

BEFORE THE OHIO POWER SITING BOARD

**In the Matter of the Application of)
Carroll County Energy, LLC for an)
Amendment to Its Certificate of) Case No. 14-2085-EL-BGA
Environmental Compatibility and Public)
Need to Construct an Electric Generation)
Facility.)**

**Application to Amend the
Carroll County Energy Certificate
Granted April 28, 2014 in
Case No. 13-1752-EL-BGN**

November 26, 2014

LIST OF TABLES	viii
LIST OF FIGURES	viii
LIST OF APPENDICES	ix
ACRONYMNS AND ABBREVIATIONS	x
Introduction and Overview	1
4906-13-01 Project Summary and Facility Overview	7
(A) PROJECT SUMMARY AND OVERVIEW	7
(1) General Purpose of the Facility.....	7
(2) Description of the Facility	7
(3) Site Selection Process	7
(4) Principal Environmental and Socioeconomic Considerations	7
(a) Potential Construction Impacts	8
(b) Potential Operational Impacts.....	9
(5) Project Schedule.....	10
4906-13-02 Project Description and Schedule	11
(A) DETAILED DESCRIPTION OF PROPOSED GENERATION AND ASSOCIATED FACILITIES	11
(1) Project Details	11
(a) Generating Units	11
(b) Land Area Requirements	11
(c) Fuel Quantity and Quality.....	12
(d) Plant Emissions.....	12
(e) Water Requirements.....	12
(f) Water Discharge Requirements	13
(g) Stormwater Management	14
(2) Description of Major Equipment	14
(3) Transmission Line Interconnect.....	15
(4) New Natural Gas Transmission Line	15
(B) DETAILED PROJECT SCHEDULE	15

	(1) Schedule.....	15
	(2) Necessity to Maintain Schedule.....	16
4906-13-03	Site Alternatives Analysis.....	17
	(A) SITE SELECTION STUDY	17
	(1) Site Selection Process	17
	(a) Description of Study Area	17
	(b) Study Area and Site Map	17
	(c) Siting Criteria.....	17
	(d) Process for Identifying the Proposed Site.....	17
	(e) Factors in Selecting the Proposed Site.....	18
	(2) Constraint Map.....	18
	(B) SUMMARY TABLE OF EVALUATED SITES	18
	(C) ADDITIONAL SITE SELECTION STUDIES	18
4906-13-04	Technical Data	19
	(A) SITE	19
	(1) Geography and Topography	19
	(2) Aerial Photograph	20
	(3) Site Mapping.....	20
	(4) Geology and Seismology	20
	(a) Geological Issues	20
	(b) Soils and Soil Suitability.....	20
	(5) Hydrology and Wind.....	21
	(a) Characteristics of Directly Affected Waterbodies	21
	(b) Potential for Flooding or High Wind Conditions	21
	(c) Aquifer Mapping.....	22
	(B) LAYOUT AND CONSTRUCTION.....	22
	(1) Site Activities.....	22
	(a) Test Borings	22
	(b) Removal of Vegetation	23
	(c) Grading and Drainage	23

	(d) Access Roads	23
	(e) Removal and Disposal of Debris	24
	(f) Post-Construction Reclamation	24
(2)	Layout	24
(3)	Structures	24
	(a) Dimensions	24
	(b) Construction Materials.....	25
	(c) Color and Texture	25
	(d) Pictorial Sketches.....	25
	(e) Unusual Features.....	25
(4)	Plans for Construction.....	25
(5)	Future Plans	25
(C)	EQUIPMENT	26
(1)	Description of Major Generating Equipment	26
	(a) Combustion Turbine Generators.....	26
	(b) Steam Turbine Generator	26
	(c) Heat Recovery Steam Generators	26
	(d) Natural Gas System.....	26
	(e) Steam System.....	26
	(f) Condensate System	27
	(g) Feedwater System	27
	(h) Air Cooled Condenser.....	27
	(i) Closed Loop Auxiliary/Cooling Water System	27
	(j) Fire Protection System	27
	(k) Water System	27
	(l) Demineralizer.....	28
	(m) Wastewater System	28
	(n) Backup Generator	29
	(o) Transformers and Switchyard	29
(2)	Emissions Control and Safety Equipment	29
	(a) Flue Gas Emissions Control.....	29
	(b) Equipment Reliability and Efficiency Reduction	29
	(c) Effluent Control Equipment.....	30

	(d) Public Safety Equipment.....	30
(3)	Other Major Equipment	30
	(a) Combustion Turbine Air Inlet Coolers	30
	(b) Auxiliary Boiler	30
	(c) Natural Gas Heaters	30
	(d) Oil/Water Separator	30
(D)	REGIONAL ELECTRIC POWER SYSTEM	31
4906-13-05	Financial Data	32
(A)	OWNERSHIP	32
(B)	CAPITAL AND INTANGIBLE COSTS	32
	(1) Estimated Capital and Intangible Costs	32
	(2) Capital Cost Comparison	32
	(3) Present Worth and Annualized Capital Costs of Alternatives	32
(C)	OPERATION AND MAINTENANCE EXPENSES	32
	(1) Estimated Annual Operation and Maintenance Expenses	32
	(a) Fixed Operation and Maintenance	32
	(b) Variable Operation and Maintenance	32
	(c) Fuel Operating Expense	33
	(2) Operation and Maintenance Expenses Comparison	33
	(3) Present Worth and Annualized Operation and Maintenance Expenses for Alternatives	33
(D)	DELAYS.....	33
4906-13-06	Environmental Data	34
(A)	GENERAL.....	34
(B)	AIR.....	34
	(1) Preconstruction	34
	(a) Description of Ambient Air Quality	34
	(b) Description of Pollution Control Equipment	34
	(c) Description of Regulatory Applicability.....	34

(d)	Required Permits to Install and Operate Air Pollution Sources	35
(e)	Air Monitoring Stations and Major Source Mapping	35
(f)	Demonstration of Regulatory Compliance	35
(2)	Construction	35
(3)	Operation	36
(a)	Description of Air Quality Monitoring Plans	36
(b)	Estimated Air Concentration Isopleths	36
(c)	Potential Failure of Air Pollution Control Equipment	36
(C)	WATER	36
(1)	Preconstruction	37
(a)	List of Permits	37
(b)	Location of Survey Data Sources	37
(c)	Description of Data Sampling Stations	37
(d)	Water Quality of Receiving Stream	37
(e)	Water Discharge Permit Information	38
(2)	Construction	38
(a)	Description of Water Monitoring and Gauging Stations	38
(b)	Quality and Quantity of Aquatic Discharges from the Site	38
(c)	Plans to Mitigate Effects	38
(d)	Changes in Flow Patterns and Erosion	38
(3)	Operation	39
(a)	Description of Water Monitoring and Gauging Stations	39
(b)	Water Pollutant Control Equipment and Treatment Processes	39
(c)	NPDES Requirements and Schedule	39
(d)	Quantitative Flow Diagram	40
(e)	Water Conservation Practices	40
(D)	SOLID WASTE	41
(1)	Preconstruction	41
(2)	Construction	41
(3)	Operation	41

	(4) Licenses and Permits.....	41
4906-13-07	Social and Ecological Data	42
(A)	HEALTH AND SAFETY.....	42
	(1) Demographic Characteristics	42
	(2) Atmospheric Emissions	42
	(3) Noise	42
	(a) Construction Noise Levels	42
	(b) Operational Noise Levels.....	43
	(c) Identification of Noise-Sensitive Areas	44
	(d) Description of Equipment and Noise Mitigation Measures	44
	(4) Water.....	44
	(a) Construction and Operation Impact to Public and Private Water Supplies.....	44
	(b) Impact of Pollution Control Equipment Failures on Public and Private Water Supplies.....	44
(B)	ECOLOGICAL IMPACT	45
	(1) Site Information	45
	(a) Mapping	45
	(b) Vegetation Survey.....	46
	(c) Species Survey	46
	(d) Ecological Study	46
	(e) List of Major Species	47
	(2) Construction.....	47
	(a) Impact of Construction on Undeveloped Areas.....	47
	(b) Impact of Construction on Major Species	48
	(c) Mitigation for Short-Term and Long-Term Construction Impacts.....	48
	(3) Operation.....	49
	(a) Impact of Operation on Undeveloped Areas	49
	(b) Impact of Operation on Major Species	49

(C)	ECONOMICS, LAND USE AND COMMUNITY DEVELOPMENT ...	49
(1)	Land Uses.....	49
(a)	Land Use Mapping.....	49
(b)	Residential Structures	49
(c)	Land Use Impact	50
(d)	Structures to be Removed or Relocated.....	50
(e)	Formally Adopted Plans for Future Use of the Site and Surrounding Lands.....	50
(f)	Applicant Plans for Concurrent or Secondary Uses of the Site	50
(2)	Economics.....	50
(a)	Annual Total and Present Worth of Construction and Operation Payroll.....	50
(b)	Construction and Operation Employment	50
(c)	Increase in Local Revenue	51
(d)	Economic Impact on Local Commercial and Industrial Activities.....	51
(3)	Public Services and Facilities	51
(4)	Impact on Regional Development	51
(a)	Impact on Regional Development	51
(b)	Compatibility with Regional Plans	51
(D)	CULTURAL IMPACT	51
(1)	Cultural Resource Mapping	52
(2)	Cultural Resource Impacts.....	52
(3)	Cultural Resource Landmarks.....	52
(4)	Land and Water Recreation Area Mapping	53
(5)	Land and Water Recreation Areas	53
(6)	Recreational Areas and Potential Impacts	53
(7)	Measures to Minimize Visual Impacts	53
(E)	PUBLIC RESPONSIBILITY	53
(1)	Public Interaction Program	53
(2)	Liability Compensation Plans.....	53

(F)	AGRICULTURAL DISTRICT IMPACT	54
(1)	Agricultural Land Mapping	54
(2)	Potential Impact to Agricultural Lands.....	54
(a)	Potential Construction, Operation and Maintenance Impacts.....	54
(b)	Agricultural Mitigation Practices.....	54
(3)	Potential Impact on Agricultural Viability	55

LIST OF TABLES

Table A-1: Additional Laydown Area

Table 07-1: Excerpt from Table 07-5: Estimated Facility Construction Sound Levels

LIST OF FIGURES

Section 13-01 – Project Summary and Facility Overview

- Figure 01-1 – Facility Location

Section 13-02 – Project Description and Schedule

- Figure 02-2 – Proposed Facility and Vicinity
- Figure 02-3 – Facility Plot Plan
- Figure 02-5a and 5b – Preliminary Water Balance

Section 13-03 – Site Alternatives Analysis

- No Figures

Section 13-04 – Technical Data

- Figure 04-2 – Soils and Floodplain
- Figure 04-6 – Aquifer Information
- Figure 04-7 – Water Wells, Oil and Gas Wells and Drinking Water Source Protection Areas

Section 13-05 – Financial Data

- No Figures

Section 13-06 – Environmental Data

- No Figures

Section 13-07 – Social and Ecological Data

- Figure 07-2 – Noise Sensitive Receptors
- Figure 07-4 – Natural Resource Characteristics of the Site and Surroundings
- Figure 07-5 – Surrounding Land Use
- Figure 07-7 – Agricultural Land

LIST OF APPENDICES

Appendix A: Wetland Delineation and Stream Identification Report

Appendix B: Species Correspondence

Appendix C: Phase I Archaeological Surveys

Appendix D: Stormwater Pollution Prevention Plan – Additional Laydown Area

Appendix E: Stormwater Pollution Prevention Plan – Facility Site

ACRONYMNS AND ABBREVIATIONS

the Additional Laydown Area	an approximately 42-acre area of disturbance located north of the Facility Site encompassing an access road and temporary laydown area for use during construction of Carroll County Energy
AEP	American Electric Power
Amendment	Application to Amend the Carroll County Energy LLC Certificate granted April 28, 2014
the Applicant	Carroll County Energy LLC
Application	Ohio Power Siting Board Application submitted for Carroll County Energy for a Certificate of Environmental Compatibility and Public Need
BkC	Berks shaly silt loam, 8 to 15 percent slopes
BkD	Berks shaly silt loam, 15 to 25 percent slopes
CAIR	Clean Air Interstate Rule
CCES	Carroll County Environmental Service
the Certificate	Certificate of Environmental Compatibility and Public Need to Construct an Electric Generation Facility in Case No. 13-1752-EL-BGN issued on April 28, 2014
CoB	Coshocton-Keene silt loams, 3 to 8 percent slopes
the Construction Laydown Area	an approximately 23-acre property located off Route 9 and adjacent to the Facility Site that is proposed for temporary use during construction of Carroll County Energy
CSAPR	Cross-State Air Pollution Rule
CTG	combustion turbine generator
CuB	Culleoka silt loam, 3 to 8 percent slopes
dba	A-weighted decibel, corresponding to the sensitivity range for human hearing
the Facility	Carroll County Energy project
the Facility Site	the 77-acre property proposed as the location of Carroll County Energy
the Facility Switchyard	a 3-acre portion of the Facility Site dedicated to the electrical interconnection between the Facility and the electrical transmission line
GE	General Electric
GfC	Glenford silt loam, 8 to 15 percent slopes, eroded
GuC2	Guernsey silty clay loam, 8 to 15 percent slopes, eroded
HRSG	heat recovery steam generator
IES	ion exchange demineralizing system
Laydown Work Area	The 20-acre portion of the Additional Laydown Area that will be utilized for temporary parking and construction laydown purposes
LbB	Library Variant silt loam, 3 to 8 percent slopes
Ohio EPA	Ohio Environmental Protection Agency
OPSB	Ohio Power Siting Board

NPDES	National Pollutant Discharge Elimination System
POTW	Publicly Owned Treatment Works
RO	reverse osmosis
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
WmC	Westmoreland-Coshocton silt loams, 8 to 15 percent slopes
WmD	Westmoreland-Coshocton silt loams, 15 to 25 percent slopes

Introduction and Overview

Carroll County Energy LLC (the Applicant) is certified to construct Carroll County Energy (the Facility), a natural gas-fired combined-cycle generating facility, including its associated on-site electrical switchyard (Facility Switchyard), to be located in Carroll County, Ohio. The original Application for a Certificate of Environmental Compatibility and Public Need (Application) was filed on November 15, 2013 and included an approximately 77-acre property (the Facility Site) located entirely within Washington Township, Carroll County, Ohio. Access to the Facility Site is off of State Route 9, across an approximately 23-acre parcel proposed for temporary use during construction (the Construction Laydown Area). The Ohio Power Siting Board (OPSB) issued an Opinion, Order and Certificate in Case No. 13-1752-EL-BGN on April 28, 2014 (the Certificate).

Through this petition, hereinafter referred to as the Amendment, the Applicant is proposing to amend the Certificate as follows:

- (1) Addition of a 20-acre temporary construction area and 2.5-acre temporary stockpile area (requiring a total 42-acre limit of disturbance associated with access and grading for this work space) located directly north of the Facility Site, to be used during construction for temporary parking and construction laydown uses such as storage of bulk materials and early deliveries of materials (the Additional Laydown Area).
- (2) Addition of an option to utilize an ion exchange demineralizing system (IES) to replace the reverse osmosis (RO) demineralizing system which, along with other water-conserving measures, has the potential to reduce water use and minimize wastewater discharge.

- (3) Re-orientation of the Facility Switchyard and other minor internal electrical system changes at the request of American Electric Power (AEP), the entity responsible for transmitting the electricity generated by the Facility to the Ohio power grid.

The purpose of the Amendment is to address these changes in the Facility design outlined in the original Application and approved by the Certificate. Since the filing of the original Application, additional information has come to the Applicant's attention that has led to the incorporation of these changes. Any change in impact as a result of the proposed changes is reflected in this Amendment. Further information regarding the Facility can be found in the original Application and in the supplemental filings currently on the case docket. Additional information regarding the proposed modifications is provided below.

Additional Laydown Area

The Certificate includes a 23-acre Construction Laydown Area outlined in the original application, located between the Facility Site and State Route 9. As design has progressed, it has been determined that additional space is required during the construction phase. The Additional Laydown Area (shown in Figure 01-1) will be used for temporary parking and construction laydown uses such as storage of bulk materials and early deliveries of materials (e.g., piping and structural steel).

The Additional Laydown Area limits of disturbance for access and grading encompass 42 acres of land, located directly north of the 77-acre Facility Site and owned by the same landowner from whom the Facility Site will be purchased. Like the Facility Site, the Additional Laydown Area is in active agricultural use, surrounded by wooded area. An existing road provides access to the site via a culvert across an intermittent stream. The Additional Laydown Area was included in various studies conducted as part of the

original Application, including the Wetland Delineation and Stream Identification Report, Threatened and Endangered Species Agency Correspondence, and the Phase I Archaeological Surveys, provided in Appendix A, B, and C, respectively.

Access to the Additional Laydown Area will not require travel on public roads. An access point off of the Facility driveway will be developed that will connect to, and generally follow, an existing road. The existing road was a former farm road that has subsequently been improved as a gravel access to the existing Rex Energy operations located just off of Route 9 immediately north of the Facility Site (which was constructed after filing of the Application). A security station is located prior to reaching the Rex Energy facility. From that point, the access will extend around the Rex Energy operations, utilizing the existing farm road, to the Additional Laydown Area. The use of this existing road avoids wetland areas and additional tree clearing for access to the Additional Laydown Area. The existing road will require only minor improvements to accommodate construction traffic, and will avoid potential impact to delineated wetlands and streams by utilizing an existing culvert crossing.

The majority of the Additional Laydown Area that will be used for laydown purposes (Laydown Work Area) is currently used for active agriculture; additional grading and clearing of the surrounding wooded area is also required to adjust elevations to a less than 3.5 percent grade and to allow for appropriate stabilization of side slopes. The Additional Laydown Area could not be positioned any further north to minimize these grading needs, due to the presence of existing utility easements along the northern boundary of the Additional Laydown Area. Habitat tree clearing will be restricted to winter months, in order to avoid potential disturbance to summer roosting habitat

associated with the Indiana bat, and a minimum 20-foot riparian buffer will be maintained around surrounding intermittent streams associated with Pipes Fork. Table A-1 outlines the characteristics of the Additional Laydown Area.

Table A-1 Additional Laydown Area

Additional Laydown Area Element	Area of Limits of Disturbance (acres)	Existing Use
Access Road	4.5	Existing road and agricultural field
Stockpile Area	2.5	Agricultural field
Laydown Work Area	20	18 acres agricultural field; 2 acres wooded
Grading/Stormwater Management	15	5 acres agricultural field; 10 acres wooded.
Total	42	

Upon completion of construction, the Additional Laydown Area will be restored to agricultural production in accordance with landowner specifications.

Water and Wastewater Reduction – Incorporation of the IES Option

The Facility as approved in the Certificate incorporated substantial water-reduction measures, including the use of air cooling and internal recycling of water flows. Under the prior configuration, average daily water demand for the Facility was on the order of 300,000 gallons, to be provided to the Facility by an existing, regulated water supplier. The low volume of water demand resulted in similarly low wastewater discharge volumes, a Facility average daily discharge on the order of 212,000 gallons, anticipated to be discharged to either the existing BTM Sewer District (located in and serving the Village of Malvern, and operated by Carroll County Environmental Service [CCES]) or the existing Carrollton publicly owned treatment works (POTW).

As Facility design has progressed, additional water-saving measures have been considered. This Amendment reflects the option to utilize an IES design in place of the

RO system which, along with other water-conserving measures, has the potential to reduce water use and minimize wastewater discharge.

This will be accomplished using two separate mobile water treatment units (one treating water in advance of its use, and one treating wastewater to allow its reuse), with regeneration off-site that will include appropriate disposal of the resulting filtered solids. The permanent equipment will consist of parking spaces for several trailers, pumps to circulate the water through the trailers, and piping manifolds with hoses to connect the trailers to the permanent piping. On-going monitoring for quality and function are incorporated. The proposed system is illustrated in Figure 02-3 and Figures 02-5a and 02-5b. Through the use of this IES design, water will be returned and reused until the remaining waste product will consist of filtered solids retained in the mobile treatment trailers. When each mobile unit requires regeneration (approximately every 7 days for the water treatment unit and every 28 days for the wastewater treatment unit), the vendor will deliver a replacement unit and transport the spent unit to its regeneration facility.

In addition, to the IES design, fin fan coolers have been incorporated in the heat recovery steam generator (HRSG) instead of using quench water, further conserving and reducing water demand.

If the IES design is utilized, average daily water demand associated with the Facility will be on the order of 90,000 gallons. The use of an IES design and the associated water conservation measures substantially reduces water demand and eliminates process wastewater discharge, providing additional benefit from the Facility. Should the IES design be selected, sanitary wastewater from the Facility will either be stored in an onsite

holding tank, and periodically trucked offsite for disposal at a nearby POTW, or disposed of via an onsite septic system, pending final design.

It is important to note that this Application seeks to add the IES design as an option only, allowing the Applicant to maintain the already-approved water treatment design in its Certificate in the event the IES design is not used or is discontinued during the life of the Facility.

Switchyard Adjustment

The equipment located within the Facility Switchyard will remain as described in the original Application. However, as design has progressed, AEP has determined that Facility reliability would be enhanced by reorienting the Facility Switchyard. In addition, minor design adjustments by AEP are associated with changing to a breaker-and-a-half configuration instead of a ring bus and a single lead connecting the Facility to the Facility Switchyard. With this change in orientation, adjustments to grading and the specific placement of stormwater features are required.

(A) PROJECT SUMMARY AND OVERVIEW

The information provided on page 1 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(1) General Purpose of the Facility

The information provided on page 1 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Description of the Facility

For a summary of this Amendment, see the Introduction and Overview above. The general project information contained in the original Application at pages 1 to 4 applies to the Amendment and will not change as a result of this Amendment.

(3) Site Selection Process

The Additional Laydown Area proposed in this Amendment is proximate to the Facility Site, located adjacent to the north, and will not require additional travel on public roadways. Thus, the information provided at pages 4 to 5 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(4) Principal Environmental and Socioeconomic Considerations

The Applicant reviewed the impacts of the proposed Facility's construction and operation on the environment and on the community based upon the addition of a 42-acre limit of disturbance for the Additional Laydown Area, incorporation of the option for an IES design and other water-conserving measures, and adjusted Facility Switchyard. Topics reviewed include water resources, wetlands and streams, cultural resources, threatened and

endangered species, noise, solid waste, and public services. No significant changes have occurred from previously assessed conditions; the Facility will continue to be compatible with and protective of environmental and community resources.

(a) Potential Construction Impacts

The information provided at page 6 of the original Application continues to apply to the Amendment.

Construction impacts have been minimized through the selection of a property for the Additional Laydown Area that is located in proximity to the Facility Site and was included in studies conducted in support of the original Application. The proximity of the Additional Laydown Area to the Facility Site allows for internal construction access and eliminates the need for construction travel on public roadways. Facility construction impacts will continue to be localized to the immediate surroundings.

Although the Additional Laydown Area is in active agricultural use, it is not within a designated agricultural district; therefore, no impact to such areas is anticipated to occur. Additionally, no impacts to cultural resources are anticipated. The Additional Laydown Area was incorporated in the archaeological investigation completed as part of the original Application. This evaluation was submitted to the Ohio Historic Preservation Office in October 2013.

No additional work is proposed in wetlands or waterways. The proposed access road for the Additional Laydown Area will utilize an existing culvert, requiring no additional impact to waters of the United States. The access road generally follows an existing road; no tree-clearing is required. On the Additional

Laydown Area, however, additional tree-clearing and grading is required to accommodate the proposed use. The limit of disturbance for the Additional Laydown Area and access road will encompass 42 acres of land, with approximately 12 acres of associated tree-clearing. As outlined in the Stormwater Pollution Prevention Plan (SWPPP) for the Additional Laydown Area (Appendix D), construction grading will direct stormwater toward the southeast, controlled with applicable Best Management Practices and approved under the Ohio Environmental Protection Agency (Ohio EPA) Construction General Permit.

No new construction area is associated with the IES design option or Facility Switchyard adjustments. However, the reorientation will adjust the details of grading and vegetative restoration in that location. Although the boundaries of the previously proposed work area and clearing have not changed, the wooded area that will remain permanently cleared will increase from 7 acres to 7.5 acres as a result of the Facility Switchyard orientation (as shown in Figure 02-2). As shown Appendix E, the reoriented Facility Switchyard requires an adjustment to one stormwater basin.

(b) Potential Operational Impacts

The information provided at pages 8 to 9 of the original Application continues to apply to the Amendment.

Following completion of construction, the Additional Laydown Area will be restored to agricultural production in accordance with landowner specifications.

The IES, if incorporated into the design, will substantially reduce water demand, which will continue to be provided to the Facility by an existing, regulated

water supplier. The IES filtered solid by-product will be regenerated by the vendor, with replacement units provided to the Facility approximately every 7 days for the water treatment unit and every 28 days for the wastewater treatment unit.

If the IES design is selected, sanitary wastewater from the Facility will either be stored in an onsite holding tank, and periodically trucked offsite for disposal at a nearby POTW, or disposed of via an onsite septic system, pending final design.

As noted above, applicable analyses have been updated to reflect the current Facility refinements, including the IES design option. No significant change in impact results from the Facility updates included in this amendment.

(5) Project Schedule

The information provided at page 9 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(A) DETAILED DESCRIPTION OF PROPOSED GENERATION AND ASSOCIATED FACILITIES

Figure 02-2 has been updated to incorporate the proposed Additional Laydown Area and adjusted Facility Switchyard overlaid on an aerial photograph, with surrounding road names and major Facility features; no material physical change is associated with the IES design. The updated layout incorporating the Facility Switchyard adjustments and IES design is provided in updated Figure 02-3.

(1) Project Details

(a) Generating Units

The information provided at pages 10 to 11 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Land Area Requirements

As design has progressed, the construction contractor for the Applicant identified a need for additional space during construction. The Additional Laydown Area, located directly to the north of the Facility Site (Figure 02-2), was selected to meet additional requirement for temporary construction laydown. Upon completion of construction, the Additional Laydown Area will return to agricultural production in accordance with landowner specifications.

The Additional Laydown Area will be used for temporary parking and laydown uses such as storage of bulk materials and early deliveries of materials (e.g., piping and structural steel).

Other than the addition of the Additional Laydown Area, no other land area changes are included in this Amendment and the information provided at page 11 of the original Application continues to apply.

(c) Fuel Quantity and Quality

The information provided at pages 11 to 12 of the original Application and the Applicant's responses to the Staff's First Set of Data Requests, Nos. 4 and 5, in Case No. 13-1752-EL-BGN continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Plant Emissions

The information provided at pages 12 to 14 of the original Application continues to apply to the Amendment. Emissions from construction, consisting mainly of relatively minor emissions from the construction equipment required for site preparation, will extend to the Additional Laydown Area.

(e) Water Requirements

The information provided at pages 14 to 15 of the original Application continues to apply to the Amendment. As described in this Amendment, the Facility has also incorporated additional water-conservation measures into the Facility, including an option to install an IES design that substantially reduces the water requirements of the Facility. Water will continue to be supplied to the Facility by an existing, regulated water supplier in the region.

If the IES design is selected, the Facility's updated maximum daily water use will be on the order of 135,000 gallons, a significant reduction from the 400,000 gallons identified in the original Application. The Facility's updated average daily

water use will be on the order of 90,000 gallons, as compared to the 300,000 gallons identified in the Certificate. An updated water balance, including flow rates and treatment equipment, for the Facility's IES option is provided in Figures 02-5a and 02-5b.

The updated maximum daily water use, shown on Figure 02-5b, reflects operating the Facility at full load with full utilization of evaporative coolers on the two combustion turbine generators (CTGs) and 100 percent duct firing of the HRSG at an average ambient temperature of 100°F for a 24-hour period. The Facility's updated average daily water use, also shown on Figure 02-5b, is estimated based on operating the Facility at full load with full utilization of evaporative cooling on the two CTGs and 100 percent duct firing of the HRSG at an average ambient temperature of 59°F.

The incorporation of an IES design allows water to be recycled through the process after being deionized, as well as filtering wastewater for reuse. The ability to reuse wastewater greatly reduces the demand for water from the existing, regulated water supplier and eliminates the need for any process wastewater discharge. Note, the water system as initially certificated remains the maximum impact case for water use and discharge.

(f) Water Discharge Requirements

The information provided in the original Application at pages 15 to 16 continues to apply to the Amendment because the IES design is an option to the already-approved water treatment equipment. If the IES design is used for both

cycle makeup water and wastewater treatment, the need for process wastewater discharge may be eliminated.

If the IES design is selected, sanitary wastewater from the Facility will either be stored in an onsite holding tank, and periodically trucked offsite for disposal at a nearby POTW, or disposed of via an onsite septic system, pending final design.

(g) Stormwater Management

The information provided at page 16 of the original Application continues to apply to the Amendment and will not materially change as a result of this Amendment. Similar measures will be incorporated for the Additional Laydown Area, and the relocated Facility Switchyard will require adjustment to one stormwater basin.

(2) Description of Major Equipment

Although the information provided at pages 16 to 20 of the original Application continues to apply to the Amendment, the potential installation of an IES design and water conservation measures included in this Amendment would result in the following changes:

- *Heat Recovery System Generator* – a HRSG blowdown fin fan cooler will be incorporated in lieu of quench water;
- *Demineralizer* – Demineralized water will be created on-site at two points in the water cycle: demineralized water will be created in the Demineralizer System, used to feed the HRSG/steam cycle, combustion turbine wash, and air-cooled condenser wash; and demineralized water will be created in the Wastewater System, recycled into Facility processes.

- *Wastewater System* – Wastewater at the Facility will be generated solely by sanitary sources. If the IES design is selected, sanitary wastewater from the Facility will either be stored in an onsite holding tank, and periodically trucked offsite for disposal at a nearby POTW, or disposed of via an onsite septic system, pending final design. All other wastewater streams will be in a closed-loop system, recycled through the process.

(3) Transmission Line Interconnect

The information provided at pages 20 to 21 of the original Application continues to apply to the Amendment and will not materially change as a result of this Amendment. Physical adjustments have been made to accommodate AEP's requirements for the reoriented Facility Switchyard and the breaker-and-a-half configuration and single lead connecting the Facility to the Facility Switchyard.

(4) New Natural Gas Transmission Line

The information provided at page 21 of the original Application and the Applicant's responses to the Staff's First Set of Data Requests, No. 3, in Case No. 13-1752-EL-BGN continues to apply to the Amendment and will not change as a result of this Amendment.

(B) DETAILED PROJECT SCHEDULE

(1) Schedule

The information provided at pages 21 to 22 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment. CCE is preparing for Facility construction to commence in early spring of 2015 in order to meet its energy market commitments.

(2) Necessity to Maintain Schedule

The information provided at pages 22 to 23 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment. CCE is requesting expedited review of this Amendment to allow for adequate timing to complete tree clearing outside of the Indiana bat roosting season to support construction in spring 2015. If this cannot be achieved, delays in Facility construction could result, with associated penalties and loss of benefit to Ohio's ratepayers.

(A) SITE SELECTION STUDY

The information provided at page 24 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(1) Site Selection Process

(a) Description of Study Area

The information provided at pages 24 to 25 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Study Area and Site Map

The information provided at page 26 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Siting Criteria

The information provided at pages 26 to 27 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Process for Identifying the Proposed Site

The information provided at pages 27 to 28 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(e) Factors in Selecting the Proposed Site

The information provided at pages 29 to 32 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Constraint Map

The information provided at page 32 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(B) SUMMARY TABLE OF EVALUATED SITES

The information provided at page 33 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(C) ADDITIONAL SITE SELECTION STUDIES

The information provided at page 33 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(A) SITE

(1) Geography and Topography

The Additional Laydown Area consists of active agricultural land fringed by woodlands and is characterized by gently rolling topography with elevations that range between approximately 1,050 and 1,320 feet above mean sea level. The parcel drains naturally in four directions, into unnamed tributaries of Pipes Fork. Elevations drop off around the intermittent streams which lie along the southern and eastern boundary of the Additional Laydown Area. Topography around these intermittent streams consists of densely vegetated, moderately to steeply sloped terrain; no work is proposed in or immediately proximate to those streams.

In order to accommodate the proposed use as temporary laydown for the Facility, the 20-acre Laydown Work Area will be graded (with about 2 acres of wooded area cleared). In addition, approximately 15 acres is required to provide for adequate grading and stormwater management features associated with the Additional Laydown Area; approximately 10 acres of wooded area will require clearing for this purpose. A minimum 20-foot buffer will be preserved between the clearing and grading activities and the existing intermittent streams.

Since the Additional Laydown Area included in this Amendment is located directly north of the Facility Site, the information provided at pages 34 to 36 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Aerial Photograph

Figure 02-2 has been updated to show the location of the proposed Additional Laydown Area, the IES design, and reoriented Facility Switchyard in relation to surface features.

(3) Site Mapping

Figure 02-2 has been updated to show the Additional Laydown Area, located adjacent to the north of the Facility Site, laydown changes associated with the potential IES design, and the reoriented Facility Switchyard elements. Due to the proximity of the Additional Laydown Area to the Facility Site, and maintaining layout adjustments within the original limits of disturbance, information provided at page 37 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(4) Geology and Seismology

(a) Geological Issues

The information provided at pages 37 to 39 of the original Application and the Applicant's responses and supplemental responses to the Staff's First Set of Data Requests, No. 2, in Case No. 13-1752-EL-BGN continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Soils and Soil Suitability

Figure 04-2 has been updated to incorporate the Additional Laydown Area, located north of the Facility Site, and access corridor, connecting the main access road which extends eastward off Route 9 to the Additional Laydown Area. Based on review of the Soil Survey database for Carroll County, Ohio and the United

States Department of Agriculture Soil Conservation Service Soil Survey of Carroll County, Ohio, the soil units on the Additional Laydown Area are mapped as: Berks shaly silt loam, 8 to 15 percent slopes (BkC) and 15 to 25 percent slopes (BkD); Coshocton-Keene silt loams, 3 to 8 percent slopes (CoB); Culleoka silt loam, 3 to 8 percent slopes (CuB); Glenford silt loam, 8 to 15 percent slopes, eroded (GfC); Guernsey silty clay loam, 8 to 15 percent slopes, eroded (GuC2); Library Variant silt loam, 3 to 8 percent slopes (LbB); and Westmoreland-Coshocton silt loams, 8 to 15 percent slopes (WmC) and 15 to 25 percent slopes (WmD). These soils are consistent with those within the Facility Site and Construction Laydown Area included in the original Application, therefore, the information provided at pages 39 to 47 of the original Application and the Applicant's responses and supplemental responses to the Staff's First Set of Data Requests, No. 2, in Case No. 13-1752-EL-BGN continues to apply to the Amendment and will not change as a result of this Amendment.

(5) Hydrology and Wind

(a) Characteristics of Directly Affected Waterbodies

The information provided at pages 47 to 48 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Potential for Flooding or High Wind Conditions

The information provided at pages 48 to 49 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Aquifer Mapping

Figure 04-6 has been updated to incorporate the Additional Laydown Area.

Due to the proximity of the Additional Laydown Area, the information provided at page 49 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(B) LAYOUT AND CONSTRUCTION

The information provided at pages 50 to 51 of the original Application continues to apply to the Amendment. Similar erosion and sediment controls will be established to demarcate the limit of work on the Additional Laydown Area. In order to accommodate the proposed use as temporary laydown for the Facility, the 20-acre Laydown Work Area will be graded (with about 2 acres of wooded area cleared). In addition, approximately 15 acres is required to provide for adequate grading and stormwater management features associated with the Additional Laydown Area; approximately 10 acres of wooded area will require clearing for this purpose.

The reorientation of the Facility Switchyard, also requires 7.5 acres of existing trees remain permanently cleared; this is 0.5 acre more than the original Facility Switchyard orientation. The location and orientation of the Facility Switchyard is illustrated on Figure 02-2.

(1) Site Activities

(a) Test Borings

The information provided at page 51 of the original Application and the Applicant's responses and supplemental responses to the Staff's First Set of Data

Requests, No. 2, in Case No. 13-1752-EL-BGN continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Removal of Vegetation

Reorientation of the Facility Switchyard requires 7.5 acres of permanent clearing, 0.5 acre more than outlined in the original Application. Facility use of the Construction Laydown Area and Additional Laydown Area is only temporary. Upon construction completion, these parcels will be restored to agricultural production, in accordance with landowner specifications.

(c) Grading and Drainage

The information provided at page 52 of the original Application continues to apply to the Amendment and will not materially change as a result of this Amendment. Due to the reorientation of the Facility Switchyard, the specific placement of a stormwater basin has been adjusted (Figure 2-3). Grading and drainage details are provided in the SWPPPs for the Additional Laydown Area and the Facility Site, Appendix D and E, respectively.

(d) Access Roads

The information provided at page 52 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

An additional access road will be provided to connect the Facility Site to the Laydown Work Area, which will generally follow an existing road. Similar to the existing Rex access road, the balance of the access to the Additional Laydown Area will be gravel surface; no tree-clearing or wetland impacts will be required.

The access road will utilize an existing culvert crossing of an intermittent stream channel.

(e) Removal and Disposal of Debris

The information provided at page 52 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(f) Post-Construction Reclamation

The Additional Laydown Area, currently in active agricultural production, is expected to return to agricultural production post-construction. Restoration activities will be in accordance with landowner specifications. The information provided at page 52 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Layout

The information provided at page 53 of the original Application continues to apply to the Amendment and will not materially change as a result of this Amendment. Figure 02-2 illustrates the adjustments associated with the incorporation of an IES design and the reoriented Facility Switchyard and bus bar, which remain within the previously-identified limits of disturbance for the Facility.

(3) Structures

(a) Dimensions

The information provided at pages 53 to 54 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Construction Materials

The information provided at page 54 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Color and Texture

The information provided at page 54 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Pictorial Sketches

The information provided at page 55 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(e) Unusual Features

The information provided at page 55 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(4) Plans for Construction

The information provided at page 55 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment. The Additional Laydown Area will allow for temporary parking and laydown use such as storage of bulk materials and early deliveries of materials (e.g., piping and structural steel). The proposed access road will accommodate internal construction travel and eliminate the need for additional construction traffic on public roadways.

(5) Future Plans

The information provided at page 55 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(C) EQUIPMENT

(1) Description of Major Generating Equipment

The information provided at page 56 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(a) Combustion Turbine Generators

The information provided at page 56 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Steam Turbine Generator

The information provided at page 57 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Heat Recovery Steam Generators

With the exception of incorporating a fin fan cooler in lieu of quench water, the information provided at page 57 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Natural Gas System

The information provided at page 57 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(e) Steam System

The information provided at page 58 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(f) Condensate System

The information provided at page 58 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(g) Feedwater System

The information provided at page 58 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(h) Air Cooled Condenser

The information provided at page 59 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(i) Closed Loop Auxiliary/Cooling Water System

The information provided at page 59 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(j) Fire Protection System

The information provided at page 59 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(k) Water System

Based on the water conservation measures outlined in this Amendment, including the IES option, the volume of water demand may be substantially reduced from a daily average of 300,000 gallons to a daily average of 90,000 gallons. If the IES design is selected, the limited Facility water needs will continue to be supplied by an existing, regulated water supplier in the region. Updated water

balances depicting Facility uses and flows are shown in Figures 02-5a and 02-5b for the IES option.

(l) Demineralizer

The information provided at page 60 of the original Application applies to this Amendment and will only change if the IES design is selected. If the IES design for cycle makeup water is incorporated into the Facility design, the demineralizer system will consist of cation, anion, and mixed bed processes located in a mobile trailer. Demineralized water will be stored in a tank prior to supplying the HRSG and Steam Cycle, as well as combustion turbine and air-cooled condenser wash water.

(m) Wastewater System

The information provided at page 60 to 61 of the original Application applies to this Amendment and will only change if the IES design is selected. Based on the incorporation of an IES design for both cycle makeup water and wastewater treatment, the Facility's process wastewater discharge would be eliminated. The mobile treatment units will be replaced periodically, with the spent unit brought by the vendor to its facility for regeneration.

Due to the reoriented Facility Switchyard, the specific placement of one stormwater basin has been adjusted. This change will not result in a material change, as stormwater will continue to be routed to on-site stormwater collection ponds to maintain acceptable rates of runoff.

(n) Backup Generator

The information provided at page 61 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(o) Transformers and Switchyard

Although the Facility Switchyard will be reoriented, the equipment will remain as described in the original application. In addition, minor design changes by AEP are associated with changing to a breaker-and-a-half configuration instead of a ring bus and a single lead connecting the Facility to the Facility Switchyard. The adjustment to the Facility Switchyard will require alterations to grading, clearing, and relocation of the stormwater basin. The reoriented Facility Switchyard requires 0.5 acre of permanent clearing and gradings more than outlined in the original Application. Figure 02-3 illustrates the modifications. The adjusted location of a stormwater basin does not materially change the information provided at pages 61 to 62 of the original Application.

(2) Emissions Control and Safety Equipment

(a) Flue Gas Emissions Control

The information provided at pages 62 to 63 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Equipment Reliability and Efficiency Reduction

The information provided at page 63 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Effluent Control Equipment

The information provided at pages 63 to 64 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Public Safety Equipment

The information provided at pages 64 to 66 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(3) Other Major Equipment

(a) Combustion Turbine Air Inlet Coolers

The information provided at pages 66 to 67 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Auxiliary Boiler

The information provided at page 67 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Natural Gas Heaters

The information provided at page 67 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Oil/Water Separator

The information provided at page 67 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(D) REGIONAL ELECTRIC POWER SYSTEM

The information provided at pages 67 to 68 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(A) OWNERSHIP

The information provided at page 69 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(B) CAPITAL AND INTANGIBLE COSTS

(1) Estimated Capital and Intangible Costs

The information provided at page 69 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Capital Cost Comparison

The information provided at page 70 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(3) Present Worth and Annualized Capital Costs of Alternatives

The information provided at page 70 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(C) OPERATION AND MAINTENANCE EXPENSES

(1) Estimated Annual Operation and Maintenance Expenses

(a) Fixed Operation and Maintenance

The information provided at page 70 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Variable Operation and Maintenance

The information provided at page 71 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Fuel Operating Expense

The information provided at page 71 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Operation and Maintenance Expenses Comparison

The information provided at pages 71 to 72 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(3) Present Worth and Annualized Operation and Maintenance Expenses for Alternatives

The information provided at page 72 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(D) DELAYS

The information provided at pages 72 to 73 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment. CCE is requesting expedited review of this Amendment to allow for adequate timing to complete tree clearing outside of the Indiana bat roosting season to support construction in spring 2015. If this cannot be achieved, delays in Facility construction could result, with associated penalties and loss of benefit to Ohio's ratepayers.

(A) GENERAL

(B) AIR

(1) Preconstruction

(a) Description of Ambient Air Quality

The information provided at pages 74 to 78 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Description of Pollution Control Equipment

The information provided at pages 78 to 82 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Description of Regulatory Applicability

The information provided at pages 82 to 91 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment. The following regulatory update has occurred since the filing of the original Application.

Cross-State Air Pollution Rule (CSAPR) - Updates have been made to CSAPR, which had previously been vacated by the United States Court of Appeals for the District of Columbia Circuit on August 21, 2012; in April 2014, the United States Supreme Court reversed this decision. On June 26, 2014, the United States Environmental Protection Agency (USEPA) filed a motion to lift the stay of CSAPR, and on October 23, 2014, the United States Court of Appeals for the

District of Columbia Circuit ordered that the motion be granted. USEPA's motion to lift the stay requested that the program begin in 2015 and therefore, CSAPR could be effective as early as 2015. However, the affected states currently do not have rules in place to implement CSAPR; therefore, it is more likely that rules will be promulgated in 2015 for a 2016 enforcement of the program. Until such time as CSAPR becomes effective, the Clean Air Act Interstate Rule (CAIR) remains in place. The Project will comply with laws and regulations in place at the time of its construction and operation.

(d) Required Permits to Install and Operate Air Pollution Sources

The information provided at pages 91 to 92 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(e) Air Monitoring Stations and Major Source Mapping

The information provided at page 92 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(f) Demonstration of Regulatory Compliance

The information provided at page 92 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Construction

The information provided at page 93 of the original Application continues to apply to the Amendment, with the construction impacts on air quality, which consist mainly of

the relatively minor emissions from the construction equipment and from fugitive dust emissions, extending over the Additional Laydown Area.

(3) Operation

(a) Description of Air Quality Monitoring Plans

The information provided at page 93 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Estimated Air Concentration Isopleths

The information provided at pages 93 to 95 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Potential Failure of Air Pollution Control Equipment

The information provided at pages 95 to 96 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(C) WATER

Additional water conservation measures have been incorporated into the proposed Facility design. In addition, an option to add an IES design is being requested in this Amendment. With the water conservation measures and the IES design option, the Facility's updated maximum daily water use will be on the order of 135,000 gallons; a volume that is significantly less than the 400,000 gallon maximum proposed in the original Application. The maximum daily water use is conservatively estimated based on operating the Facility at full load with full utilization of evaporative cooling on the two CTGs and

100 percent duct firing of the HRSG at an average ambient temperature of 100°F for a 24-hour period. The Facility's updated average daily water use will be on the order of 90,000 gallons, as compared to the 300,000 gallons proposed in the original Application. The average daily water use is estimated based on operating the Facility at full load with full utilization of evaporative cooling on the two CTGs and 100 percent duct firing of the HRSG at an average ambient temperature of 59°F for a 24-hour period.

(1) Preconstruction

(a) List of Permits

The information provided at page 104 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment. Sanitary waste disposal will require approvals, depending upon the final design selected, that could include a Permit to Install from Ohio EPA.

(b) Location of Survey Data Sources

The information provided at page 104 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Description of Data Sampling Stations

The information provided at page 105 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Water Quality of Receiving Stream

The information provided at page 105 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(e) Water Discharge Permit Information

The information provided at page 105 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment, with the exception of eliminating the industrial discharge to the POTW and treating sanitary flows through use of either a holding tank or septic system, depending on final design if the IES design is used.

(2) Construction

(a) Description of Water Monitoring and Gauging Stations

The information provided at pages 105 to 106 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Quality and Quantity of Aquatic Discharges from the Site

The information provided at page 106 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Plans to Mitigate Effects

The information provided at page 106 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Changes in Flow Patterns and Erosion

The information provided at page 106 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment. Appendix D and E provide updated SWPPPs for both the Additional Laydown Area and Facility Site, respectively.

(3) Operation

(a) Description of Water Monitoring and Gauging Stations

The information provided at page 106 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment. Although no process discharge will occur to the POTW if the IES design is used, should sanitary flows be discharged to a POTW, that discharge will be in compliance with the POTW's National Pollutant Discharge Elimination System (NPDES) obligations.

(b) Water Pollutant Control Equipment and Treatment Processes

No significant change in the water pollution control equipment described will result from the amendments. The incorporation of an IES design, if selected, for both cycle makeup water and wastewater treatment would eliminate process wastewater discharge. Instead, the vendor will replace the mobile units periodically, removing the spent units for regeneration. Sanitary wastewater from the Facility will either be stored in an onsite holding tank for and periodically disposal at a nearby POTW or treated with a septic system, pending final design, in accordance with applicable regulations and permits.

Best Management Practices will be used to handle stormwater; updated SWPPPs are provided in Appendix D and E for the Additional Laydown Area and the Facility Site/Construction Laydown Area, respectively.

(c) NPDES Requirements and Schedule

The information provided on page 107 of the original Application continues to apply to the Amendment. If the IES design is implemented in the design, no

process water will be discharged, and sanitary waste will be disposed of in accordance with the receiving facility's existing NPDES approval. An operational stormwater NPDES approval will be obtained, if necessary, prior to Facility operation.

(d) Quantitative Flow Diagram

Depending on the operating conditions and weather conditions, Facility flows will vary. An updated Facility water balance is provided in Figures 02-5a and 02-5b, illustrating the IES design which has been incorporated as an option for both cycle makeup water and wastewater treatment. As can be seen, this technology, if selected, substantially reduces water demand and eliminates process wastewater discharge.

If the IES design is used, sanitary wastewater from the Facility will either be stored in an onsite holding tank for and periodically disposal at a nearby POTW or treated with a septic system, pending final design, in accordance with applicable regulations and permits.

(e) Water Conservation Practices

As Facility design has progressed, additional water-saving measures have been considered. If the IES design along with other water conservation measures is installed, this will further reduce water demand on local systems and also eliminate the need for process wastewater discharge to a POTW.

(D) SOLID WASTE

(1) Preconstruction

The information provided at page 108 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Construction

The information provided at pages 108 to 109 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(3) Operation

The information provided at page 109 of the original Application continues to apply to the Amendment. If an IES design is installed, the mobile water and wastewater treatment trailers will also be periodically removed from the Facility Site and replaced, allowing for regeneration of filtered solids.

(4) Licenses and Permits

The information provided at pages 109 to 110 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(A) HEALTH AND SAFETY

(1) Demographic Characteristics

The information provided at page 111 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Atmospheric Emissions

The information provided at page 112 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(3) Noise

Ambient Noise Level Survey

(a) Construction Noise Levels

With the addition the Additional Laydown Area, the intermittent, temporary impacts from construction noise may extend over a slightly larger geographical area. While the majority of construction activities will still occur on the Facility Site, some activity, including truck movements and site clearing, will occur within the Additional Laydown Area. The Additional Laydown Area extends north from the Facility Site, closer to Location 1 (see Figure 07-2). Located approximately 500 feet from the Laydown Work Area, this receptor may experience a temporary increase in construction-related sound levels. Construction sound levels at Location 1 were calculated assuming simultaneous operation of all pieces of construction equipment identified in Table 07-1 (an excerpt from Table 07-5 in the original Application) at the centroid of the Additional Laydown Area.

Table 07-1:

Excerpt from Table 07-5: Estimated Facility Construction Sound Levels

Construction Phase	Construction Equipment	Equipment Noise Level at 50 feet, (dBA ¹)	Composite Sound at Location 1 (dBA)
Site Clearing and Preparation	Backhoe	85	57
	Dozer	80	
	Generator	78	
	Grader	85	
	Loader	79	
	Scraper	88	
	Truck (2)	91	

¹ dBA = A-weighted decibel

Results showed that construction sound levels would be approximately 57 dBA. This is a conservative estimate since the level of activity and pieces of equipment operating at any given time are expected to be less than what was assumed in the calculations. Given these results and the transient nature of construction noise, conclusions outlined in the original Application remain the same. Facility construction is still expected to result in minimal community noise impact.

(b) Operational Noise Levels

The information provided at pages 121 to 125 of the original Application and the Applicant's responses to the Staff's First Set of Data Requests, No. 8, in Case No. 13-1752-EL-BGN continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Identification of Noise-Sensitive Areas

The information provided at page 125 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Description of Equipment and Noise Mitigation Measures

The information provided at pages 125 to 127 of the original Application continues to apply to the Amendment, with the impact area expanded to include the Additional Laydown Area and surrounding area.

(4) Water

No significant impact to waterbodies is anticipated as a result of the Facility.

(a) Construction and Operation Impact to Public and Private Water Supplies

The information provided at pages 127 to 128 of the original Application continues to apply to the Amendment. Incorporation of an IES design and additional water conservation measures, if installed, will further reduce the water demand of the Facility. As outlined in the original Application, water will be supplied by an existing, regulated water supplier in the region.

(b) Impact of Pollution Control Equipment Failures on Public and Private Water Supplies

The information provided at pages 128 to 129 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment. The incorporation of an IES design, if used, will eliminate the process wastewater discharge, and retain process flows within a series of internal tanks and vessels that will be continually monitored. Water discharge would then be limited

to stormwater, which will be controlled by Best Management Practices and stormwater management features in accordance with NPDES requirements, and sanitary waste, which will be treated and disposed of in accordance with applicable regulations either through a holding tank periodically disposed of at a nearby POTW or an on-site septic system, pending final design.

(B) ECOLOGICAL IMPACT

(1) Site Information

(a) Mapping

The information provided at pages 129 to 130 of the original Application continues to apply to the Amendment.

Figure 07-4 has been updated to incorporate the boundary of the Additional Laydown Area, which was included in the original study area for wetland and stream delineation and threatened and endangered species. No wildlife areas, nature preserves or other conservation areas are present in this area.

An updated Natural Resources Conservation Service soil mapping (Figure 04-2) indicates the presence of highly erodible land on the majority of the Additional Laydown Area, largely related to sloping terrain. Moderately to steeply sloped terrain is present within the narrow drainage valleys located around the intermittent streams present in the eastern and southern portions of the parcel. The rest of the Additional Laydown Area is relatively flat, with a gentle slope toward the south-southeast. Figure 07-4 illustrates all delineated surface water resources; these have been reviewed and approved by the United States Army Corps of Engineers (USACE).

(b) Vegetation Survey

The Additional Laydown Area was included in the original survey conducted to identify representative plant species. Similar to the Facility Site and Construction Laydown Area, the Additional Laydown Area is an active agricultural area with perimeter riparian areas, particularly in the eastern and southern portions of the property. Agricultural fields and wooded areas dominate the land within half a mile of the Facility Site. The information provided at pages 130 to 137 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Species Survey

The information provided at pages 137 to 140 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment. Clearing, including for the Additional Laydown Area, will be restricted to not occur from April 1 through September 30 to avoid the potential impact to Indiana bat summer roosting habitat.

(d) Ecological Study

Wetland Assessment - The Additional Laydown Area was included in the Wetland Delineation and Stream Identification Report (Appendix A) conducted to support the original Application. The majority of identified wetlands in this area are associated with intermittent and perennial tributaries to Pipes Fork, located along the perimeter of the Additional Laydown Area, outside the proposed area of activity. The existing road corridor along which the new access road will run, includes an existing culvert across Stream 12, an intermittent, unnamed tributary of

Pipes Fork that is supported by drainage from Wetland O (located northwest of the Additional Laydown Area). No additional impacts to delineated wetlands or streams are proposed in association with this Amendment.

Ecological Impact Study Summary – The modifications included in this Amendment do not pose any material change to the ecological impact study conducted as part of the original Application. The information provided at pages 140 to 141 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(e) List of Major Species

The information provided at pages 141 to 142 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Construction

(a) Impact of Construction on Undeveloped Areas

The information provided at pages 142 to 143 of the original Application continues to apply to the Amendment. In addition to the impacts outlined in the original Application, approximately 12 acres of wooded area associated with the Additional Laydown Area will be cleared during construction. Restoration of this area will be in accordance with landowner specifications; no Facility-related activities will occur in this area following completion of construction. A minimum 20-foot buffer will be maintained to protect the intermittent streams running along the southern and eastern boundaries of the Additional Laydown Area.

The reorientation of the Facility Switchyard also requires that an additional 0.5-acre of cleared area remain permanently cleared. Low-growing vegetation will be allowed within the adjusted electrical transmission right-of-way, and the remaining area will be landscaped with gravel and shrubbery.

(b) Impact of Construction on Major Species

The original review completed by the United States Fish and Wildlife Service and Ohio Department of Natural Resources included a one-mile radius around the Facility Site. Since the Additional Laydown Area is located directly north of the Facility Site, it was included in this review, which concluded that impacts to threatened and endangered species are not anticipated. A field-confirmation determined habitat on these parcels is not suitable for federally-listed species, and seasonal restriction of clearing will avoid impact to potential Indiana bat habitat. Thus, the information provided at pages 143 to 144 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Mitigation for Short-Term and Long-Term Construction Impacts

The information provided at page 144 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

Similar measures will be implemented on the Additional Laydown Area as were proposed in the original Application. Sediment and erosion control, dust and particulate control, and revegetation will mitigate the short- and long-term impacts of construction. The additional clearing and grading required on the Additional Laydown Area will be conducted in the same manner as those activities on the

Facility Site and Construction Laydown Area. Specifically, habitat tree-clearing will be seasonally restricted to avoid impact to potential Indiana bat habitat, and a minimum 20-foot buffer will be maintained between grading activities and the existing, intermittent streams.

(3) Operation

(a) Impact of Operation on Undeveloped Areas

Although the reoriented Facility Switchyard requires 0.5 additional acre of permanent clearing, significant impact to wildlife species is not anticipated. The information provided at page 145 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Impact of Operation on Major Species

The information provided at page 145 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(C) Economics, Land Use and Community Development

(1) Land Uses

(a) Land Use Mapping

The information provided at pages 145 to 146 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Residential Structures

The information provided at page 146 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Land Use Impact

The information provided at pages 146 to 147 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Structures to be Removed or Relocated

No structures will be removed or relocated as a result of the proposed Facility.

(e) Formally Adopted Plans for Future Use of the Site and Surrounding Lands

The information provided at page 147 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(f) Applicant Plans for Concurrent or Secondary Uses of the Site

The information provided at page 147 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Economics

(a) Annual Total and Present Worth of Construction and Operation Payroll

The information provided at page 148 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Construction and Operation Employment

The information provided at page 148 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(c) Increase in Local Revenue

The information provided at page 149 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(d) Economic Impact on Local Commercial and Industrial Activities

The information provided at pages 149 to 152 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(3) Public Services and Facilities

The information provided at pages 152 to 153 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(4) Impact on Regional Development

(a) Impact on Regional Development

The information provided at pages 153 to 154 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Compatibility with Regional Plans

The information provided at page 154 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(D) Cultural Impact

The Additional Laydown Area was included in the original Phase I archaeological investigation conducted as part of the original Application. This archaeological investigation concluded that the proposed Facility would not adversely affect the 10

previously documented archaeological sites, 17 cemeteries, and one recreational park located within the five-mile study area; the three resources identified within the 232 acre area studied will not be impacted as a result of the Amendment.

An additional archaeological study was conducted to support the proposed natural gas pipeline interconnection corridor. The 93-acre area studied included land proposed for the access road which will connect the Facility Site to the Additional Laydown Area. One cultural object was identified within the area studied, which was determined to not possess significant archaeological research value. No further archaeological investigations were recommended for this area.

The modifications included in this Amendment do not alter the conclusions of this archaeological investigation; therefore, the information provided at page 154 continues to apply to this Amendment and will not change as a result of this Amendment.

(1) Cultural Resource Mapping

The information provided at page 155 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Cultural Resource Impacts

The information provided at pages 155 to 156 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(3) Cultural Resource Landmarks

The information provided at pages 156 to 158 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(4) Land and Water Recreation Area Mapping

The information provided at page 158 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(5) Land and Water Recreation Areas

The information provided at pages 158 to 159 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(6) Recreational Areas and Potential Impacts

The information provided at page 159 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(7) Measures to Minimize Visual Impacts

The information provided at page 159 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(E) PUBLIC RESPONSIBILITY

(1) Public Interaction Program

The information provided at pages 160 to 161 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Liability Compensation Plans

The information provided at page 161 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(F) AGRICULTURAL DISTRICT IMPACT

No agricultural district land is located within the boundaries of the Additional Laydown Area.

(1) Agricultural Land Mapping

Figure 07-7 has been updated to incorporate agricultural land located within and proximate to the boundaries of the proposed Additional Laydown Area. No agricultural district land is located within these boundaries, therefore, the information provided at page 161 of the original Application continues to apply to the Amendment and will not change as a result of this Amendment.

(2) Potential Impact to Agricultural Lands

(a) Potential Construction, Operation and Maintenance Impacts

The information provided at pages 161 to 162 of the original Application and the Applicant's responses to the Staff's First Set of Data Requests, No. 1, in Case No. 13-1752-EL-BGN continues to apply to the Amendment and will not change as a result of this Amendment.

(b) Agricultural Mitigation Practices

The information provided at page 162 of the original Application and the Applicant's responses to the Staff's First Set of Data Requests, No. 1, in Case No. 13-1752-EL-BGN continues to apply to the Amendment and will not change as a result of this Amendment. The Additional Laydown Area does not lie within an agricultural district; therefore, no impact to an agricultural district is anticipated. Construction will incorporate analysis and mitigation of existing drainage paths.

Best Management Practices will be implemented to manage stormwater and protect existing features.

(3) Potential Impact on Agricultural Viability

The information provided at pages 162 to 163 of the original Application and the Applicant's responses to the Staff's First Set of Data Requests, No. 1, in Case No. 13-1752-EL-BGN continues to apply to the Amendment. Use of the Additional Laydown Area will temporarily remove an additional 18 acres of land from agricultural production. Upon construction completion, the Additional Laydown Area, along with the 23-acre Construction Laydown Area, will be restored to agricultural use, in accordance with landowner specifications.

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Summary: Application to Amend Certificate electronically filed by Mr. Michael J. Settineri on behalf of Carroll County Energy LLC