility will generate between \$840,000 and \$1.1 million annually for the Hancock County taxing districts. This estimate is based on a PILOT plan in which Border Basin would pay between \$7,000/MW and \$9,000/MW annually for a total of 120 MW. Staff notes, however, that at the time of the Staff Report issuance, Border Basin had not entered into a PILOT agreement with Hancock County. (Staff Ex. 1 at 14.)

vii. DECOMMISSIONING

{¶ 51} Border Basin estimates that the Facility can operate for 30 years or more. Border Basin included a decommissioning plan as part of the application, which estimates total decommissioning costs of \$3,770,500. According to this plan, at the end of the useful life of the Facility it would be decommissioned, and the land returned to its original topography and current use as agricultural land, or to the specific use desired by the

landowner. Border Basin would obtain applicable permits needed for decommissioning. The decommissioning sequence consists of, in part, reinforcing and reconverting disturbed areas to protect sensitive environmental resources and removing certain equipment, such that land can be returned to pre-construction conditions, to the extent practicable. Border Basin states that it may abandon and/or leave in place certain electrical lines and equipment, subject to the necessary approvals, but would work to restore the land to its original topography to allow for resumption of the pre-construction agricultural land use. Applicant anticipates that decommissioning activities and restoration will occur over a 12-month period. Because of the weather dependent nature of site restoration, Staff recommends that the updated decommissioning plan include a requirement to monitor the site to ensure successful revegetation and rehabilitation. Staff also recommends that a timeframe be included in the draft decommissioning plan that requires the majority of equipment to be removed from the site within a year. (Staff Ex. 1 at 15-16.)

{¶ 52} Border Basin intends to repurpose, salvage, recycle or haul offsite to a licensed solid waste disposal facility all solar components. Some of the components could be resold or salvaged to offset decommissioning costs. With respect to disposal, Border Basin indicated that it is considering panels that meet the United States Environmental Protection Agency (US EPA) definition of non-hazardous waste. Border Basin already identified that prior to decommissioning, it will obtain all required approvals and necessary permits to commence decommissioning activities. Border Basin also intends to provide for financial security to ensure that funds are available for decommissioning and land restoration. Specifically, Border Basin would employ a surety bond during the life of the Project, to be renewed annually. Applicant states that it would periodically review the decommissioning plan and costs and provide an updated report to the Board every five years after commercial operations begin at the Facility. The decommissioning plan updates would be prepared by an independent, registered professional engineer to estimate the total cost of decommissioning, salvage value, and the appropriateness of any contingency amount or percentage. Staff notes that Border Basin also considered a scenario in which a

decommissioning plan may be activated prior to the end of the useful life of the Facility, such as due to insolvency, and Applicant assumes a requirement that sufficient funds be in place to remove the Facility in such a contingency will be a condition of Board approval. (Staff Ex. 1 at 16.)

{¶ 53} Staff makes several recommendations with respect to decommissioning. Staff recommends that at least 30 days prior to the preconstruction conference, Border Basin submit an updated decommissioning plan and total decommissioning cost estimate without regard to salvage value, on the public docket, which includes: a provision that the financial assurance mechanism include a performance bond where the company is the principal, the insurance company is the surety, and the Board is the obligee; (b) a provision to monitor the site for at least one additional year to ensure successful revegetation and rehabilitation; (c) a timeline of up to one year for removal of the majority of equipment; (d) a provision where the performance bond is posted prior to beginning construction; and (e) a provision that the performance bond is for the total decommissioning cost and excludes salvage value. (Staff Ex. 1 at 16.)

viii. WIND VELOCITY

{¶ 54} Staff states Border Basin indicated that the Facility would be designed to withstand a 105 miles per hour wind load and 20 pounds per square foot snow load. Additionally, Border Basin represents that the structural components of the Facility will be designed to meet all requirements of applicable building codes. Staff notes that the single-axis tracker components contain features that will allow it to withstand high wind speeds. The tracker components are configurable to 140 miles per hour for a three-second gust. The tracker system also has a stow mode that can be activated during occurrences of high winds, such that the panels are put at an angle of 30 degrees to minimize wind loading and reduce potential damage. Staff states that Border Basin plans to monitor wind speed and direction with anemometers placed throughout the Facility to allow it to adjust the panels to a safe angle during occurrences of high wind. (Staff Ex. 1 at 17.)

ix. ROADS AND BRIDGES

{¶ 55} While Border Basin has not finalized its delivery route, Staff states that it is expected that construction traffic will be by way of Country Roads 18, 212, 216, and 236. In addition, Township Roads 109, 212, 213, 215, 238, and 248 could also be used. Border Basin conducted a Bridge and Culvert Inventory Report to identify any possible restrictions to accessing the project site. According to this report, all bridges along the proposed transportation route are in good condition and all but a few of the culverts are in good condition. Border Basin expects minimal negative impact on roadway surfaces. Conventional heavy equipment, which does not require special permitting, would make up the majority of construction traffic, although the electrical transformer is likely to be overweight and require special permitting and route coordination for delivery. Staff anticipates an increase in truck traffic during construction but does not believe there will be any additional traffic at the site during operation of the Facility beyond routine maintenance. Staff states that Border Basin anticipates entering a Road Use Maintenance Agreement (RUMA) with Hancock County and Cass Township and that any road or bridge repair would be done under the guidance of the appropriate regulatory authority. (Staff Ex. 1 at 17-18.)

x. NOISE

{¶ 56} Staff notes that activities such as site clearing, installation of mechanical and electrical equipment, and commissioning and testing of equipment are the common causes of construction-related noise impacts at sites like this. Staff states that many construction activities would generate significant noise levels, but that these impacts would be temporary and intermittent and would occur away from most residential structures. Additionally, such activities would be limited to daytime working hours. Border Basin has committed to using mitigation practices such as limiting the hours of construction activities and establishing a complaint resolution process. Staff states that operational noise impacts would be relatively minor and occur only during the day, resulting from sources such as

inverters and tracking motors. Border Basin conducted an ambient noise level study to understand the existing noise levels near the proposed Facility. Noise impacts to non-participating residences were modeled using the proposed inverter model and substation transformer and no non-participating receptors were modeled to receive noise impacts greater than the daytime ambient noise level plus five decibels (dBA). Staff states that based on this data, the Facility would be expected to have minimal adverse noise impacts on the adjacent community. However, if an inverter model different than that proposed in the application is chosen, Border Basin would submit a noise report confirming that no non-participating receptors were modeled to receive noise impacts greater than the daytime ambient noise level plus five dBA. (Staff Ex. 1 at 18.)

b. Geology

i. SOIL TYPES

{¶ 57} Staff states that glacial drift thickness throughout the study area ranges from 45 to 80 feet thick and, due to this significant thickness, neither bedrock nor karst features are expected to be encountered during construction.² Slope is relatively flat, rarely exceeding a six percent grade. Staff explains that the project area consists primarily of soils derived from glacial till, lacustrine deposits, and alluvium, with Blount and Pewamo soils comprising over 76 percent of the area. These soils present a moderate risk of shrink-swell potential. Overall, Applicant has determined that the subsurface conditions and soils are suitable for the proposed Facility. To address any concerns that exist due to soft soil/plow zones, silty soils, and soil corrosivity, Applicant has proposed development and implementation of a Soils Management Plan (SMP) to account for the potential discovery of historical oil and gas activity-impacted soils. (Staff Ex. 1 at 19, 21-22.)

² Staff notes that the nearest document karst feature (sinkhole) is nine miles southeast of the project area.

ii. OIL/GAS AND MINING

{¶ 58} Staff relates that a disconnection between the beginning of oil and gas exploration in Ohio versus its regulation by the state has led to incomplete or absent records of abandoned wells. Idle and orphan oil and gas wells pose a degree of environmental risk; thus, if these wells exist within the project area, well locations must be identified prior to initiation of construction. As a result, it is necessary for an applicant to conduct survey work to provide field evidence for well locations where definitive documentation is lacking. The Ohio Department of Natural Resources (ODNR) has record of 631 oil and gas wells within one mile of the project area, 441 of which are listed as historic production wells. All wells within the project area are currently inactive historic production wells or plugged and abandoned wells. There are no records indicating the oil and gas wells listed as “historic production” wells have been properly plugged and abandoned. (Staff Ex. 1 at 20-21.)

{¶ 59} With its original application, Applicant committed to continuing efforts to further understand the locations of potential wells in the project area such that the structures can be avoided during project construction via a minimum setback of 50 feet. Applicant later procured a contractor to conduct an electromagnetic survey of the project area with the purpose of locating historic oil and gas wells. Further, at Staff’s request, Applicant submitted an Engineering Constructability Report (ECR), which was provided to Staff on December 23, 2021, and supplemented on February 16, 2022, and March 10, 2022. The results of the ECR are more fully discussed below. Staff represents that no active mining occurs within the project area. (Staff Ex. 1 at 20-21.)

iii. SEISMIC ACTIVITY

{¶ 60} Staff states that records from ODNR indicate a history of five seismic events within ten miles of the project area, the nearest epicenter of which occurred approximately 2.5 miles southeast of the area. Based on the 2018 United States Geological Survey Long-term National Seismic Hazard Map, the project area is a low-risk area relative to seismic hazard. Applicant has indicated that no blasting activities are needed for construction or

operation of the proposed Facility, which negates anticipation of blasting-induced seismic activity. (Staff Ex. 1 at 21.)

iv. GEOTECHNICAL REPORT

{¶ 61} Staff reviewed Applicant's preliminary geotechnical report, which did indicate that potential concerns with project area soils may require final design level consideration or remediation. Limited corrosion testing results indicated area soils are potentially corrosive to steel and concrete and, thus, additional corrosion testing at varying depths is recommended. Further recommendations for inclusion in the final geotechnical report are pile load testing and additional borings within the proposed solar array and the footprints of the building and other supporting structures. (Staff Ex. 1 at 22-23.)

v. ENGINEERING CONSTRUCTABILITY REPORT

{¶ 62} The purpose of the ECR was to locate historic subsurface oil and gas well infrastructure to create an accurate inventory of these features within the project area to avoid or mitigate for any discovered features. According to the Staff Report, an aerial survey conducted as part of the ECR revealed several targets of interest; a subsequent ground survey attempted to "ground-truth," or confirm, those targets. The survey also indicated a magnetic anomaly resembling an underground petroleum collection line may be present within the southwestern portion of the project area. Of the 90 "well-like" anomalies within the project area identified by the survey, five were ground confirmed. (Staff Ex. 1 at 23.)

{¶ 63} Staff relates that the Applicant performed a risk evaluation of the orphan well features within the project area based on the same risk evaluation matrix used by the ODNR Orphan Well Program, which categorizes orphan wells into four classes with a Class 1 well being labeled an emergency and a Class 4 well deemed low risk. Applicant's technical expert evaluated all orphan wells in the project area and determined they would be

classified as low risk and do not require plugging at this time; ODNR is aware of the orphan wells and accepts Applicant's classification of the wells as low risk. (Staff Ex. 1 at 24.)

{¶ 64} Applicant has committed to visually monitor identified historic oil and gas well locations within the project area at least once every 90 days during Project construction, operation, and maintenance for the duration of the Project term. Should Applicant identify any signs of potential oil and gas well release, it will contact the ODNR Division of Oil & Gas Resources Central Office. (Staff Ex. 1 at 24.)

{¶ 65} The ECR also addressed the potential environmental impact of encountering an undiscovered historic oil and gas well feature during construction, including the creation of a preliminary Unanticipated Discovery Plan (UDP). While water contamination is a potential impact of such a discovery, the ECR's well location study determined that ground water impact is unlikely. Furthermore, the ECR concludes that the risk presented by constructing a solar facility is lower than current farm practices. (Staff Ex. 1 at 24.)

{¶ 66} Given this information, Staff concludes that the orphan well risk is extremely low. Staff does recommend that the final detailed engineering drawing account for geological features and that Applicant provide a final geotechnical engineering report, a final UDP, and a final SMP at least 30 days before the preconstruction conference. Staff concludes that implementation of these conditions plus those regarding pile load testing, boring, and the installation of geofabric material to address access road soil load bearing deficiencies, will assure construction and operation of the proposed Facility is compatible with the chosen project area. (Staff Ex. 1 at 24-25.)

c. Ecological Impacts

i. PUBLIC AND PRIVATE WATER SUPPLIES

{¶ 67} Based on information provided by Applicant, as well as records maintained by the Ohio Environmental Protection Agency (OEPA) and ODNR, groundwater sources are plentiful through the project area. While there are wells and source water protection

areas (SWPAs) within one mile of the project area, none are identified within the boundaries. Applicant shares that ODNR geospatial data sources show three private water wells within the project area, but they have not been ground located and confirmed. One such well is located within the central portion of the project area approximately six feet from the proposed collector substation. Staff states that, although solar facilities are an unlikely source of contamination, a 50-foot setback or isolation radius from domestic-use water supplies should be observed.

{¶ 68} The ECR discussed above also included a need for a hydrogeological impact assessment. Based on Applicant's limited hydrogeologic assessment of the project area, subsurface land disturbance is unlikely to impact local groundwater conditions. Furthermore, Applicant has committed to coordination with OEPA to ensure public water supplies are not impacted. Staff concludes that based on the information provided—and given consideration to measure such as the development and implementation of a Spill Prevention and Countermeasures Plan, Storm Water Pollution Prevention Plan (SWPPP), SMP, and UDP, as well as recommended conditions—there is a low risk that construction or operation of the proposed Facility would adversely impact public or private drinking water supplies. (Staff Ex. 1 at 25-27.)

ii. SURFACE WATERS

{¶ 69} Staff states that there are four perennial streams within the project area. Access road stream crossings may occur in up to six locations, but these crossings would be accomplished via horizontal directional drilling (HDD); Applicant has included a frac-out contingency plan as part of the application to address frac-out risks associated with HDD. Staff also recommends that Border Basin have an environmental specialist on site during construction activities where HDD may impact surface waters. With this, no impacts to streams are anticipated. Staff also indicates that the project area contains 23 wetlands, including ten Category 2 and 13 Category 1 wetlands. Applicant has designed the Project

to avoid all wetlands during and after construction, so not impacts to wetlands will occur. The Project would not impact a 100-year floodplain.

{¶ 70} Applicant states that boundaries of streams and wetlands within and immediately adjacent to the construction limits of disturbance will be flagged, staked, or fenced prior to construction, and all contractors and subcontractors will be provided training to recognize and understand the significance of the demarcations. Staff additionally recommends that Applicant outline further specifics regarding erosion and sedimentation controls in its SWPPP, that Applicant obtain an Ohio National Pollutant Discharge Elimination System (NPDES) construction stormwater general permit through the OEPA prior to the start of construction, and that Applicant implement OEPA published Guidance on Post-Construction Storm Water control for Solar Panel Arrays to Project construction and operation. (Staff Ex. 1 at 27-28.)

iii. THREATENED AND ENDANGERED SPECIES

{¶ 71} Staff reviewed Applicant's information as to potential impacts to threatened and endangered species, which included information from ODNR and the United States Fish and Wildlife Service (USFWS), field assessments, and document reviews. The presence of four species of bat, five types of freshwater mussels, and one fish identified as threatened or endangered are noted as either present in or having known range within the project area. Applicant did not, however, identify any listed plant or animal species during field surveys. To avoid impacts to the listed bat species, Applicant has committed to adhere to ODNR and USFWS recommended seasonal tree cutting dates for all trees three inches or greater in diameter. No impacts are expected to other state and federal listed species. (Staff Ex. 1 at 28-29.)

iv. VEGETATION

{¶ 72} Staff relates that the project area is comprised of three vegetative communities: forestland (46 acres), shrubland (19.1 acres), and agricultural lands (1,283.3

acres). Permanent vegetative impacts would occur primarily within agricultural lands, although approximately 0.9 acres of forestland would see access road and collection line impacts. Staff notes that Applicant's vegetation management plan incorporates pollinator-friendly habitat pursuant to recommendations of the Ohio Pollinator Habitat Initiative, which habitat would enhance the visual appeal of the project, enrich local wildlife habitat, benefit the local farming community, increase plant diversity, and discourage invasive species. The plan should also aim to include planting a minimum of 70 percent of the project area in beneficial vegetation; must follow the Ohio Solar Site Pollinator Habitat Planning and Assessment Form; and shall include a narrative on how the Project proposes to establish and maintain these beneficial vegetation and pollinator habitat guidelines. Furthermore, the vegetation management plan shall require that routine mowing be limited to fall/spring seasons, as needed, to allow for natural reseeding of plantings and reduce impacts to ground-nesting birds. Staff additionally recommends that Applicant take steps to prevent establishment and/or further propagation of noxious weeds identified in Ohio Adm.Code 901:5-37 during implementation of any pollinator-friendly plantings. (Staff Ex. 1 at 30.)

d. Conclusion

{¶ 73} Based on the above, Staff recommends that the Board find that Border Basin has determined the nature of the probable environmental impact for the proposed Facility and therefore complies with the requirements specified in R.C. 4906.10(A)(2), provided that any certificate issued by the Board for the proposed Facility include the conditions specified in the Staff Report (Staff Ex. 1 at 30).

3. MINIMUM ADVERSE ENVIRONMENTAL IMPACT

{¶ 74} Pursuant to R.C. 4906.10(A)(3), the proposed facility must represent the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, along with other pertinent considerations.

{¶ 75} In this section, Staff describes the Applicant's site selection process and measures taken, or to be taken, to minimize identified impacts. Staff explains that, in siting the Project, Border Basin focused on criteria such as strong solar resources, manageable access to the bulk power transmission system, landowner interest, compatible land use characteristics, and few environmentally sensitive areas. Applicant engaged local officials and the public in preparation of submitting its application, which incorporated local guidance and input into project design where feasible. (Staff Ex. 1 at 31.)

{¶ 76} Applicant commits to an array of measures to minimize any identified impacts. Staff has determined that implementation of a MOU developed by OHPO and Border Basin together with avoidance of an identified cemetery will achieve minimal adverse impacts to cultural resources. Further, the Project design's focus on avoidance of and setback from oil and gas well-like features and implementation of recommended conditions will assure that construction and operation of the Facility is compatible with the chosen project area. Applicant has committed to coordination with OEPA to ensure public water supplies are not impacted, and Staff has recommended conditions that include ensuring a 50-foot setback from water wells. With implementation of these conditions, Staff avers that there is a low risk that the Facility would adversely impact public or private drinking water supplies. (Staff Ex. 1 at 31.)

{¶ 77} Staff describes that no impacts are proposed to wetlands and no significant impacts are anticipated to surface waters. Impacts to state or federal listed species can be avoided by following seasonal restrictions, and Applicant did not identify any listed plant or animal species during field surveys. Staff's recommended mowing routine provides two benefits: allowing for natural reseeding of plantings and reducing any impacts to ground-nesting birds. (Staff Ex. 1 at 31.)

{¶ 78} Continuing, Staff states that noise impacts are expected to be limited to construction activities and that adverse impacts of construction noise will be temporary in nature, intermittent, and will occur away from most residential structures. Staff

recommends limitations on construction hours to address concerns of any nearby residents. Sound modeling indicated that noise impacts at non-participating receptors are not greater than daytime ambient noise levels. If Applicant changes inverter models, Staff recommends that Border Basin be required to submit an updated noise study using noise data from the newly specified inverter, which study would confirm that sound levels would not exceed the daytime ambient level plus five dBA at any non-participating sensitive receptor to assure the minimum adverse operational noise impacts. (Staff Ex. 1 at 31-32.)

{¶ 79} Staff further informs that impacts to local roadways will be experienced primarily during construction with temporary increases in truck traffic. Impacts will be lessened through a transportation management plan, which will be finalized once the engineering layout is determined. Additionally, final delivery routes will be developed through discussions with local officials, and Applicant intends to enter into a road use agreement with the county engineer. (Staff Ex. 1 at 32.)

{¶ 80} With its low profile and existing area vegetation, visual impacts are most prominent to landowners in the immediate vicinity of the actual infrastructure. To reduce visual impacts in areas where an adjacent, non-participating parcel containing a residence with a direct line of sight to the Project, Staff has recommended a final landscape and lighting plan that addresses potential impacts of the Facility. (Staff Ex. 1 at 32.)

{¶ 81} Applicant has committed to address potential adverse impacts to farmland, such as damage to drain tile and restoration of land. Through use of engineering data and in consultation with landowners and country records, Applicant will locate drain tiles as accurately as possible prior to construction and will promptly repair any drain tile found to be damaged by the Project during its operational life. Additionally, following decommissioning of the Facility, land can be restored to prior use. (Staff Ex. 1 at 32.)

{¶ 82} Applicant has a draft plan for decommissioning of the Project. The plan includes for the provision of financial security to ensure that funds are available for decommissioning and land restoration. Applicant commits to restoring land significantly

to its original topography to allow for resumption of agricultural use. Staff recommends that the draft plan be updated to include such items as improved financial assurance and a decommissioning cost estimate. (Staff Ex. 1 at 32.)

{¶ 83} In addition to these mitigation measures, Staff highlights the expected positive impacts of the Project. Staff states that the Facility will have an overall positive impact on the state and local economy due to the increase in construction spending, wages, purchasing of goods and services, annual lease payments to local landowners, increased tax revenue, and PILOT revenue. (Staff Ex. 1 at 32.)

{¶ 84} In short, while both temporary and permanent environmental impacts will occur, Staff concludes that the Project is unlikely to pose significant adverse impact to existing land use, cultural resources, recreational resources, or wildlife. Factoring in Staff's recommended conditionals to further mitigate potential impacts, Staff concludes that the Project represents the minimum adverse environmental impact. Accordingly, based on its review of the application and its investigation, Staff recommends that the Board find that the proposed facility represents the minimum adverse environmental impact and, therefore, complies with the requirements of R.C. 4906.10(A)(3), provided that any certificate issued by the Board includes the conditions specified in the Staff Report (Staff Ex. 1 at 32-33).

4. ELECTRIC POWER GRID

{¶ 85} Pursuant to R.C. 4906.10(A)(4), the Board must determine that the proposed facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems. Under the same authority, the Board must also determine that that proposed facility will serve the interest of the electric system economy and reliability.

{¶ 86} Staff evaluated the impact of integrating the proposed Facility into the existing regional electric transmission grid. As proposed, the Facility would be capable of producing 120 MW and would interconnect from the collector substation to the American

Electric Power (AEP) Ebersole-Fostoria Central #2 138 kV Circuit, which will be the point of interconnection (POI). Staff states that there will be a collector substation and a project substation and a three-circuit breaker 138 kV switching station, physically configured in the breaker and half arrangement but operated as a ring bus, will be constructed to accommodate the interconnection. The Project will require associated protection and control equipment, 138 kV line risers, and revenue metering equipment. A short section of 138 kV gen-tie line will connect the Project to the POI and switchyard. (Staff Ex. 1 at 34.)

{¶ 87} According to Staff, Applicant is subject to compliance with various North American Electric Reliability Corporation reliability standards. Border Basin submitted a generation interconnection request for the proposed Facility to PJM Interconnection, LLC (PJM), which is the regional transmission organization responsible for planning upgrades and administering the generation queue for the regional transmission system in Ohio. PJM has completed the feasibility study (Feasibility Study) and system impact study (SIS). (Staff Ex. 1 at 34.)

{¶ 88} PJM used a 2022 summer peak power flow model to evaluate regional reliability impacts for the Project. The Feasibility Study revealed several overload conditions resulting from the Project and the Staff Report outlines several corrective actions or reinforcements required for the Facility to be responsibly constructed and operated. The SIS identified the need for a sag study along the 11.1 miles of the line from PJM AC2-015 tap to the Howard 138 kV substation. Further, Staff states that the line may need a complete double line reconductor or rebuild, depending on the results of the sag study. Staff also relates that the Howard station copper line risers will also need to be upgraded. An engineering study will need to be conducted to determine whether the thermal limits can be adjusted to mitigate overloads. According to Staff, additional upgrades in the form of relays would be required if settings are not able to be adjusted sufficiently. (Staff Ex. 1 at 35-36.)

{¶ 89} In terms of the Project's effect on earlier generation or transmission projects in the PJM queue, a breaker was identified to overload, which could result in operations restrictions on the Facility. The identified overload item is tabulated and described in the SIS report. PJM's study of the delivery of the energy portion of the interconnection request also revealed four incidents for transmission lines of an "operation" type. According to Staff, this means there could be real-time congestion or restrictions when operating the PJM grid that may restrict or limit delivery of generation to the PJM grid, depending on outages or other restrictions that may be present in the area. These findings are also tabulated and described in the SIS report. PJM's short circuit analysis found no breakers to be overloaded. (Staff Ex. 1 at 36.)

{¶ 90} Staff concludes that the Facility would be consistent with regional plans for expansion of the regional power system and would serve the interests of electric system economy and reliability. Accordingly, Staff recommends that the Board find that the Project complies with the requirements of R.C. 4906.10(A)(4), provided that any certificate issued for the Facility includes the conditions specified in the Staff Report. (Staff Ex. 1 at 36.)

5. AIR, WATER, SOLID WASTE, AND AVIATION

{¶ 91} Pursuant to R.C. 4906.10(A)(5), the Facility must comply with Ohio law regarding air and water pollution control, withdrawal of waters of the state, solid and hazardous wastes, and air navigation.

{¶ 92} Although the proposed Facility would not require any air quality permits, Staff states fugitive dust rules may be applicable to its construction. Border Basin indicated that the amount of dust should be low because little topsoil will be moved and there will be minimal grading and earth work activities. Accordingly, Border Basin plans to control temporary and localized fugitive dust by using best management practices such as water to wet soil to minimize dust and/or dust suppressants. Staff notes that the Project would not include any stationary sources of air emissions, so no air pollution control equipment is required. (Staff Ex. 1 at 37.)

{¶ 93} With respect to effects on water, Border Basin indicated that it would obtain environmental permits if and where necessary. According to Staff, Border Basin would mitigate potential water quality impacts associated with aquatic discharges by obtaining an NPDES construction stormwater general permit (OHC00005) from OEPA. The construction stormwater general permit also requires development of an SWPPP to direct the implementation of construction related stormwater best management practices for soil erosion control. Border Basin further confirmed that, if necessary, it would obtain the following permits: an individual permit or nationwide permit under Section 404 of the Clean Water Act (CWA); Water Quality Certification from OEPA; and an Ohio Isolated Wetland Permit. Staff recommends that Border Basin construct the Facility in a manner that incorporates post-construction stormwater management in accordance with OEPA's guidance for such control for solar panel arrays. With these measures in place, Staff concludes that the Facility would comply with requirements of R.C. Chapter 6111 and the rules and laws adopted under that chapter. (Staff Ex. 1 at 37-38.)

{¶ 94} Staff explains that debris generated by construction should consist of items such as damaged/unusable parts or materials, crates, nails, boxes, containers, packing materials, construction scrap, and general refuse. Border Basin estimates approximately 11,000 cubic yards of solid waste to be generated during construction, all of which not reused or recycled will be disposed of at an authorized solid waste disposal facility. During operation, Border Basin anticipates very small amounts of solid waste of the same types as that generated during construction. Waste generated during operation would also be recycled, reused, or disposed of in accordance with applicable solid waste regulations at a local landfill. Staff concludes that Border Basin's solid waste disposal plans would comply with solid waste disposal requirements set forth in R.C. Chapter 3734. (Staff Ex. 1 at 38.)

{¶ 95} Staff notes that the tallest aboveground structures are anticipated to be between 60 and 90 feet tall, which is under the height requirement in the Federal Aviation Administration's (FAA) regulations. According to Border Basin, there are no public use airports within five miles of the project area. Staff confirmed through the FAA that the

closest public-use airport is the Findlay airport approximately seven miles southwest of the proposed Project collector substation. The nearest private-use airstrip, according to Border Basin, is approximately 1.5 miles east of the project area; the nearest private airport, Tatham, is approximately five miles southwest of the project area. As required under R.C. 4906.10(A)(5), Staff contacted the ODOT Office of Aviation to coordinate review of potential impacts of the Facility on local airports. Staff states that, as of the date of the Staff Report, no such concerns have been identified. (Staff Ex. 1 at 38-39.)

{¶ 96} Staff concludes, and recommends that the Board find, that the Project complies with the requirements specified in R.C. 4906.10(A)(5) provided that any certificate issued by the Board includes the conditions specified in the Staff Report (Staff Ex. 1 at 39).

6. PUBLIC INTEREST, CONVENIENCE, AND NECESSITY

{¶ 97} Pursuant to R.C. 4906.10(A)(6), the Board must determine that the Facility will serve the public interest, convenience, and necessity.

{¶ 98} Regarding safety at the Facility, Border Basin stated that it would use reliable equipment, selected using leading suppliers, that adheres to applicable industry codes and standards. Staff recognizes that Applicant planned for the expenses of operation and maintenance to keep the Facility in a safe and reliable status. Border Basin intends to restrict public access to the Facility by enclosing the project area with an agricultural-style metal fence that is seven to eight feet tall and compliant with National Electric Safety Code (NESC) requirements. Applicant plans to install a six-foot tall chain link fence, topped with a one-foot tall, barbed wire strand around the substation. Staff recommends that, except for the substation fencing, the perimeter fencing at the Facility should be both wildlife permeable and aesthetically fitting for a rural location. (Staff Ex. 1 at 40.)

{¶ 99} Border Basin also plans to implement setbacks from non-participating sensitive receptors, non-participating properties, and public roads. Specifically, Border Basin plans the following minimum setbacks: 40 feet to the public road right-of-way edge,

50 feet from the property line of any non-participating parcel, 300 feet to a non-participating home where there is a roadway between the Project and the home, and 500 feet to a non-participating home in areas not separated by a roadway. Border Basin stresses that these examples are minimum setbacks and that actual setbacks at the completed Facility will be much greater. Further, Border Basin stated that it would incorporate any setbacks recommended by manufacturers. Border Basin also intends to further consult with potentially affected emergency response personnel and develop an emergency response plan. (Staff Ex. 1 at 40.)

{¶ 100} Staff explains that electric transmission lines, when energized, generate electromagnetic fields (EMF). Laboratory studies have failed to establish a strong correlation between exposure to EMF and effects on human health. There have been concerns, however, that EMF may have impacts on human health. Staff determines that the gen-tie transmission line is not within 100 feet of an occupied structure, therefore calculation of the production of EMF during operation of the proposed gen-tie transmission line is not warranted per Ohio Adm. Code 4906-5-07(A)(2). Applicant stated that the electrical system design will be certified by a licensed professional engineer and that the equipment will meet NESC requirements. (Staff Ex. 1 at 40-41.)

{¶ 101} Border Basin hosted a virtual and an in-person public informational meeting for the Project, giving attendees the opportunity to review information about the Project and engage in conversations with the company. Staff notes that Border Basin has developed a complaint resolution plan to handle complaints during construction and operation of the Facility. Further, Staff recommends that a final version of the complaint resolution plan be filed on the docket no later than 30 days prior to the start of construction. Applicant has agreed to provide a quarterly complaint summary report regarding all complaints received in that quarter, and to submit that report to the Board for the first five years of operation. Staff recommends that these quarterly complaint reports be filed on the public docket in this case. Border Basin committed to notify, by mail, affected property owners and tenants prior to the start of construction and prior to the start of operations. Staff recommends that these

notices be mailed to all residences, airports, schools, and libraries located within one mile of the project area; parties to this case; county commissioners, township trustees, and emergency responders; and any other person who requests updates regarding the Project. (Staff Ex. 1 at 41.)

{¶ 102} With respect to additional public interaction and participation, Staff notes that the ALJ scheduled a public hearing for March 21, 2022, at Findlay Elks Lodge #75, 900 W. Melrose Avenue, Findlay, Ohio 45840. At the time of the Staff Report, Staff states that there were 146 documents filed in the public comments section of the case docket. Supporters of the Project emphasized the potential benefits of additional local tax revenue and the production of renewable energy. In particular, Staff notes that the Findlay-Hancock County Chamber of Commerce and Findlay-Hancock County Economic Development filed letters touting the potential for investment in the local economy and additional tax revenue for local schools and government. Comments expressing apprehension or opposition to the Project shared concerns about potential impacts to roads and traffic, agricultural land use and farmland preservation, wildlife, drinking water, drainage tile and flooding, property values, public health, aesthetics, noise, glare, decommissioning, vegetation management, fencing, and inactive and plugged oil and gas wells. Staff specifically highlights two opposition comments filed in the docket. First, it notes that Cass Township filed a letter expressing opposition to the Project and outlining particular areas of concern. Second, the Director of Health of Hancock Public Health expressed concern with how the Project could impact household sewage treatment systems.³

{¶ 103} Staff recommends that the Board find that the proposed Facility would serve the public interest, convenience, and necessity, and therefore complies with the requirements specified in R.C. 4906.10(A)(6), provided that any certificate issued by the Board includes the conditions specified in the Staff Report (Staff Ex. 1 at 42).

³ It should be noted that Cass Township ultimately became a Signatory Party to the Stipulation; Hancock County also joined the Stipulation as a Signatory Party.

7. AGRICULTURAL DISTRICTS

{¶ 104} Pursuant to R.C. 4906.10(A)(7), the Board must determine the Facility's impact on the agricultural viability of any land in an existing agricultural district within the project area of the proposed utility facility.

{¶ 105} Staff reports that approximately 953 acres of land will be disturbed by the proposed Project, of which 848 acres are currently enrolled in the agricultural district program. According to Border Basin, the repurposed land could be converted back to agricultural use after decommissioning. While no agricultural structures will be removed because the Project, Staff represents that the Facility will disturb existing soil and could lead to broken drainage tiles. In attempt to mitigate this risk, Border Basin conducted a desktop review to identify the locations of existing drain tiles within the project area. Border Basin also commissioned a Drainage Tile Assessment and Impact Report, attached to the application as Exhibit U, which discusses avoidance, repair, and mitigation details of all known drain tile locations. Staff states that Border Basin has committed to repair any drain tile found to be damaged by the Project during the operational life of the Facility. Further, Border Basin intends to take steps to address further impacts to farmland, such as returning topsoil after construction and restoring land following decommissioning (Staff Ex. 1 at 43.)

{¶ 106} Staff recommends that the Board find that the impact of the proposed Facility on the viability of existing agricultural land in an agricultural district has been determined and, therefore, the requirements of R.C. 4906.10(A)(7) are satisfied, provided that any certificate issued includes the conditions specified in the Staff Report (Staff Ex. 1 at 43).

8. WATER CONSERVATION PRACTICE

{¶ 107} 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.

{¶ 108} Staff submits that operation of the Facility would not require the use of significant amounts of water. Any water needed for cleaning panels would be brought in from off-site by water trucks. Staff states that Applicant has no plans to erect an operations and maintenance building, so no water or wastewater discharge is anticipated. Therefore, Staff avers that the requirements of R.C. 1501.33 and 1501.34 are either inapplicable to the Project or are satisfied because of the limited to no water usage expected at the Facility. (Staff Ex. 1 at 44.)

{¶ 109} Staff recommends that the Board find that the proposed Facility would, subject to inclusion of conditions specified in the Staff Report, incorporate maximum feasible water conservation practices and, therefore, complies with the requirements specified in R.C. 4906.10(A)(8) (Staff Ex. 1 at 44).

9. RECOMMENDATIONS

{¶ 110} In addition to making various findings throughout its report, Staff recommended that the 44 conditions set forth in Staff Ex. 1 be made part of any certificate issued by the Board for the proposed Facility (Staff Ex. 1 at 45-51). The recommended conditions found in the Staff Report were substantially incorporated into the Stipulation filed on April 13, 2022 (Joint Ex. 1 at 3-10). The Stipulation and conditions are discussed further below in this Order.

C. *Evidentiary Hearing and Post-Hearing Filings*

{¶ 111} Border Basin presented the testimony of twelve witnesses during the evidentiary hearing. Ben Metcalf, Director of Development for Galehead Development LLC, offered extensive testimony in support of the application (App. Ex. 1), including aspects such as a Project overview, components, public outreach, schedule, socioeconomics, complaint resolution, interconnection, decommissioning, lighting plan, land use, and financial information. Mr. Metcalf also testified regarding Applicant's local public outreach, expected economic benefits from the Project, and commitments made in the application,

including supplements, responses to data requests, and the conditions in the Staff Report. (App. Ex. 25). The following individuals also testified on behalf of Border Basin:

- Andrew Lines, Principal of the Valuation Advisory Services Group at CohnReznick LLP, testified regarding property valuation as it relates to the Project (App. Ex. 36).
- Lawrence Drane, a Senior Project Manager at Tetra Tech, Inc., testified regarding Applicant's Vegetation Management Plan, HDD Inadvertent Return Response Contingency Plan, and Drain Tile Assessment and Impact Report (App. Ex. 26).
- Shaun Brooks, a visual resources specialist at Tetra Tech, Inc., testified regarding the Applicant's Visual Impact Analysis (App. Ex. 32).
- Greg Hynes, a Project Manager at Tetra Tech, Inc., testified regarding the Culvert and Bridge Inventory Report and Hydrologic Assessment submitted with the application (App. Ex. 27).
- Jamie Macnab, Project Development Team Lead for Wood, testified regarding Applicant's Geotechnical Report (App. Ex. 35).
- Christopher Hatfield, a Senior Geologist employed by Stantec, provided testimony regarding information relating to historical oil and gas wells identified within the Project area and site suitability described in the Applicant's ECR (App. Ex. 34).
- Drew Timmis, a biologist at Tetra Tech, Inc., testified regarding Applicant's Glare Analysis (App. Ex. 28).
- Christopher Hulik, an acoustic engineer for Tetra Tech, Inc., testified regarding Applicant's Acoustic Assessment Report, i.e., sound (App. Ex. 29).

- Kory McCluskey, an environmental scientist and manager of Wetlands and Ecological Services Department at Tetra Tech, Inc., provided testimony regarding Applicant's Biological Resources Technical Wildlife Memo and USFWS and ODNr Correspondence (App. Ex. 30).
- James Marine, a Cultural Resources Department Head at Tetra Tech, Inc., testified regarding the cultural survey information set forth in Applicant's Archaeological Survey (App. Ex. 31).
- Amy Kramb, an Architectural Historian for Kramb Consulting, LLC, testified regarding the history/architectural cultural survey information set forth in Applicant's Architecture Survey (App. Ex. 33).

Witnesses Metcalf, Drane, Hynes, Timmis, Hulik, McCluskey, Marine, Brooks, Kramb, Hatfield, and Macnab also offered supplemental testimony in support of the Stipulation according to their respective areas of expertise (App. Exs. 25A, 26A, 27A, 28A, 29A, 30A, 31A, 32A, 33A, 34A, and 35A, respectively).

{¶ 112} Intervenors Sarah Lewis, Richard Lewis, Jeffrey Overmyer, Robin Gardner, and Deidra Noel participated in the hearing, both in providing testimony and in cross-examining witnesses:

- Sarah Lewis testified on her own behalf regarding her ownership of property adjacent to the proposed project area and the detrimental impact that she believes the Facility will have on the activities she conducts on her property as well as on her community (Sarah Lewis Ex. 1).
- Richard Lewis testified on his own behalf regarding his ownership of property adjacent to the proposed project area and the detrimental impact that he believes the Facility will have on the activities he conducts on his property and on property value (Richard Lewis Ex. 1).

- Jeffery Overmyer testified on his own behalf regarding Applicant's actions in developing the Project and specific negative effects that he believes the Project will have (Overmyer Exs. 9, 9A).
- Robin Gardner testified on her own behalf regarding Applicant's alleged lack of adherence to Board notice rules and negative effects she believes the Project will have on her property (Tr. I at 178-180).
- Deidra Noel testified on her own behalf regarding adverse effects that she believes the Project would have on her residence, local wildlife, and the surrounding communities (Deidra Noel Ex. 1).

{¶ 113} Staff presented the testimony of eleven witnesses, each of whom testified concerning their assessment of the Facility as included in the Staff Report:

- Allison DeLong testified to sponsor the land use, regional planning, recreation, and site selection sections in the Staff Report (Staff Ex. 2).
- Andrew Conway testified to sponsor the sections of the Staff Report relating to glare, aviation, safety, electromagnetic fields, and decommissioning, as well as certain recommended conditions in the Staff Report and Stipulation (Staff Ex. 3).
- Jess Stottsberry testified to sponsor the geology and public and private water supplies subsections in the "economic impacts" section of the Staff Report, as well as certain recommended conditions in the Staff Report and Stipulation (Staff Ex. 4).
- Tyler Conklin testified to sponsor the economic impacts section of the Staff Report (Staff Ex. 5).

- Mark Bellamy testified to sponsor the cultural resources, noise, and air, water and solid waste subsections of the Staff Report, as well as certain recommended conditions in the Staff Report and Stipulation (Staff Ex. 6).
- James O'Dell testified as the project lead for Staff's investigation that resulted in the Staff Report and in support of the Stipulation (Staff Ex. 7).
- Eric Morrison testified to sponsor portions of the Staff Report pertaining to agricultural land and roads and bridges (Staff Ex. 8).
- Thomas Crawford, PhD, PE, testified to sponsor the electric and wind velocity sections of the Staff Report, as well as certain recommended conditions in the Staff Report and Stipulation (Staff Ex. 9).
- Grant Zeto testified to sponsor the subsections pertaining to surface waters, threatened and endangered species, and vegetation in the Staff Report, as well as certain recommended conditions in the Staff Report and Stipulation (Staff Ex. 10).

{¶ 114} As stated above, the parties engaged in post-hearing briefing. As part of that briefing, Ms. Gardner filed a motion to strike portions of Border Basin's reply brief, to which Applicant filed a memorandum contra.

{¶ 115} Ms. Gardner seeks to strike Attachment 1 to Applicant's reply brief, contending that it constitutes new evidence offered after the record was closed. Ms. Gardner submits that inclusion and consideration of the attachment, along with related arguments, would thus be improper, prejudicial, and contrary to Ms. Gardner's procedural due process rights to question and challenge evidence considered by the Board. Ms. Gardner also asserts that Border Basin improperly raised new, unsupported arguments regarding the PJM queue and PJM Open Access Transmission Tariff in its brief.

{¶ 116} Border Basin denies that Attachment 1 constitutes new evidence. As described by Applicant in its brief, Attachment 1 is an aerial view of the area around the existing transmission line and steel lattice tower (tower) owned by AEP showing, for purposes of illustration, the existing 138 kV transmission line owned by AEP; the existing tower; the proposed substation location that was repositioned to provide a setback of over 600 feet from the Overmyers' residence; the existing hedgerow; and the proposed vegetative screening that Applicant has committed to provide south of the tower (App. Reply Br. at 9). Applicant states that Attachment 1 was presented for purposes of illustration only to illustrate the visual impact of the repositioned switching station. Applicant explains that the image is a "zoomed-in" depiction of maps already contained in the record in Applicant Exhibit 11, Attachment Figure No. 1, as well as in figures included in the application admitted into evidence as Applicant Ex. 1. Furthermore, Condition 23 to the Stipulation, which commits Border Basin to address aesthetic and lighting impacts of the Project, was widely discussed in testimony and during cross-examination. As such, Border Basin submits that Intervenors had ample opportunity to question witnesses regarding the relocation of the substation as depicted in the challenged attachment.

{¶ 117} For similar reasons, Border Basin asserts that no part of its discussion of the PJM queue or PJM tariffs is subject to strike as improper hearsay. Applicant first notes that Ms. Gardner does not identify which statements she is challenging as hearsay. Applicant additionally notes that the Board's statutory authority to certificate projects is based on determinations directly related to FERC-based requirements, PJM processes, and PJM regulatory documents, and requires consideration of interconnected utility systems. As such, Applicant submitted PJM interconnection study reports, reports that cite and rely on the PJM Open Access Transmission Tariff, as part of the application that was admitted into evidence (App. Ex. 1, Exhibit F). Applicant further submits that the PJM queue and PJM Open Access Transmission Tariff are properly subject to administrative notice.

{¶ 118} Upon review of the challenged portions of Applicant's reply brief, including Attachment 1, in light of the parties' arguments, the Board finds that the motion

to strike should be denied. Ms. Gardner, and her fellow intervenors, were able to offer their own testimony and to cross-examine Applicant and Staff witnesses regarding the aerial maps and depictions of the project area, including the location of the substation, that were submitted with the application. They were further able to probe the requirements of Condition 23 of the Stipulation, including what screening could or would be used to comply with that condition. Ms. Gardner does not dispute that the record establishes that the substation was relocated to grant the Overmyers a greater setback; thus a detailed visual depiction of that relocation is not prejudicial. The Board further finds discussion of the PJM queue and tariff is not injecting new evidence to the record, does not constitute hearsay as argued, and is not prejudicial to Ms. Gardner.

VI. STIPULATION AND CONDITIONS

{¶ 119} At the adjudicatory hearing, Border Basin presented the Stipulation executed by the Signatory Parties that purports to resolve all matters pertinent to the certification and construction of the Project (Jt. Ex. 1; Tr. I at 17, 252). With the Stipulation, the Signatory Parties recommend that the Board issue the certificate requested by Border Basin, subject to 44 conditions. The following is a summary of the conditions proposed by the Signatory Parties and is not intended to replace or supersede the actual Stipulation. The Signatory Parties stipulate that:

- (1) Border Basin shall install the Facility, use equipment and construction practices, and implement mitigation measures as described in the application and modified and/or clarified by supplemental filings.
- (2) Prior to the start of any construction activities, Border Basin shall conduct a preconstruction conference, which shall be attended by Staff, the Applicant, and representatives of the primary contractor and all subcontractors for the Facility. Border Basin shall provide a proposed conference agenda for

Staff review and file a copy of the agenda on the case docket before the conference.

- (3) Within 60 days after the commencement of commercial operation, Border Basin shall submit to Staff a copy of the as-built specifications for the entire facility. Applicant shall use reasonable efforts to provide as-built drawings in both hard copy and as geographically-referenced data.
- (4) Separate preconstruction conferences may be held for different phases of civil construction and equipment installation. At least 30 days before each preconstruction conference, Border Basin shall submit to Staff one set of detailed engineering drawings of the final project design for that phase of construction and mapping in the form of a PDF, which shall be filed to this case docket, and geographically referenced data. All applicable geotechnical study results shall be included in the submission of the final project design.
- (5) Border Basin shall provide Staff the final geotechnical engineering report, which shall include a summary statement addressing the geologic and soil suitability, at least 30 days before the preconstruction conference.
- (6) At least 30 days before the preconstruction conference, Border Basin shall provide the final Unanticipated Discovery Plan to Staff for review and acceptance.
- (7) All Facility components shall be setback a minimum of 50 feet from any oil and gas or oil and gas well related features.

- (8) Any identified unplugged idle or orphan well, or associated production lines, shall be managed in accordance with the applicable laws established by ODNR Division of Oil and Gas. Construction at an unplugged idle or orphan well site must include setback considerations that would allow well access and be at least 14 feet wide leading to the well with the setback established in Condition 7.
- (9) Border Basin shall visually monitor identified historical oil and gas well locations within the project area at least once every 90 days during project construction, operation, and maintenance for the duration of the project term.
- (10) If any changes are made to the Facility layout after the submission of final engineering drawings, Border Basin shall provide all such changes to Staff in hard copy and as geographically referenced electronic data. All changes are subject to Staff review for compliance with all conditions of the certificate.
- (11) At least 30 days before the preconstruction conference, Border Basin shall provide the final Soils Management Plan to Staff for review and acceptance.
- (12) Additional geotechnical borings shall be conducted and those results presented with the final geotechnical report. This shall include, but not be limited to, borings at the substation locations.

- (13) Additional soil corrosion testing shall be conducted at varying depths to further identify corrosion potential for consideration in the final engineering design.
- (14) Pile load testing shall be conducted to determine lateral and uplift load capabilities.
- (15) Border Basin shall install appropriate geotextile fabric on soil subgrade surfaces of access roads prior to gravel aggregate placement.
- (16) If Border Basin has not commenced a continuous course of construction for the proposed facility within five years of the date of the certificate's journalization, the certificate shall become invalid, unless the Board grants a waiver or extension of time.
- (17) As the information becomes known, Border Basin shall file to the public docket the date on which construction will begin, on which construction was completed, and on which the Facility begins commercial operation.
- (18) Border Basin shall obtain transportation permits or authorizations prior to the commencement of construction activities that require them. Applicant shall coordinate with the appropriate authority regarding any temporary road closures, road use agreements, driveway permits, lane closures, road access restrictions, and traffic control necessary for construction and operation of the proposed facility. Border Basin shall detail this coordination as part of a final transportation management plan submitted to Staff before the

preconstruction conference for review; construction activities shall not commence until Staff confirms that it complies with this condition.

- (19) Before commencement of construction activities in any affected areas, Border Basin shall obtain and comply with all necessary permits and authorizations. No less than seven days of issuance or receipt, Applicant shall file to the docket and provide to Staff copies of permits and authorizations with all supporting documentation. Applicant shall provide a schedule of construction activities and acquisition of corresponding permits for each activity at the preconstruction conference(s).
- (20) The certificate authority shall not exempt the Facility from any other applicable local, state, or federal rules or regulations nor be used to affect the discretion of any other local, state, or federal permitting or licensing authority in the areas subject to their supervision and control.
- (21) The Facility shall be operated in such a way as to assure that no more than 120 MW would at any time be injected into the Bulk Power System at any time.
- (22) Border Basin shall not commence any construction of the Facility until it has executed an Interconnection Service Agreement and Interconnection Construction Service Agreement with PJM. Applicant shall file in this docket either a copy of the executed Interconnection Service Agreement and Interconnection Construction Service Agreement or a letter stating that the Agreement has been signed.

- (23) Prior to the start of construction, Border Basin shall prepare a landscape and lighting plan in consultation with a landscape architect licensed by the Ohio Landscape Architects Board to address the aesthetic and lighting impacts of the Facility with an emphasis on any locations where an adjacent non-participating parcel contains a residence with a direct line of sight to the project area. The plan shall include measures such as fencing, vegetative screening or good neighbor agreements. Unless alternative mitigation is agreed upon with the owner of any adjacent, non-participating parcel containing a residence with a direct line of sight to the Facility's fence, the plan shall provide for vegetative screening to enhance the view from the residence and be in harmony with the existing vegetation and area viewshed. The plan shall incorporate planting design features or measures to address the aesthetic impacts to the traveling public, nearby communities, sensitive institutional land uses, and recreationalists. Applicant shall maintain vegetative screening for the life of the Facility and shall replace any failed plantings so that, after five years, at least 90 percent of the vegetation has survived. Border Basin shall maintain all fencing along the perimeter of the project in good repair for the term of the project and promptly repair any significant damage as needed. Lights shall be motion-activated and designed to narrowly focus light inward toward the facility, such as being downward-facing and/or fitted with side shields. Applicant shall provide the plan to Staff for review and confirmation that it complies with this condition.

- (24) Before the start of construction, Applicant shall submit to Staff for approval a solar panel perimeter fence type that is both small-wildlife permeable and aesthetically fitting for a rural location as set forth in Applicant's Response to the First Data Request from Staff filed on August 9, 2021. This conditional shall not apply to substation fencing.
- (25) Border Basin shall have a Staff-approved environmental specialist familiar with water quality protection issues and potential threatened or endangered species of plants and animals that may be encountered during project construction on site during construction activities that may affect sensitive areas. Sensitive areas that would be impacted by construction shall be identified on a map provided to Staff and shall include, but not be limited to, wetlands, county ditches, and streams, and locations of threatened or endangered species. The environmental specialist shall have authority to stop construction to assure that unforeseen environmental impacts do not progress and recommend procedures to resolve the impact. A map showing sensitive areas that would be impacted during construction with information on when the environmental specialist would be present shall be provided to Staff.
- (26) Border Basin shall have an environmental specialist experienced in drinking water quality protection sources on site during all construction activities that may impact public or private water supplies.

- (27) If Border Basin encounters any new listed plant or animal species or suitable habitat of these species prior to construction, it shall include the location in the final engineering drawings and associated mapping. Border Basin shall avoid impacts to these species and explain how it would avoid impacts during construction.
- (28) Border Basin shall construct the Facility in a manner that incorporates post-construction stormwater management under OHC00005 (Part III.G.2.e, pp. 19-27) in accordance with the Ohio Environmental Protection Agency's Guidance on Post-Construction Storm Water Controls for Solar Panel Arrays.
- (29) Unless coordination with ODNR and USFWS allows a different course of action, Border Basin shall adhere to the seasonal cutting dates of October 1 through March 31 for the removal of trees three inches or greater in diameter to avoid impacts to Indiana bats, northern long-eared bats, little brown bats, and tricolored bats. If coordination with these agencies allows clearing between April 1 and September 30, Border Basin shall docket proof of the completed coordination prior to clearing trees.
- (30) Unless coordination with ODNR and USFWS allows a different course of action, Border Basin shall conduct no in-water work in perennial streams from April 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat.

- (31) Border Basin shall contact Staff, ODNR, and the USFWS within 24 hours if state or federally listed threatened or endangered species are encountered during construction activities, and construction activities that could adversely impact the identified plants or animals shall be halted until an appropriate course of action has been agreed upon. Applicant shall keep a running list of and notify Staff and ODNR Department of Wildlife of any wildlife mortality or entrapment is discovered in the Facility during operation.
- (32) Border Basin shall prepare an updated vegetation management plan in consultation with ODNR and the county engineer before the start of any construction. Plan goals should include planting a minimum of 70 percent of the project area in beneficial vegetation using plant species listed in Attachment A of ODNR Recommended Requirements for Proposed Solar Energy Facilities in Ohio and shall follow the Ohio Solar Site Pollinator Habitat Planning and Assessment Form with a minimum score of 80 points. The plan shall explain how the project proposes to establish and maintain beneficial vegetation and pollinator habitat in accordance with the above guidelines and shall include mapping of the areas where pollinator habitat would be established and maintained. The plan shall also delineate that routine mowing would be limited to fall/spring seasons, as needed, to allow for natural reseeding of plantings and reduce impacts to ground-nesting birds provided, however, that more regular mowing shall be performed as necessary to prevent noxious weeds.

- (33) Border Basin shall take steps to prevent establishment and propagation of noxious weeds identified in Ohio Adm. Code Chapter 901:5-37, including its setback areas, during construction, operation, and decommissioning via procedures and processes specified and required by the projects vegetation plan and shall follow all applicable state laws regarding noxious weeds. Applicant shall provide annual proof of weed control for the first four years of operation with the goal of weed eradication significantly completed by year three of operation.
- (34) Any construction within FEMA delineated 100-year floodplain shall be coordinated with the local floodplain program administrator. All permitting or other documents authorizing construction in the floodplain shall be filed on to the case docket.
- (35) General construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m., or until dusk when sunset occurs after 7:00 p.m. Impact pile driving may occur between 7:00 a.m. and 9:00 a.m., and after 6:00 p.m. or until dusk when sunset occurs after 6:00 p.m., if the noise impact at non-participating receptors is not greater than daytime ambient Leq plus 10dBA. If impact pile driving is required during these hours, Applicant shall install a noise monitor in a representative location to catalog that this threshold is not being exceeded. Hoe ram operations, if required, shall be limited to the hours between 10:00 a.m. and 4:00 p.m., Monday through Friday. Border Basin shall notify property owners or affected tenants within the meaning of Ohio Adm.Code 4906-3-03(B)(2) of

upcoming construction activities including potential for nighttime construction.

- (36) At least 30 days before the preconstruction conference, Border Basin shall submit and docket an updated decommissioning plan and total decommissioning cost estimate without regard to salvage value that includes: (a) a provision that the decommissioning financial assurance mechanism include a performance bond where the company is the principal, the insurance company is the surety, and the Board is the obligee; (b) a timeline of up to one year for removal of equipment; (c) a provision to monitor the site for at least one additional year to ensure successful revegetation and rehabilitation; (d) a provision where the performance bond is posted prior to the commencement of construction; (e) a provision that the performance bond is for the total decommissioning cost and excludes salvage value; (f) a provision for road use agreements to coordinate repair of public roads damaged or modified during the decommissioning and reclamation process; (g) a provision that the decommissioning plan be prepared by a professional engineer registered with the state board of registration for professional engineers and surveyors; and (h) a provision stating that the bond shall be recalculated every five years by an engineer retained by Border Basin.
- (37) Retired solar panels marked for disposal shall be sent to an engineered landfill with various barriers and methods designed to prevent leaching of materials into soils and groundwater.

- (38) All water wells within the project area shall be “ground-truthed” to determine the exact locations prior to construction. Border Basin shall adhere to a minimum solar facility equipment setback of 50 feet from any existing domestic use water supply well.
- (39) Upon final Facility design, Border Basin will coordinate with OEPA’s Division of Drinking and Groundwater to identify any potential notification requirements and additional measures that may need implementation during construction to ensure public water supplies are not impacted.
- (40) Thirty days before the preconstruction meeting, Border Basin shall submit for Staff’s review and concurrence a final Soils Management Plan as outlined in the Engineering Constructability Report.
- (41) Operational sound levels shall not exceed ambient sound levels plus 5dBA, as listed in table 9 of the acoustic assessment report, at non-participating receptors. If the inverters or substation transformer chosen for the project have a higher sound power output than those used in the noise model, Border Basin shall show that sound levels will not exceed the daytime ambient level plus 5 dBA at any non-participating sensitive receptor and will be submitted at least 30 days prior to construction. If noise data is not available from the inverter or transformer manufacturer, an operational noise test may be performed to comply with this condition. The test must be performed on a sunny day in the months of May-August, at a distance equal to the minimum distance from an

inverter at a non-participating residence. If the test shows the operational noise level is greater than the project area ambient Leq level plus 5 dBA, additional noise mitigation will be required. This condition is complied with if the test shows the operational noise level is less than project area ambient Leq level plus 5 dBA.

- (42) Border Basin shall avoid, where possible, or minimize to the extent practicable, any damage to functioning field tile drainage systems and soils resulting from the construction, operation, and/or maintenance of the Facility in agricultural areas. Damaged field tile systems shall be promptly repaired or rerouted to at least original conditions or modern equivalent at Applicant's expense to ensure proper drainage. The affected landowner(s) may agree to not having the damaged field tile system repaired, but only if: the filed tile systems of adjacent landowners remain unaffected by the non-repair and the damaged field tile does not route directly onto or into an adjacent parcel. Border Basin shall design the project to ensure that nearby parcels are protected from unwanted drainage problems due to construction and operation of the project. Before the start of any construction, Border Basin shall document benchmark conditions of surface and subsurface drainage systems including the location of laterals, mains, grassed waterways, and county maintenance/repair ditches. Together with an independent tile and drainage consultant, Applicant shall consult with owners of all parcels adjacent to the property, the county soil and water conservation district, and the county engineer to

require drainage system information over those parcels. Applicant shall consult with the county soil and water conservation district and the county engineer for the tile located in a county maintenance/repair ditch and shall consult with the county engineer for tile, storm sewers and ditches located in a county or township right-of-way. A map of discovered and repaired drain tile systems shall be filed in the case docket once construction is complete.

- (43) Before the start of construction, Border Basin shall finalize an MOU with OHPO to mitigate for and/or avoid cultural resources with potential adverse effects due to the project. Applicant shall submit the MOU to Staff and file the same to the docket of this case.
- (44) At least 30 days before the start of construction, Applicant shall file a copy of the final complaint resolution plan for construction and operation of the Facility to the public docket. At least seven days before the start of construction and at least seven days before the start of facility operations, Border Basin shall notify by mail affected property owners and tenants; all residents, airports, schools, and libraries located within one mile of the project area; parties to the case; county commissioners, township trustees, and emergency responders; and any other person one who requested updates regarding the project. These notices must provide information about the project, including contact information and a copy of the complaint resolution plan. The start of construction notice shall include written confirmation that Applicant has complied with all preconstruction-related

certificate conditions, as well as a timeline for construction and restoration activities. The start of facility operations notice shall include a timeline for the start of operations, as well as written confirmation of preconstruction-related certificate conditions. Applicant shall file a copy of these notices on the public docket. During the construction and operation of the facility, Border Basin shall submit to Staff a complaint summary report by the fifteenth of April, July, October, and January of each year during construction and through the first five years of operation, which report must include a list of all complaints received through the complaint resolution process, a description of actions taken towards resolution, and a status update if yet to be resolved. The complaint summaries will also be filed to the public docket

(Joint Ex. 1 at 4-10.)

VII. CONSIDERATION OF STIPULATION

{¶ 120} Pursuant to Ohio Adm.Code 4906-2-24, parties before the Board are permitted to enter into stipulations concerning issues of fact, the authenticity of documents, or the proposed resolution of some or all of the issues in a proceeding. In accordance with Ohio Adm.Code 4906-2-24(D), no stipulation is binding on the Board. However, the Board affords the terms of the stipulation substantial weight. The standard of review for considering the reasonableness of a stipulation has been discussed in numerous Board proceedings. See, e.g. *In re Hardin Wind, LLC*, Case No. 13-1177-EL-BGN (Mar. 17, 2014); *In re Northwest Ohio Wind Energy, LLC*, Case No. 13-197-EL-BGN (Dec. 16, 2013); *In re AEP Transm. Co., Inc.*, Case No. 12-1361-EL-BSB (Sept. 30, 2013); *In re Rolling Hills Generating LLC*, Case No. 12-1669-EL-BGA (May 1, 2013); *In re American Transm. Systems Inc.*, Case No. 12-1727-EL-BSB (Mar. 11, 2013). The ultimate issue for the Board's consideration is whether

the agreement, which embodies considerable time and effort by the signatory parties, is reasonable and should be adopted. In considering the reasonableness of a stipulation, the Board has used the following criteria:

- (a) Is the settlement a product of serious bargaining among capable, knowledgeable parties?
- (b) Does the settlement, as a package, benefit ratepayers and the public interest?
- (c) Does the settlement package violate any important regulatory principal or practice?

A. Is the settlement a product of serious bargaining among capable, knowledgeable parties?

{¶ 121} Border Basin and Staff submit that the Stipulation is the result of an open process in which all intervenors were given the opportunity to participate. Counsel for all represented parties and all pro se intervenors were invited to all settlement negotiations, and representatives of all parties were aware of and knowledgeable about the issues addressed in the Stipulation and were kept informed of progress of deliberations. (App. Ex. 25A at 5.) Staff states that all parties but the individual intervenors were represented by experienced counsel. Staff and Applicant assert that the Stipulation embodies a comprehensive compromise of issues identified by the parties, which represent diverse interests.

{¶ 122} Intervenors⁴ disagree, arguing that not all intervenors were present at the negotiations due to scheduling issues (Overmyer Ex. 9A at 2). Intervenors also argue against a finding of diversity of interests, highlighting that none of the nine individual resident intervenors are signatories. Finally, Intervenors assert that their lack of counsel precludes a determination that serious bargaining occurred given Board precedent pointing to the

⁴ For clarity and ease of argument, although the arguments addressed herein were briefed only by Ms. Gardner, the Board attributes the same to all non-signatory individual intervenors collectively.

participation of knowledgeable competent counsel as support for such a finding. Based on these factors, Intervenor state that the Stipulation fails the first inquiry.

{¶ 123} Border Basin submits that Intervenor's arguments are unfounded. Applicant clarifies that Ms. Gardner had counsel of record, who did not participate at hearing or make an appearance and later withdrew, and that other individual intervenors made the decision not to engage counsel. Applicant further reasons that Intervenor made the decision not to attend settlement discussions, which were offered on various occasions and at all hours of the day. Applicant maintains that Intervenor's choice not to participate does not render the Stipulation deficient, nor is their choice indicative of a lack of good faith negotiating or serious bargaining. Furthermore, even without nine individuals, Applicant asserts that the Stipulation's Signatory Parties represent a diverse group, including government officials representing residents in the project area, OFBF representing farming interests in the state, and Board Staff, which is charged with objectively balancing all interests.

{¶ 124} The Board finds that the Stipulation is the product of serious bargaining among capable, knowledgeable parties. The record supports the conclusion that there were extensive negotiations held over at least five sessions (Tr. II at 244). While not all intervenors participated in those discussions, all were invited to attend and were informed of the progress of deliberations (Overmyer Ex. 9A at 2; App. Ex. 25A at 5). Mr. Overmyer participated, presumably without counsel, in several discussions with Applicant regarding his concerns (Tr. I at 26, 28). Similarly, a meeting between Applicant and Mr. Lewis resulted in modifications to a fence line based on Mr. Lewis' expressed concerns (App. Ex. 25 at 8). Intervenor were well-informed, active participants during the hearing; they asked probing questions and elicited pertinent information during cross-examination. Likewise, Mr. Overmyer and any other pro se intervenor could have participated in settlement discussions. Lack of counsel does not equate to lack of ability or opportunity to negotiate on one's own behalf. Furthermore, one or more pro se intervenor's presence in a case does not preclude a finding that serious bargaining occurs during negotiations. If this were true,

no Stipulation lacking a pro se intervenor's signature could pass muster under the Board's test. Finally, the Board notes that the Signatory Parties do, in fact, represent a diversity of interest. Contrary to Intervenor's implications, local residents were represented; Intervenor Hancock County and Cass Township, each of which represents the interests of its respective constituents, participated in negotiations and are both signatory parties to the Stipulation (Tr. II at 244).⁵ In short, the Board finds that the Stipulation satisfies the first prong of the reasonableness test.

B. Does the settlement, as a package, benefit ratepayers and the public interest?

{¶ 125} Border Basin and Staff submit that the Stipulation ensures that the construction and operation of the Facility benefits the public interest. Staff states that the commitments in the Stipulation enhance and strengthen recommendation made in the Staff Report, all of which will ensure that the Project will represent minimum adverse impacts during both construction and operation. Staff further argues that the Township's and County's participation in negotiations and ultimate agreement to the Stipulation is evidence that the Stipulation represents a balancing of public interests.

{¶ 126} Border Basin maintains that the Stipulation results in a Project that presents positive socioeconomic benefits and will serve the public in the local community, surrounding regions, and the state of Ohio. Applicant points to the approximately \$1,080,000 million in annual contributions to taxing entities, such as the township and local school districts, over the life of the Project, funds that would not be generated absent the Project (App. Ex. 1 at 24; App. Ex. 25 at 10; Staff Ex. 1 at 14). This is in addition to other economic benefits such as annual lease payments to participating landowners that can flow back into the local economy and the expected creation of 329 total jobs in the state during construction with associated earnings of \$21.3 million and 14 jobs during operations with

⁵ Cass Township, in fact, had initially expressed opposition to the Project in a letter filed as a public comment and noted in the Staff Report (Staff Ex. 1 at 42). The Township's presence as a signatory party to the Stipulation after originally expressing its concerns against the Project is further evidence that serious bargaining occurred.

associated employee earnings of \$0.8 million (App. Ex. 1 at 23-24, Exhibit G; App Ex. 25 at 10-11; App. Ex. 25A at 5; Staff Ex. 1 at 14). Other cited benefits include monitoring of historic orphaned oil and gas wells, meeting industrial and commercial demands for zero emission electricity, and related interconnection and transmission upgrades contributing to a more robust electrical grid (App. Ex. 25 at 7; App. Ex. 25A at 5).

{¶ 127} Intervenors, on the other hand, contend that the Stipulation is not in the public interest because it lacks a mitigation plan for the substation. Intervenors argue that the Stipulation does not provide any aesthetic mitigation plan for the substation, and the application mentions only the possibility of vegetative screening for a six-foot, chain-link fence (App. Ex. 1 at 6, 10). Intervenors contend that Applicant's assurances that adherence to the Stipulation will protect local residents from lighting and aesthetic impacts of the substation are empty because the only commitments for enhanced vegetative screening exempt the substation. Intervenors further allege that Staff Witness O'Dell testified that aesthetic mitigation is not required for the substation (Tr. II at 240-241). Intervenors assert that the only alternatives to vegetative screening for an aesthetic remedy are setbacks, on which the Stipulation is silent, or relocation of the substation. Without aesthetic protections, Intervenors contend the Stipulation is not in the public interest.

{¶ 128} Intervenors further argue that the Stipulation is contrary to the public interest because it does not include any condition to address known ponding/flooding hazards near the substation. Intervenors concede that the Stipulation mandates an environmental specialist be onsite during construction activities that may affect sensitive areas. Intervenors, however, criticize Border Basin's evaluation of such potentially sensitive areas because it did not identify any flooding, which is contradicted by photographic evidence presented by Intervenors. Even so, argue Intervenors, the Stipulation does not require definitive action to prevent exacerbation of ponding or flooding in the substation area, which precludes a finding that the Stipulation is in the public interest.

{¶ 129} Staff states that Intervenor’s arguments that the Stipulation fails to provide impact mitigation for aesthetics and consideration of flooding are baseless. Staff affirms that the record provides an abundant amount of information and documentation regarding both topics. For example, Staff maintains that the Visual Impact Analysis (VIA) provides sufficient evidence regarding visual impacts of the over Project, including the substation, which would be mitigated through enhanced vegetative screening as set forth in the Stipulation. Staff further avers that any flooding concerns are addressed in Conditions 25, 28, and 42, which were supported with testimony from both Staff and Border Basin.

{¶ 130} Border Basin argues that Intervenor’s position misreads and/or misconstrues the extent of Applicant’s obligations under the Stipulation. Border Basin stresses that the Stipulation obliges Applicant to uphold not only the commitments made in the Stipulation itself, but also the extensive and significant commitments—including all mitigating measures—made “in the application as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in the [Staff Report]” (Jt. Ex. 1 at 3). These commitments encompass the entirety of the Project, including the substation. Thus, mitigating measures such as landscape screening, lighting, fencing, setbacks, including the 600-foot setback from the substation to the Overmyers’ residence, are absolute and cannot be reduced (App. Ex. 1, Exhibit A; App. Ex. 11, Attachment Appendix G, Figure 3-2; Tr. I at 29). Similarly, although the landscape and lighting plan is not yet finalized, it cannot commit to less than what is promised in the application and Stipulation.

{¶ 131} Applicant further maintains that Intervenor’s assertion that no aesthetic mitigation is required for the substation misinterprets the record. Border Basin clarifies that the Project’s power substation and AEP’s switching station are co-located but different: Border Basin will own the Project substation and AEP will own the switching station; each will be in their own fenced enclosures directly adjacent to each other (App. Ex. 1, Exhibit F; App. Ex. 11, Attachment Appendix G, Figure 3-2). Border Basin explains that the application and Condition 23 of the Stipulation require Applicant to prepare a final landscape and

lighting plan that addresses the aesthetic impacts of the Facility, which includes the substation, with an emphasis on any locations where an adjacent, non-participating parcel contains a residence with a direct line of sight to the project area (Jt. Ex. 1 at 5-6). Border Basin emphasizes that all requirements of Condition 23 apply to the substation as part of the Project; the only condition in the Stipulation that does not apply to the substation relates to fencing (Condition 24). This is because substation fencing is governed by the NESC (Tr. II at 235, 240). Similarly, lighting at the substation is governed the NESC, which requires security lighting (Tr. I at 29-30). This does not signify, however, that Applicant need not follow mitigating measures applicable to the Project (Tr. I at 28-29). This includes working with a landscape architect to mitigate direct views of the Project infrastructure, including Intervenor's views of the substation. Consistent with the Stipulation, Border Basin represents that it has specifically committed to add the appropriate vegetative screening as chosen by the landscape architect starting from the existing transmission lattice tower opposite the Overmyers' residence and extending south to a point as determined by the landscape architect to fully mitigate the direct line of sight.

{¶ 132} Applicant additionally states that Intervenor's allegation that the Stipulation is not in the public interest because it does not require any action to prevent exacerbation of ponding or flooding in the area of the substation is incorrect. Here, Border Basin points out that any ponding or flooding currently experienced in the area is not associated with or caused by the Project. Still, there is record evidence to support findings that the Project may, in fact, alleviate the existing problems with permanent vegetation, the incorporation of post-construction stormwater management practices, the presence of an environmental specialist during construction activities that may affect sensitive areas (such as county ditches), and consultation with the county soil and water conservation district and county engineer regarding existing drainage systems (Tr. I at 57-58; Jt. Ex. 1 at 6, 8, 9-10).

{¶ 133} Finally, Border Basin states that Intervenor's present no evidence to dispute the numerous other social and economic benefits the public will realize as a result of the Project. Applicant also directs the Board's attention to commitments in the Stipulation that

enhance Staff's recommendations to further promote the public interest, such as planting a minimum of 70 percent of the project area in beneficial vegetation utilizing ODNR recommended species, additional protections against the establishment and propagation of noxious weeds and invasive species, additional assurances that field tile drainage systems will be accounted for in the design and construction of the Project, and the monitoring of historic orphan gas and oil wells (Jt. Ex. 1 at 5-6, 9; App. Ex. 25A at 5).

{¶ 134} In reply briefs, Intervenor raise two new arguments against a finding that the Stipulation is beneficial and in the public interest and couch the arguments as challenges to a finding that the Facility would serve the public interest, convenience, and necessity under R.C. 4906.10(A)(6). First, Intervenor criticize Border Basin's public outreach regarding the Project. Intervenor note that Applicant's first public information meeting did not conform to Board rules because Applicant did not send notice to all affected and adjacent property owners. Thus, Intervenor condemn any effort by Applicant to describe the second public information meeting as an act of good will or as proof of a robust public information campaign. Instead, Intervenor observe that the second public information meeting was legally necessary to fix the initial error. Citing the error in the initial notice, and Ms. Gardner's testimony that she still did not receive written notice of the Project until receiving letters on January 18, 2022, Intervenor argue that Applicant did not develop the Project with appropriate consideration to local residents and that Applicant's level of public engagement fails to support a finding that the Project is in the public interest (Tr. I at 36, 178). Second, Intervenor submit that the Board must not give too much weight to Border Basin's citations to potential PILOT funds in considering the projected benefits of the Project in comparison to the potential negative impacts. Intervenor contend that no particular economic benefit should be an offset to protecting the public. Thus, Intervenor urge the Board to properly weigh any touted economic benefit of a PILOT in considering whether the Project presented through the Stipulation benefits the public interest.

{¶ 135} The Board concludes that the Stipulation, as a whole, benefits ratepayers and the public interest. The Stipulation supports the application and incorporates all

commitments made by Border Basin in regard to the construction and operation of the Facility in a manner as to benefit the public interest, convenience, and necessity while still representing the minimum adverse environmental impacts. Contrary to Intervenor's arguments, the Stipulation makes mandatory all commitments to mitigating measures, whether made in the application, supplemental materials, data requests, or in the Stipulation (Jt. Ex. 1 at 3). Thus, the Stipulation does enforce the various setback commitments made by Border Basin, such as setbacks of 300 feet from nonparticipating residences where there is a roadway between the Project and the residence, 500 feet from non-participating residences in areas not separated by a roadway, and 600 feet from the substation to the Overmyers' residence. Accordingly, these and other committed setbacks are enforceable requirements of any certificate issued by the Board. Additionally, to address concerns relative to the project and consistent with other recent decisions regarding setbacks, the Board finds that the Facility design must incorporate a minimum setback from the Project's solar modules of at least 50 feet from non-participating parcel boundaries not containing a residence and of at least 150 feet from the edge of any state, county, or township road within or adjacent to the project area.

{¶ 136} Furthermore, the Board finds that the Stipulation requires mitigation of the adverse aesthetic impacts of the substation, as it is part of the Project as a whole, with an emphasis on any locations where an adjacent non-participating parcel contains a residence with a direct line of sight to the project area, which is the case for some Intervenor's (Jt. Ex. 1 at 5-6). The only Stipulation condition that the substation is exempt from is that relating to fencing: while the Project's perimeter fencing must be both small-wildlife permeable and aesthetically fitting for a rural location (i.e., agricultural fencing), the fencing of the substation is governed by electric safety requirements beyond Applicant's control. Furthermore, the record supports the conclusion that the application and Stipulation did consider that areas of surface water ponding could be encountered due to localized depressions, but that these occurrences could be reduced by observing best practices, vegetation management, utilizing expert resources such as environmental specialists,

county soil and water conservation districts, county engineers, and drainage consultants, adherence to post-construction stormwater management, avoidance of floodplains, and prompt repair of compromised drain tile (App. Ex. 1, Exhibit O at 7; Jt. Ex. 1 at 5-8, 9-10).⁶ Additionally, it is clear that the Project brings economic benefits to the local community and the state in the form of job creation, additional streams of revenue in the form of lease payments, and the injection of employee earnings into local economies. And, notwithstanding Intervenor's concerns about too much attention being paid to Hancock County's approval of a PILOT agreement, there can be no dispute that the Project will bring additional revenues to the local taxing districts. Additionally, the Project will generate zero emission energy that is sought after by industrial and commercial interests, as well as residential ratepayers. We further conclude that Cass Township's and Hancock County's participation in the Stipulation as Signatory Parties, after initially expressing objections to the Facility, is strong evidence of the Project's serving the public interest and imparting beneficial impacts on the local community.

{¶ 137} The Board is sensitive to Intervenor's concerns regarding Applicant's error pertaining to properly notifying adjacent landowners and affected tenants of the first public information meeting (App. Ex. 18). However, the Board also acknowledges that notice was sent to some affected residents and information regarding the initial public interest meeting was published in a newspaper of general circulation. Inadvertent failure to notify the persons described in the rule requiring notice does not constitute a failure to give notice. Ohio Adm.Code 4906-3-03(B)(2). The Board further finds that Border Basin took steps to alleviate its error by holding a second public information meeting for which a separate letter of notice was issued (App. Ex. 19, App. Ex. 20; App. Ex. 21). Intervenor's acknowledge that they were properly included in the second notice (App. Ex. 20; Tr. I at 148, 178-180).

⁶ The Board additionally notes that the photographic evidence of flooding is limited to conditions on a single day, July 17, 2021, and permanent flood zone signs require manipulation to indicate flooding conditions (Noel Ex. 1, 1-A; Overmyer Exs. 1, 2; Tr. I at 32-33). There is no record evidence to support a finding that the area near the substation is subject to consistent or persistent flooding conditions requiring specific study.

Additionally, the original failure in notice did not prevent Intervenor's participation in this proceeding (Tr. I at 170).

{¶ 138} Finally, the Board specifically adopts the findings of the Staff Report, as modified by the Stipulation, that the application, as supplemented and clarified by responses to data requests, was sufficient to evaluate the certification criteria in R.C. 4906.10. And, with regard to Intervenor's implication that the application as specifically deficient as to R.C. 4906.10(A)(6), we note that our conclusions regarding whether the Stipulation serves the public interest under our reasonableness test mirror the considerations made in determining that the Facility will serve the public interest, convenience, and necessity under R.C. 4906.10(A)(6).

C. Does the settlement package violate any important regulatory principle or practice?

{¶ 139} Staff and Applicant assert that the Stipulation does not violate any important regulatory principle or practice (App. Ex. 25A at 5). Staff maintains that the record reflects that Applicant has complied with every statutory and regulatory requirement involved in requesting a certificate for the Project. Border Basin contends that Stipulation, as supported or supplemented by the application and testimony, supports a finding and determination by the Board that all criteria in R.C. 4906.10 have been met. Border Basin further asserts that the Project is consistent with Ohio's legislative desire for driving economic benefits and jobs, as well as infrastructure investment for the clean industry, and will contribute to a more robust electrical grid in Ohio (Staff Ex. 1 at 14; App. Ex. 25 at 7).

{¶ 140} Intervenor's argue that the Stipulation does not meet the Board's reasonableness test because it violates important regulatory principals. Specifically, Intervenor's assert that Border Basin's Project does not satisfy R.C. 4906.10(A)(2) or (A)(3), and those deficiencies are not cured by the Stipulation. Given these claimed deficiencies, Intervenor's contend that the Board would violate an important regulatory principle if it approved the Project via the Stipulation.

{¶ 141} In initial briefing, Intervenor challenge the Project's compliance with R.C. 4906.10(A)(2) on two grounds. First, Intervenor assert that the application fails to evaluate any visual impacts of the substation. Second, Intervenor contend that Border Basin did not analyze a vantage point sufficiently representative of adjacent, non-participating residents. Intervenor argue that, in accordance with Ohio Adm.Code 4906-4-08(D)(4), the Board must consider aesthetics and visual impacts to non-participating residences as part of its socioeconomic impact review. They further argue that, under Ohio Adm.Code 4906-4-08(D)(4)(e), photographic simulations or pictorial sketches of the proposed facility from public vantage points covering a range of landscapes and viewer groups must be provided and, under Ohio Adm.Code 4906-4-08(D)(4)(f), measures that will be taken to minimize adverse visual impacts created by the facility, including the project area location and visual screening, must be described.

{¶ 142} Intervenor submit that Border Basin's application fails under R.C. 4906.10(A)(2) because the VIA does not study the visual effects of the substation, especially from the vantage point of residences located within 1,500 feet of the substation. Instead, citing the low profile of the ancillary features and the limited footprint of the collector stations, the VIA focuses on the potential visual effects associated with the solar panels (App. Ex. 1, Exhibit T at 1-2). Given this representation, Intervenor contend the VIA is deficient. Additionally, to the degree that any impacts are identified, Intervenor allege that Border Basin does not definitively describe measures that will be taken to minimize adverse impacts. In reply briefing, Intervenor similarly claim that Border Basin's application failed to adequately identify or account for evidence of flooding in the area of the substation.

{¶ 143} Intervenor further argue that none of the simulations included in the VIA depict views of the substation and that Applicant did not coordinate with local residents or public officials in selecting the vantage points for producing simulations. Intervenor challenge each of the chosen vantage points studied as either too great a distance from the Project or generally non-representative of non-participating properties adjacent to the

Project. In short, Intervenors find fault in the VIA because none of the photographic renderings capture any vantage point from an adjacent, non-participating residence.

{¶ 144} In reply briefing, Intervenors add that the record does not contain evidence allowing the Board to make determinations as the effect of glare on federally protected bird species because said effects were not studied (Tr. I at 107). Intervenors also claim that birds of conservation concern (BCC) may reside or migrate through the project area, but the application does not address the Project's impacts on BCC. Intervenors similarly complain that Border Basin did not investigate the Project's impacts on bald eagles.

{¶ 145} Border Basin and Staff submit that the record contains ample evidence from which the Board can determine the probable visual impact of the Facility. Applicant contends that the VIA conservatively modeled the ten-mile study area and recognized that impacts would vary depending on factors such as proximity, screening provided by vegetation, terrain, or development, and personal attitudes held by a viewer regarding solar energy (App. Ex. 1, Exhibit T at 8-9). Applicant maintains that the VIA concluded that, while only a limited number of homes are located in the area, viewers in the immediate vicinity may have unobstructed views. Indeed, the Project is likely to be visible in the immediate vicinity from locations where vegetation does not screen the views. As expected, the visual effects greatly diminish with distance. (App. Ex. 1, Exhibit T; App. Ex. 32 at 6). The VIA indicates that views from most surrounding areas will be screened by vegetation and structures while roads and rural residential development will have limited views (App. Ex. 1, Exhibit T, App. Ex. 13; App. Ex. 32). Border Basin stresses that the application does comport with the administrative rules briefed by Intervenors. Applicant further disputes Intervenors' allegation that no mitigating measures are described. To the contrary, Applicant notes that it has committed to provide vegetative screening to help obstruct or soften views of the Facility, including the substation (App. Ex. 1, Exhibit T at 9). Additionally, mitigating measures are thoroughly discussed and committed to in the Stipulation, specifically in Condition 23. Finally, Border Basin disputes Intervenors'

assertion that Applicant did not coordinate with local residents, public officials, or historic preservation groups in preparing the application.

{¶ 146} Staff's arguments shadow and supplement those made by Border Basin. Staff states that the VIA reviewed potential visual impacts within ten miles of the project area. According to Staff, the VIA provides evidence regarding the different types of visual impacts associated with the Project, including interruptions of the shapes, colors, and contours of the terrain from different viewpoints and distances. Staff additionally points to the findings cataloged in the Staff Report as evidence for the Board's consideration, including findings that aesthetic impacts and considerations are measured against surrounding land use features and viewers' subjective opinions, that the rural nature of the project area limits the number of potential viewers and the duration of such views, and that existing woodlots offer screening (Staff Ex. 1 at 11). As to mitigating measures of general visual impacts, Staff argues that Applicant has committed to a setback of at least 300 feet from non-participating residences in locations where there is a roadway between the Project and the residence and a setback of at least 500 feet from non-participating residences not separated by a roadway (App. Ex. 6). Additionally, Applicant proposes mitigation through vegetative screening at sensitive areas around the Project site (Staff Ex. 1 at 11).

{¶ 147} Staff further submits that there is no requirement—statutory or otherwise—that an applicant specifically study substations for visual impacts. Moreover, fencing around the substation is governed by the NESC and other security and safety requirements outside the Board's purview, as is the lighting (Tr. II at 240; Tr. I at 29-30). Staff contends that impacts from the substation were not ignored but were considered as part of the overall Project and disputes Intervenor's claims that the vantage points used in the VIA are deficient. Staff further points to Applicant's glare analysis (App. Ex. 1, Exhibit M), which indicates no glare is predicted from the Project.

{¶ 148} Intervenor additionally challenge the Project's compliance with R.C. 4906.10(A)(3), asserting that Applicant has not adequately justified its substation siting,

which precludes the Board from finding minimal environmental effect. Intervenor further assert that Border Basin failed to respond to evidence of flooding in the area of the proposed substation. In essence, Intervenor contend that because the substation could be located elsewhere within the Project's footprint—at a location that could be less intrusive to Intervenor—its siting by Applicant cannot be found to represent the minimum effect. In support of this argument, Intervenor point to record evidence that at least one alternative location was contemplated. Intervenor further contend that the possibility of encountering an unanticipated discovery that could force the relocation of Project components is proof that the current siting of the substation fails to comply with R.C. 4906.10(A)(3). Continuing, Intervenor argue that Applicant failed to consider or respond to evidence of flooding/ponding in the area of the substation and, therefore, no determination can be made that the substation will represent the minimum adverse environmental impact.

{¶ 149} Staff contends that Applicant has adequately justified the siting of the substation through evidence sufficient for finding minimum impacts under R.C. 4906.10(A)(3). Staff states that many criteria were considered in siting the Project, of which the substation is only one part. Criteria considered included but is not limited to strong land fundamentals and compatible land use, existing transmission interconnection infrastructure, an industrial base with high electricity demand, landowner interest, natural buffers, and limited environmental constraints. (App. Ex. 1 at 14; Staff Ex. 1 at 31.) Staff further asserts that the area for development has been continuously refined. Staff maintains that Intervenor's argument regarding flooding is unfounded; Conditions 25, 28, and 42 provide mitigating measures against risks of flooding within the project area, including the substation (Jt. Ex. 1 at 6, 7, 9-10; Tr. I at 34-35; Tr. II at 260-261, 263).

{¶ 150} Border Basin also contends that there is ample record evidence to support the siting of the substation. Applicant cites extensively to Exhibit F of its Application, which contains its interconnection filings. Border Basin explains that the developers must submit both a primary and an alternate point of interconnection (POI) for evaluation in the PJM feasibility study and that Applicant's primary POI was chosen because it was deemed to

have the highest likelihood to result in a viable cost profile for the overall interconnection at the end of the PJM facilities study. Prior to submitting its request, Border Basin had considered two additional alternative locations, both of which were deemed unworkable because transmission line spans were adjacent to transmission towers abutting the southern and northern sides of the Norfolk Southern Railroad. Additionally, one of the studied locations would have been less than 300 feet from a non-participating residence. (App. Ex. 1, Exhibit F.) Border Basin continued to investigate other potential options for the substation siting, but found that proposed alternatives presented considerable barriers, such as historical oil and gas wells and other residences (Tr. I at 30). Furthermore, as the Project advanced into and beyond the system impact study and into the PJM facilities study stage, any changes to the location of the POI could be deemed a material modification, requiring the Project to withdraw from the interconnection queue and begin the PJM process anew. Still, in order to address the Overmyers' concerns, Border Basin repositioned the substation to increase the setback to 600 feet. Applicant stresses that "considering the state of available technology and the nature and economics of the various alternatives, and other pertinent consideration the substation siting is not arbitrary, is supported by record evidence, and allows a finding of finding of minimum adverse environmental impact. R.C. 4906.10(A)(3).

{¶ 151} Border Basin similarly refutes Intervenor's arguments regarding flooding under R.C. 4906.10(A)(3). Applicant notes that Intervenor's criticize the hydrologic study as not assessing the substation's impact on flooding while also conceding that the substation area is not delineated within a 100-year flood plain. Border Basin contends that Intervenor's concerns regarding flooding pertain to areas of poor drainage during specific rain events, not potential flooding caused by the presence of the solar arrays or substation. Border Basin further contends that, once the Project is constructed according to best management practices and processes outlined in the Hydrology and Flood Inundation Report, drainage in the area could be improved compared to current conditions (App. Ex. 1, Exhibit O, Jt. Ex. 1 at 9; Tr. I at 57).

{¶ 152} Consistent with the Staff Report, the Board finds that the nature of the Facility's probable visual impact has been properly evaluated and determined under R.C. 4906.10(A)(2) and that Applicant's siting of the substation within the Project footprint does not preclude a finding of minimum adverse environmental impacts under R.C. 4906.10(A)(3). The Board notes that in focusing on one component of the Facility—the substation—Intervenors insert requirements that do not exist. There is no requirement that the probable environmental impacts specifically assignable to the substation be presented and analyzed. Instead, it is this Board's obligation to find and determine the nature of the probable visual impact of the Facility as a whole. The Board finds that the record allows that determination to be made. The VIA evaluated "the potential visual effects of the proposed Project, including solar panels *and an onsite substation* that will connect directly to the existing transmission line" (Emphasis added.) (App. Ex. 1, Exhibit T at 1). And, in addition to demonstrating the potential visibility of the Project in the surrounding area, the VIA specifically included local residents within its viewer groups (App. Ex. 1, Exhibit T at 4). Further, Witness Brooks testified regarding her methodology in selecting the vantage points, as required by Ohio Adm.Code 4906-4-08(D)(4)(e) (App. Ex. 1, Exhibit T at 5; Tr. I at 67-68, 71). Intervenors would prefer the substation be sited elsewhere, but there is no evidence to support a finding that such a modification would present fewer or less substantial environmental impacts.

{¶ 153} As discussed above, there is ample evidence to find that the Project, and therefore the substation, presents minimum adverse environmental impacts with regard to aesthetics. Condition 23 of the Stipulation requires mitigation of all adverse aesthetic impacts of the Project, with an emphasis on any locations where an adjacent non-participating parcel contains a residence with a direct line of sight to the project area, which is the case for some Intervenors (Jt. Ex. 1 at 5-6). Intervenors' arguments regarding vegetative screening to the contrary are without merit. Similarly, with regard to flooding impacts and mitigating measures, the Board reiterates that the record supports the conclusion that the application and Stipulation sufficiently identified the possibility of

flooding and ponding due to localized depressions as well as avenues for addressing and reducing those concerns (App. Ex. 1, Exhibit O at 7; Jt. Ex. 1 at 5-8, 9-10). Additionally, the Staff Report affirmatively states that the Project will not impact a 100-year floodplain (Staff Ex. 1 at 28).

{¶ 154} The Board similarly rejects Intervenor's arguments regarding glare and migratory birds, the Board notes that Applicant Witness McCluskey testified that, in his professional opinion, most migrating birds would not be affected by the Project (Tr. I at 127). Furthermore, no BCC were identified during Applicant's onsite survey investigation, which indicates that the potential for glare impacts is extremely low (App. Ex. 1, Exhibit P). Similarly, while there is evidence of eagles being present in the vicinity of the project area, neither bald nor golden eagles were identified in the wildlife survey (Staff Ex. 1 at 28-29).

{¶ 155} Based on the foregoing, the Board specifically finds that the probable visual impacts of the Project have been evaluated and determined in compliance with R.C. 4906.10(A)(2). The Board further finds no merit to the Intervenor's challenge to a determination that the Facility represents the minimum adverse environmental impacts due to substation siting. On the contrary, the Board finds that the record supports a finding that the statutory inquiry under R.C. 4906.10(A)(3) is satisfied. As such, we find no merit to Intervenor's argument that adopting the Stipulation would constitute a violation of any important regulatory principle or practice.

VIII. CONCLUSION

{¶ 156} Based on the record in this proceeding, the Board concludes that all of the required elements of R.C. Chapter 4906.10 are satisfied for the construction, operation, and maintenance of the solar powered generation facility described in Border Basin's application, subject to the conditions set forth in the Stipulation and consistent with this Opinion, Order, and Certificate. The Board thus approves and adopts the Stipulation and hereby issues a certificate to Border Basin in accordance with R.C. Chapter 4906.10.

IX. FINDINGS OF FACT AND CONCLUSIONS OF LAW

{¶ 157} Border Basin is a person under R.C. 4906.01(A).

{¶ 158} The proposed solar-powered electric generation facility is a major utility facility as that term is defined in R.C. 4906.01(B).

{¶ 159} On April 26, 2021, Border Basin filed a preapplication notification regarding its proposed Project.

{¶ 160} On April 26, 2021, having previously obtained Board approval, Applicant filed its notice of a virtual public information meeting to affected property owners and tenants, local public officials, local agencies, first responders, the school district, and the local library. And on May 11, 2021, Applicant filed its proof of publication noticing the public information meeting in *The Courier*.

{¶ 161} On June 15, 2021, as supplemented on July 21, 2021, August 31, 2021, September 29, 2021, and November 12, 2021, Border Basin filed its application for a certificate to construct and operate a solar-powered electric generation facility and a motion for protective order requesting that parts of its application be kept confidential. The motion for protective order was granted by Entry dated March 8, 2022.

{¶ 162} On August 6, 2021, Applicant filed notice of its intent to hold a second public information meeting on August 16, 2021, in Arcadia, Ohio. The letter also served as notice of compliance with Ohio Adm.Code 4906-3-03(B)(2) regarding Applicant's notice of the meeting to property owners and tenants affected by the proposed Facility, as well as local officials and agencies, first responders, school districts, the library, and chambers of commerce.

{¶ 163} On August 6, 2021, and August 23, 2021, Applicant filed motions for extensions of time for the Board's determination, under Ohio Adm.Code 4906-3-06,

regarding the completeness of the application. In Entries dated August 11, 2021, and August 23, 2021, the ALJ extended the completeness determination to September 7, 2021.

{¶ 164} By letter dated September 7, 2021, the Board notified Border Basin that its application was sufficiently complete to permit Staff to commence its review and investigation pursuant to Ohio Adm.Code Chapter 4906-1, et seq.

{¶ 165} On September 9, 2021, Applicant filed proof of publication for the second public information meeting in accordance with Ohio Adm.Code 4906-3-03(B).

{¶ 166} On October 15, 2021, December 21, 2021, and December 22, 2021, the Overmyers, Deidra Noel, Hancock County, and Cass Township moved for or filed notice of intervention, all of which were granted by Entry dated January 7, 2022.

{¶ 167} On December 16, 2021, Border Basin filed both a certificate of service of the accepted, complete application on local officials and libraries and notice of payment of the application fee.

{¶ 168} On January 6, 2022, and February 18, 2022, separate motions to intervene were filed by the Lewis Family, OFBF, the Millers, and the Gardners; the motions were granted by Entry dated March 9, 2022.

{¶ 169} By Entry issued January 7, 2022, the effective date of the application was established as January 7, 2022, and a procedural schedule was established, including a local public hearing on March 31, 2022, and an evidentiary hearing on April 19, 2022.

{¶ 170} On February 14, 2022, Border Basin filed proof of publication of the procedural schedule and accepted, complete application, in accordance with Ohio Adm.Code 4906-3-09(A)(1).

{¶ 171} The Staff Report was filed on March 16, 2022.

{¶ 172} A local public hearing was held on March 31, 2022, at which 17 members of the public offered testimony.

{¶ 173} On April 6, 2022, and April 13, 2022, Border Basin, Deidra Noel, Sarah Lewis, Richard Lewis, Jeff Overmyer, and Robin Gardner filed direct testimony.

{¶ 174} On April 13, 2022, Border Basin, Staff, OFBF, the Hancock County, and Cass Township filed the Stipulation.

{¶ 175} On April 13, 2022, Staff filed direct testimony.

{¶ 176} On April 14, 2022, Border Basin filed supplemental direct testimony. Mr. Overmyer filed supplemental direct testimony on April 15, 2021.

{¶ 177} The adjudicatory hearing commenced on April 19, 2022. Witnesses presented testimony on behalf of Border Basin, Staff, and Mr. Overmyer, Mr. Lewis, Ms. Lewis, Ms. Noel, and Ms. Gardner.

{¶ 178} Initial post-hearing briefs were filed on June 9, 2022, and June 10, 2022. Reply briefs were filed on July 1, 2022. On July 12, 2022, Ms. Gardner filed a motion to strike portions of Applicant's reply brief. The motion to strike is denied as discussed in Paragraph 118 of this Opinion, Order, and Certificate.

{¶ 179} Adequate data on the proposed generation facility has been provided to make the applicable determinations required by R.C. 4906.10(A). The record evidence in this matter provides sufficient factual data to enable the Board to make an informed decision.

{¶ 180} The record establishes that the Project is not an electric transmission line or gas pipeline and, therefore, R.C. 4906.10(A)(1) is not applicable.

{¶ 181} The record establishes the nature of the probably environmental impact from the construction, operation, and maintenance of the Facility, consistent with R.C. 4906.10(A)(2).

{¶ 182} The record establishes that the Project, subject to the conditions set forth in the Stipulation and consistent with this Opinion, Order, and Certificate, represents the minimum adverse environmental impact, considering the available technology and nature and economics of the various alternatives, and other pertinent considerations, consistent with R.C. 4906.10(A)(3).

{¶ 183} The record establishes that the Project, an electric generation 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 Project will serve the interests of electric system economy and reliability consistent with R.C. 4906.10(A)(4).

{¶ 184} The record establishes that the Facility, subject to the conditions set forth in the Stipulation and consistent with this Opinion, Order, and Certificate, will comply with R.C. Chapters 3704, 3734, 6111, and R.C. 4561.32; and all rules and regulations thereunder, to the extent applicable, consistent with R.C. 4906.10(A)(5).

{¶ 185} The record establishes that the Project, subject to the conditions set forth in the Stipulation and consistent with this Opinion, Order, and Certificate, will serve the public interest, convenience, and necessity, consistent with R.C. 4906.10(A)(6).

{¶ 186} The record establishes the impact of the Project on agricultural lands and agricultural district land consistent with the requirements of R.C. 4906.10(A)(7).

{¶ 187} The record establishes that, the Project will not require significant amounts of water, nearly no water or wastewater discharge, and incorporates maximum feasible water conservation practices. Accordingly, the Project meets the requirements of R.C. 4906.10(A)(8).

{¶ 188} The evidence supports a finding that all criteria in R.C. 4906.10(A) are satisfied for the construction, operation, and maintenance of the Facility as proposed by Applicant, subject to the conditions set forth in the Stipulation and consistent with this Opinion, Order and Certificate.

{¶ 189} Based on the record, the Board should issue a certificate of environmental compatibility and public need, pursuant to R.C. Chapter 4906, for the construction, operation, and maintenance of the solar-powered electric generation facility subject to the conditions set forth in the Stipulation and consistent with this Opinion, Order and Certificate.

X. ORDER

{¶ 190} It is, therefore,

{¶ 191} ORDERED, That Ms. Gardner's motion to strike be denied as provided in Paragraph 118. It is, further,

{¶ 192} ORDERED, That the Stipulation, as modified by this Order, be approved and adopted. It is, further,

{¶ 193} ORDERED, That a certificate be issued to Border Basin for the construction, operation, and maintenance of a solar-powered electric generation facility subject to the conditions set forth in the Stipulation and consistent with this Opinion, Order, and Certificate. It is, further,

{¶ 194} ORDERED, That a copy of this Opinion, Order, and Certificate be served upon all parties and interested persons of record.

BOARD MEMBERS:

Approving:

Jenifer French, Chair
Public Utilities Commission of Ohio

Markee Osborne, Designee for Lydia Mihalik, Director
Ohio Department of Development

Damian Sikora, Designee for Mary Mertz, Director
Ohio Department of Natural Resources

Drew Bergman, Designee for Anne Vogel, Director
Ohio Environmental Protection Agency

Sarah Huffman, Designee for Brian Baldrige, Director
Ohio Department of Agriculture

Gregory Slone
Public Member

PAS/DMH/dr

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Case No(s). 21-0277-EL-BGN

Summary: Opinion & Order issuing a certificate of environmental compatibility and public need to Border Basin I, LLC for the construction, operation, and maintenance of the solar-powered electric generation facility, subject to the conditions set forth in the stipulation and consistent with this Opinion, Order, and Certificate electronically filed by Debbie S Ryan on behalf of Ohio Power Siting Board