Town of Wawayanda Planning Board State Environmental Quality Review Findings Statement

This Findings Statement is based on the information contained in the Draft Environmental Impact Statement (DEIS), the Additional Studies, and Final Environmental Impact Statement (FEIS) prepared for the CPV Valley Energy Center Project (Project) (collectively, the EIS Documents) and as set forth below, the independent review of the EIS Documents conducted by the Planning Board and its consultants and advisors. The Project applicant is CPV Valley, LLC (CPV Valley).

The Town of Wawayanda Planning Board (Planning Board) has relied upon the advice, technical review, and counsel of its outside environmental and engineering consultants, McGoey, Hauser & Edsall Consulting Engineers, C.T. Male, ARC Engineering and Construction, George M Janes & Associates, Greenplan and The Hudson Group, and of its outside legal counsel, Bavoso, Plotsky & Onofry. These consultants and counsel have reviewed the EIS Documents and the associated record developed with respect to those documents, and have advised the Planning Board with respect to the identification of environmental and other impacts of the Project, the potential significance of such impacts, and the availability and sufficiency of potential measures to avoid, minimize, and mitigate such impacts to the maximum extent practicable. The Planning Board has conducted its own thorough review of the EIS Documents, the public comments received on the EIS Documents, the record created with respect to the EIS Documents and the results of the consultants' and counsel's review of that record. These Findings are based upon the review of the entire record by the Board, its consultants and its counsel. The Planning Board paid

particular attention to the comments on the DEIS, and placed an emphasis on assuring that substantive comments were addressed in the FEIS and in these Findings.

These Findings are made by the Town of Wawayanda Planning Board acting as Lead Agency pursuant to Article 8 of the Environmental Conservation Law, The State Environmental Quality Review Act and 6 New York Code of Rules and Regulations Part 617.

Lead Agency:

Town of Wawayanda Planning Board

Address:

Town of Wawayanda

80 Ridgebury Hill Road

Slate Hill, NY 10973

Name of Action: CPV Valley Energy Center Project

Applicant:

CPV Valley, LLC

Description of

Action:

The proposed CPV Valley Energy Center will be located on an approximate 21.25 acre portion of a total 122 acre site parcel of open land in the northeast portion of the Town of Wawayanda. The broader 122 acre site parcel is bounded by Interstate-84 (I-84) to the south, Route 17M on the east, and Route 6 to the north and west. The approximate 21.25 acre development footprint is located in the southwest quadrant of the broader The development site parcel is currently undeveloped land used site. previously for agricultural purposes, including the growing of hay and corn, and wooded areas. There is a private cemetery (Cooley Cemetery) located on the far northwestern corner of the Project site, which will not be impacted by the Project.

The Project consists of a combined-cycle facility (Facility) capable of generating a peak of approximately 630¹ megawatts (MW) of electricity, although the output of the Facility will vary depending on actual ambient conditions. Approximately 365 MW of this power will be produced using two F Class combustion turbine generator sets. Exhaust heat from the combustion turbines will be sent to heat recovery steam generators (HRSGs) to produce steam to drive a steam turbine generator. The HRSGs will include a natural gas-fired "duct burner" (supplemental firing system). The duct burners will allow for additional electrical production during select periods. Exhaust steam from the steam turbine will be cooled (i.e., condensed) and then returned to the HRSG using an air-cooled condenser. Air-cooled condensing will be employed to minimize water use and eliminate potential cooling tower plume impacts.

For environmental purposes, the Project will be equipped with state-of-theart emissions control technology; including selective catalytic reduction (SCR) technology to control oxides of nitrogen (NO_x) and an oxidation catalyst to control carbon monoxide (CO) and volatile organic compound (VOC)

¹ CPV Valley, LLC is listed as queue position 251 in the NYISO Interconnection Queue and has a maximum summer output ("SP (MW)") rating of 678 MW. The output of the facility varies depending on weather conditions. The 678 MW output represents the facility's maximum summer net output @ 85°F.

emissions. To control the NO_x emissions from the Facility, the combustion turbines also will be equipped with an advanced dry low NO_x combustion system. The dry low NO_x combustion system will limit NO_x formation by controlling the combustion process through optimization of the air and fuel mixture. When the combustion turbines are operating on ultra-low sulfur light distillate oil, water injection will also be used to control NO_x emissions. The CO emissions from the combustion turbines (and duct burners) will be reduced using an oxidation catalyst (also referred to as a CO catalyst). Exhaust gases from the turbines will be passed over a catalyst bed where excess air oxidizes the CO to carbon dioxide (CO_2).

Natural gas will be used as the primary fuel with ultra-low sulfur distillate oil serving as a back-up fuel for reliability purposes. Use of the back-up fuel will be limited to the equivalent of 720 hours per year, per turbine, so that the Facility can reliably support the electrical system in the event that natural gas supplies are needed to meet residential heating or other demands. To accommodate short-term operation on ultra-low sulfur distillate oil, the proposed Project will include a 965,000 gallon fuel oil storage tank and associated off-loading facilities.

The Project will interconnect with the New York Power Authority's (NYPA) 345-kilovolt (kV) transmission system, which is located less than 1 mile north of the Project site. The Facility's new 345 kV gas insulated switchgear (GIS)

switchyard will be located adjacent to the NYPA transmission lines. In

addition to the electrical substation facilities to be located adjacent to the

NYPA transmission lines, the electrical interconnection will include

underground transmission lines that will extend easterly along the Project

site parallel to I-84 towards Route 17M. At the eastern portion of the site,

the underground transmission line route will turn and extend north

paralleling Route 17M in the New York State Department of Transportation

(NYSDOT) Route 17M right-of-way.

Process water requirements for the Facility will be met through use of

treated effluent from the City of Middletown Sewage Treatment Plant.

Treated effluent currently discharged to the Wallkill River will be filtered and

chlorinated for reuse as process makeup water. Process water discharge will

be conveyed back to the City of Middletown Sewage Treatment Plant.

Potable water will be obtained through an interconnection to the municipal

system along Route 6.

Location:

Town of Wawayanda, Orange County, NY

Jurisdiction:

Special Use Permit and Site Plan Review

Contact:

Barbara Parsons, Planning Board Chairperson

80 Ridgebury Hill Road

Slate Hill, NY 10973

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Date FEIS Filed: February 8, 2012

Procedural Summary

On March 10, 2008 a Full Environmental Assessment Form (EAF) addressing the proposed power generation Project was submitted by CPV Valley, LLC to the Planning Board. The formal submittal of the EAF initiated the SEQRA process for the subject action. A solicitation of Lead Agency status was forwarded to involved agencies by the Wawayanda Planning Board on May 8, 2009. On June 11, 2008, the Planning Board formally assumed the role of Lead Agency, and, in that role, issued a positive declaration on June 25, 2008 requiring the preparation of a DEIS.

On October 8, 2008, the EIS Scope was approved by the Planning Board. The DEIS was submitted to the Planning Board on November 18, 2008. After review by the Planning Board and its consultants, any revision to address their comments, the DEIS was accepted as complete on February 23, 2009. Upon acceptance of the DEIS, copies of that document (along with a copy of the public notice) were distributed to all interested and involved agencies and made available to the public at the Town of Wawayanda Town Hall, Goshen Library and Historical Society, City of Middletown, Middletown Thrall Library and the Wallkill Town Hall. The entire DEIS was posted to the Project website (www.cpvvalley.com) and a link provided on the Town of Wawayanda's website (www.townofwawayanda.com) to facilitate public review and comment on the document. The public comment period ran from February 23, 2009 to April 22, 2009, and was subsequently extended through May 14, 2009. A public hearing was held by the Planning Board in its capacity as Lead Agency at the Wawayanda Town Hall on April 8, 2009.

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To provide greater detail regarding specific aspects of the Project, some additional studies were performed at the request of the Planning Board. The studies included seasonally dependent ecological field surveys, a more detailed visual impact assessment of the above ground electric transmission lines, and preparation of a technical memorandum on the visible plume analysis and secondary formation of fine particulate matter (PM_{2.5}), which responded to specific comments on the DEIS (Additional Studies). The Additional Studies were documented in the following reports:

- Spring and Summer 2009 Ecological Field Survey Report, which provides the results
 and assessment of the seasonally dependent ecological surveys;
- Technical Memoranda regarding comments on the Visible Plume and Secondary
 Formation of Fine Particulate Matter (PM_{2.5}); and
- Technical Memorandum regarding the visual assessment further analyzing the impacts of the above ground electric transmission line.

The Additional Studies were submitted to the Planning Board, and the Planning Board held a public comment period on the Additional Studies from March 8, 2010 through March 22, 2010. A Responsiveness Summary was subsequently prepared as part of the FEIS to address all substantive comments received on the DEIS (Section 4 of the FEIS) and the Additional Studies (Section 5 of the FEIS).

A proposed FEIS was prepared initially by CPV Valley. The proposed FEIS was reviewed by the Planning Board and its consultants. The FEIS was revised and ultimately accepted as

complete by the Planning Board on February 8, 2012, and thereafter noticed, filed and distributed as required under 6 NYCRR Section 617.12.

Facts and Conclusions Relied Upon To Support Decision

The EIS Documents fully describe the Project, its environmental setting, and its potential environmental impacts, including a summary of permits and approvals, as presented in Section 1.5 of the DEIS. The EIS Documents also demonstrate the public need for the Project and the socioeconomic benefits that it will provide, which benefits include, among others approximately 660 construction jobs, 25-30 direct jobs during operation, and a new source of revenue for the community and state through the construction and operation of the Project. The Planning board believes that the benefits to the Town serve to balance the identified adverse environmental impacts associated with the Project, all of which have been minimized to the maximum extent practicable.

The EIS Documents identify both significant and minor adverse environmental impacts resulting from the Project. They also comprehensively discuss alternatives to the Project and measures that could avoid, minimize, or mitigate identified significant adverse environmental impacts. The Planning Board has identified measures that will ensure that environmental impacts of the Project are minimized to the maximum extent practicable. The measures are detailed in this Findings Statement, consistent with the requirements of Part 617.11 (Findings Statement).

The Planning Board recognizes the subjective nature of individual perspectives regarding potential impacts from the Project. The Planning Board and its consultants have given careful consideration to these perspectives, and spent many hours reviewing the potential impacts of the Project. The Planning Board has done so with an open mind, consistent with its obligations to assure compliance with applicable laws and regulations and to protect the interests of residents of Wawayanda, and with its broader responsibility as SEQRA lead agency.

The potential environmental impacts reviewed in the SEQRA process are summarized by topic herein. Each section presents a summary of potential significant environmental impacts, the required mitigation, and the Planning Board's related findings. As appropriate, potential environmental impacts both from the construction and operation of the Facility are addressed separately, as are the associated mitigation measures.

Purpose & Need

The Project is consistent with several of the policy objectives set forth in the 2009 New York State Energy Plan. This Plan, which is the most recent State Energy Plan, states the following five (5) policy objectives:

- 1. Assure that New York has reliable energy and transportation systems;
- Support energy and transportation systems that enable the State to significantly reduce greenhouse gas emissions;

- Address affordability concerns of residents and business caused by rising energy bills, and improve the State's economic competitiveness;
- 4. Reduce health and environmental risks associated with the production of energy; and
- 5. Improve the State's energy independence by developing in-state energy supply resources.²

The Energy Plan further states "[p]roduction and use of in-state energy resources – renewable resources and natural gas – can increase the reliability and security of our energy systems, reduce energy costs and contribute to meeting climate change, public health and environmental objectives." ³

The addition of the Project to the generation resources of New York will enhance electric system reliability as well as increase the fuel diversity in the region. As a combined-cycle facility, the Project will be one of the most efficient methods of generating dispatchable electricity. The high efficiency of combined-cycle technology equates to less fuel consumed to produce electricity, and therefore, less emissions. The efficiency of combined-cycle technology along with the clean burning nature of natural gas provides significant reductions in greenhouse gas emissions⁴ when compared to existing alternative generation

² 2009 New York State Energy Plan, p. xiii

³ Id. at p. xiv

⁴ On April 21, 2009, the NY ISO issued a press release entitled "Power Plant Emission Rates Improve: Double-Digit Decline in Past Decade" This document, describes the increased efficiency of power plants as the root of the significant reductions in greenhouse gas and other pollutant emission rates in New York State. Over the ten (Footnote continued on next page)

resources in the state, and more specifically, in the NYISO's Zone G. The Project's combined-cycle technology along with the clean burning natural gas fuel is another step towards improving New York's health and reducing environmental impacts associated with power generation.

The NYISO has confirmed that the expansion of natural gas combined-cycle power generation facilities has improved New York's air quality while reducing overall costs for the consumer⁵. The CPV Valley Energy Center will continue this trend of improved air quality and benefits to the public.

The location of the proposed Project is consistent with the State's Energy Plan to increase in-state generation and energy independence. Further, the NYISO's CARIS⁶ process

year period from 1999 to 2008, SO₂ rates have dropped 77%, CO₂ rates 28%, and NO_X rates 61%. Combined cycle, natural gas facilities are by far the most efficient of the fossil fuels at generating power, and as the press release points out, "...the lower the heat rate the less fuel is required to produce the same amount of electricity.", resulting in lower emissions.

http://www.nyiso.com/public/webdocs/newsroom/press_releases/2009/Power_Plant_Emission_Rates_Improve_0 4212009.pdf

On May 12, 2009, the NY ISO issued a press release entitled "Wholesale Electricity Prices Drop Again: Wholesale energy price in April at a level not seen since 2002" This document credits the more efficient natural gas facilities that have been added to the fleet for driving down wholesale energy prices. "The prices of wholesale electric energy in New York State have dropped to their lowest level since 2002..." Over a ten year period, 1999 to 2008, the system-wide heat rate has improved 21% due to the addition of the efficient fossil-fueled facilities. NYISO President and CEO Stephen G. Whitley was quoted as saying "While the latest drop in energy prices is largely attributable to lower natural gas costs, New York also has a much more efficient fleet of power plants today. Natural gas prices may go back up, but the efficiency improvements will not disappear." The economic, environmental, and reliability benefits for a natural gas facility are unlike any other power generation technology.http://www.nyiso.com/public/webdocs/newsroom/press_releases/2009/NYISO_Wholesale_Electricity_Prices_Drop_Again_05122009.pdf

The NYISO released the "2009 Congestion Assessment and Relief Integration Study, CARIS-Phase 1". This study evaluated the impacts of adding various resource types on the projected congestion costs from 2009 to 2018. In the study, the congestion costs for three regions of the transmission system were calculated for the ten years period. Then, the additions of generic resources were added to those regions to determine the impact on congestion costs. The analysis concluded that the addition of a generic 500MW combined-cycle in the Hudson Valley region, which includes Zone G, would provide significant congestion cost benefits. Of the three regions evaluated, the Hudson Valley region was projected to experience the greatest amount of congestion costs (Footnote continued on next page)

concluded that the addition of new resources located in the Hudson Valley region, which includes Zone G, would provide congestion relief and could provide economic benefits to the consumers⁷. The Project is located in Zone G.

The Project represents a significant capital investment in New York that will stimulate the local economy through construction and operational job creation. As more fully described in Section 7.4 of the DEIS, the economic stimulus provided by the Project once in operation is in excess of \$23 million annually. In addition, the Project is estimated to provide an average of \$2.35 million annually in additional revenues to the Town of Wawayanda, the local school district, the local fire district and Orange County through payments in lieu of taxes and other host community payments.

A. Land Use and Zoning

The CPV Valley Energy Center would be located on an approximate 21.25 acre portion of the total 122 acres of site parcel in the northeast portion of the Town of Wawayanda and approximately 0.4 miles to the boundary with the City of Middletown. The land is currently vacant and bounded by an interstate highway (I-84) and New York State roadways (Route 6 and Route 17M). It is also adjacent to a clover-leaf exit off I-84 with Route 17M. Approximately 7.0 additional acres of land within the 122 acre site parcel would be temporarily used during construction for materials lay down, equipment storage and

(estimated at \$1.3 billion) over the 10-year study period. The study estimated that the location of 500 MW of combined-cycle generation in this region would create \$346 million (net present value) of production cost savings.

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Subsequent to the FEIS being accepted as complete, the NYISO released the "2011 Congestion Assessment and Resource Integration Study, CARIS-Phase 1". Although analysis of this document is not included in the SEQRA record, the conclusions in the new report are consistent with those provided in the 2009 version of the report.

construction parking. The primary land use management law applicable to the Project is the Town of Wawayanda's Zoning Code. Other applicable laws and regulations include the State's Agricultural Districts Law and the Environmental Quality Review Act (SEQRA) regulations governing the designation of the Critical Environmental Areas. In addition, the City of Middletown's Zoning Ordinance will apply to the portions of the Project's electrical, process water supply, and water discharge interconnection that are located within the City.

From a land use development perspective, the CPV Valley Energy Center will occupy approximately 21.25 acres within the large 122 acre parcel. The majority of the tract on the site currently used for agricultural purposes is located within the 21.25 acre development footprint. As a result, the agricultural use will be displaced by the Project development.

The 21.25 acre development footprint is located in the southwest quadrant of the 122 acre site area. The I-84 limited access highway forms a boundary edge between the Project and open space to the south. The two lane Route 6 arterial roadway forms a similar boundary edge to the north and west. In an easterly and northeasterly direction, the areas of the site that are outside the development footprint serve as a physical buffer providing a degree of separation between the proposed physical plant from off-site land uses. Route 17-M, a four lane arterial roadway, forms the easterly edge of the broader Facility site. Highway commercial oriented land uses dominate development along Route 17M. The Facility as an industrial activity will not have any adverse impact to the highway commercial land uses.

Horizons at Wawayanda abuts the Project site to the northeast. The location of the Facility physical development in the southwest portion of the 122 acre site provides a significant

physical separation from the Horizons complex consisting of primarily tree cover along with some open crop land. Four single-family residences are located on the section of Route 6 that forms the northern boundary of the 122 acre site. One of the residences is located on the south side of Route 6. The land use setting of this residence to the south currently consists of agricultural use and open space. This setting will change with development of the energy facility. Through selective tree plantings, development of a landscaped buffer area will be incorporated.

Single-family residences located on Kirbytown Road to the north of the site have areas of tree buffer of varying density and linear thickness leading to Route 6. This tree cover and the Route 6 arterial roadway physically separate the energy facility from the Kirbytown residences. As a result of the physical separation and tree cover, the energy facility does not represent a direct physical disruption to the neighborhood appearance or functioning.

The CPV Valley Energy Facility will require construction of an electrical interconnection to the NYPA transmission lines, located less than one mile north of the site. The transmission line will be underground from the Project to the NYPA transmission lines. From the western edge of the site to the NYPA lines, the transmission lines will be underground within the unpaved portion of the Route 17M right-of-way. No permanent impacts to existing highways or commercial land uses will result from operation of the underground line.

Off site construction trenching activities of the underground electrical conduit will be relatively short in duration and would not be expected to result in significant adverse impacts to nearby land uses due to their temporary nature.

Construction of the electrical interconnect would result in some currently vacant land onsite and commercial land off-site being converted to industrial/utility use. Impacts
associated with the construction of the approximate 0.9 mile utility interconnect easement
would include conversion of undeveloped and forested land to a cleared 20 foot wide
permanent right-of-way, although the existing ecological communities will be maintained.
A total of approximately 1,450 feet of underground electrical interconnect would be
installed offsite mainly in the roadway shoulder of Route 17M, with a portion south of and
then north of its intersection with Route 6.

Operation of the Project would be compatible with the existing and proposed land uses within the 1-mile radius study area. Given the agricultural and open space use of the 122 acre site, no displacement of current physical land use development will result from development of the CPV Valley Energy Center.

Operation of the electrical interconnect also would be compatible with existing and proposed land uses within the 1-mile radius study area, as well as the broader region. Once constructed, the underground electrical transmission line and the water supply/wastewater pipelines will have no impacts to off-site land use development.

Through selective tree plantings on the Project site, a landscaped buffer will be constructed to minimize visual impacts of the Project on viewpoints north of the Site, along Route 6. Due to the minimal nature of impacts to nearby land uses, no specific mitigation measures are suggested for the electrical interconnect and water supply/wastewater pipelines.

B. Cultural Resources

The potential impacts on cultural resources from the construction and operation of the Project are analyzed and discussed in the EIS Documents. The impact analysis was carried out in accordance with the standards and methods contained in *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*, published by the New York Archaeological Council in 1994. The New York Office of Parks, Recreation and Historic Preservation (OPRHP), which acts as the State Historic Preservation Office (SHPO) for the State of New York, was consulted throughout the process for both guidance and concurrence.

A Phase IA and IB archaeological survey was conducted on the proposed construction impact areas of the Project site in an effort to determine if there would be a potential impact to any cultural resources eligible for inclusion in the National Register of Historic Places (NRHP).

In addition, an architectural survey, consisting of a literature search and field verification of historic resources—buildings, structures, objects, districts, and sites—50 years or older was conducted within a 1/2-mile radius, defined as the Area of Potential Effect (APE) of the Project site. The objective of these surveys was to identify historic resources listed in, determined eligible for listing, or potentially eligible for listing in the NRHP; to provide evaluations of NRHP eligibility for the surveyed resources based on the NRHP Criteria for historic significance and integrity; and to provide assessments of direct and indirect (primarily noise and visual) effects to historic resources from the Facility.

A Phase IA/IB Cultural Resource Report was submitted to the OPRHP on October 31, 2008. The Report concluded that the archaeological deposits encountered are not eligible for the National Register of Historic Places. The OPRHP responded in a letter dated December 23, 2008 concurring with the Report's findings, but recommended additional Phase 2 testing at two sites. Upon further discussion with the OPRHP reviewer, Mr. Doug Mackey, it was agreed that Phase 2 testing on the two sites would not be needed if additional shovel tests were conducted in and around the clusters of artifacts at the sites that could confirm no concentrations of subsurface artifacts in those areas.

As recommended by the OPRHP, additional field shovel testing was conducted in September, 2009 at two small areas on the Project site (A07119.000197 and A07119.000198). Consistent with the previous conclusions, these additional investigations did not identify any significant archeological resources on the Project site. The results of the September 2009 field work were submitted to the OPRHP for concurrence with the findings and determination of No Adverse Impact upon properties eligible for inclusion in the State or National Register of Historic Places. The OPRHP concurred with the conclusion, and has determined that the Project will have No Adverse Impact upon properties (historic and archeological) listed in or eligible for inclusion in the State or National Register of Historic Places as stated in their letter dated November 5, 2009.

By letter dated November 4, 2011, CPV provided the OPRHP a summary of Project refinements that evolved as a result of the SEQRA and permitting processes. These include the electric interconnection (addition of the GIS building) and process water supply/return

routing alternatives (see Appendix 7B of the FEIS). The OPRHP's response dated December 13, 2011 requested more detailed information along the proposed water supply/return routing alternatives that are proposed to be located within roadway right-of-way corridors to document existing conditions and assess the potential for intact deposits to remain along these road right-of-way corridors. For any areas where the full depth of disturbance cannot be verified, additional testing may be required to help verify disturbance.

By letter dated January 9, 2012, CPV committed to provide additional information and to carry out supplemental cultural resources investigation of the routing options (or if selected the preferred options) along the Route 17M right-of-way and Dolsontown Road right-of-way. The objective will be to ascertain the extent of previous ground disturbance in the areas proposed to be utilized for the routing alternatives to determine whether installation of the water line has the potential to impact archeological resources. The work will consist of a walk-over of each route alternative, collection of street-view photographs to document disturbance along the routes, and, in areas where disturbance is not apparent, manual shovel tests to document soil profiles. Field observations will be reported in a letter to OPRHP, with a copy of the results also provided to the Town of Wawayanda. CPV Valley will complete this supplemental investigation prior to commencing construction of the water lines.

By letter dated February 1, 2012 the OPRHP stated that they have no objections to this approach or to the SEQRA process being allowed to proceed with the understanding that

such testing in advance of any actual construction be made a condition of any SEQRA finding or New York State Department of Environmental Conservation (NYSDEC) permit.

Based on prior reports and contingent upon the specific results of the supplemental investigation, it is not anticipated that there will be any impacts to NRHP-listed or eligible cultural resources as a result of construction and operation of the Project; therefore, no additional mitigation is necessary. If any changes are made to the Project, additional consultations with OPRHP may be necessary.

C. Visual Resources and Aesthetics

The most prominent features of the overall appearance of the CPV Valley Energy Center are the two exhaust stacks, air cooled condenser, and the generation building. The generation building would house the combustion turbine generators and the Heat Recovery Steam Generators (HRSG). The tallest structure will be the two exhaust stacks with a height of approximately 275 feet above grade. The highest portion of the generation building will be 113 feet above grade. The air-cooled condenser will have a height of approximately 115 feet above grade. The Project will also incorporate a 1,000,000 gallon combination raw water/fire water storage tank, a 400,000 gallon demineralized water storage tank, and a 965,000-gallon fuel storage tank and associated off-loading facilities, transfer piping, and pump systems. The Facility's combined raw and fire water storage tank will be 40 feet tall and the fuel storage tank will be 48 feet tall. The demineralized water storage tank will be 22 feet tall. Ancillary facilities, such as fuel gas compressor, maintenance building, and a

combustion turbine inlet filter would be smaller and less prominent than the aforementioned structures.

Neutral coloring will be used for project building structures. Landscaping is proposed for key vantage points on the development parcel. The Facility lighting plan is designed to meet operational requirements while minimizing to the extent possible offsite visibility. The two exhaust stacks will be lighted to meet Federal Aviation Administration (FAA) requirements. Considerations such as color, landscaping and lighting will be addressed in detail during the site plan review conducted by the Planning Board.

Visual impacts of the Project's electrical interconnect to the 345 kilovolt (kV) NYPA Marcy South system, located less than 1 mile from the site to the northeast have been avoided by placing the electric transmission lines underground from the Facility, to the point of interconnection. The GIS building will be an enclosed structure, similar in character to existing nearby structures. With a height of approximately 55 feet, the GIS building does represent a new element in the area viewshed, however, the NYPA Marcy South transmission structures represent the dominate viewshed feature.

The visual impact assessment (VIA) performed for the Project identified potential viewpoints within a 5 mile radius of the Project site for which viewshed analyses were performed, along with impact assessments and mitigation analyses. In addition, an analysis of potential stack plume visibility was also performed. Visual impact was assessed in terms of the anticipated change in visual resources, including whether there would be a change in character or quality of the view.

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The analysis performed for this Project used the technical concepts and methods contained in the NYSDEC program policy entitled "Assessing and Mitigating Visual Impacts" for evaluating visual and aesthetic impacts generated from proposed facilities.

The visual impact assessment for this Project was performed using two methodologies:

1) viewshed analysis and 2) realistic photo-renderings (photosimulations). A viewshed analysis is a Geographic Information System analytical technique that allows one to determine if and where an object, such as a generating facility, is potentially visible within the visual study area. The results of the viewshed analyses are typically displayed over a USGS topographic quadrangle or aerial photograph. Photosimulations are prepared to obtain the best possible visual representation of the proposed Project in terms of size and scale within the landscape, and assist in evaluating the potential visual impact from a given vantage point. These assessments are contained in the EIS Documents.

Representative viewpoints were selected for photosimulations. The process for selecting the viewpoints for photosimulations included: 1) identification of existing visual resources within the 5-mile study area surrounding the Project site (as described in Section 5.2.3 of the DEIS); 2) determination of potential project visibility from each location identified; and 3) evaluation of potential project visibility for sensitive viewing areas and locations of representative viewer groups in the Project vicinity in accordance with the NYSDEC visual policy.

Existing visual resources and potential viewpoints identified within the Project study area included historic sites, recreational resources, residential communities, major roadways, and other areas identified by the Planning Board.

The CPV Valley Energy Center has been designed in such a way to minimize visual impacts. However, the Project will create a new visual element to the existing landscape. As previously stated, the most prominent structures associated with the Project are the two exhaust stacks; air cooled condenser, and the generation building. The tallest structure will be the two exhaust stacks with a height of approximately 275 feet above grade.

The Project will interconnect to the 345 kilovolt (kV) NYPA Marcy South system, located less than 1 mile from the site to the northeast. The interconnection would be made via a newly constructed, enclosed 345 kV GIS substation located adjacent to the existing NYPA transmission lines. The transmission line connecting the Project to the new substation will be located underground within the right-of-way of Route 17M.

The results of the viewshed analysis and field survey show that the areas with the greatest potential for views of the Project will be open areas in low lying locations and those at higher elevations where views of the site are not obscured by hills and vegetation. Views from parks, schools, and other sensitive receptors considered in the study would be very limited as a result of dense tree cover and intervening topography.

The CPV Valley Energy Center will create a new visual element in the landscape from certain viewpoints. Places where the Facility will appear large in relation to the landscape are

limited to those located very close to the site along major roadways (i.e., I-84 and Route 6) where motorists would view the Project for short periods of time while traveling. Due to the short term nature of this view by motorists, this impact is not considered to be significant.

The vapor plume from the two exhaust stacks will add to the vertical visual impact of the Facility during limited periods when temperature, relative humidity and wind speed are conducive to plume formation. The vapor plume will be a wispy light cloudy type of visual element occurring approximately 13.2 percent of the daylight hours (See Section 3.4 and appendix 3A of the FEIS). At all other times there would be no visible plume seen from the stacks. When the plume is visible, it can increase the Project's impact on visual resources, since the acuity of the human eye will notice the plume's movement and draw attention to the Project.

The Project has implemented a number of techniques to avoid and minimize off-site visual impacts. The techniques are consistent with the visual impact avoidance and mitigation tools recommended for consideration under NYSDEC's visual resources policy. These include design and siting; alternative cooling technologies; changes to the profile or size of the Facility; on-site screening and landscaping; coloring and texture of materials; maintenance during operation. In addition, the Project design also includes enclosing much of the Facility components inside buildings; minimizing stack height based on air discharge analysis; preserving the natural vegetation to the extent practicable and implementing a lighting plan that complies with Dark Sky standards and incorporates red lighting on the stacks to minimize impacts to the surrounding communities and roadways.

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The CPV Valley Energy Center is sited and designed in such a way to minimize visual impacts to the maximum extent practicable. Locating the Facility at the southern center portion of the Project site was preferred as it placed the proposed Facility proximate to nearby Route 6 and I-84 and proposed and existing commercial properties along the Route 6 corridor, thereby providing for a continuation of the orderly development of the Project area by avoiding a fragmented development condition, and also providing maximum buffer from nearby visual receptors, thereby mitigating potential impacts. The air-cooling design was chosen over a wet-cooling design for a number of reasons, including its elimination of cooling tower plumes. The air-cooled condenser (ACC) height was minimized so as not to increase the height of the stacks. Preliminary modeling considered stack heights of up to 325 feet based on Good Engineering Practice stack height associated with an initial Facility design. Project design changes, including the reduction in the height of the air cooled condenser to 115 feet, reduced the Good Engineering Practice stack height to 287.5 feet. The final stack height of 275 feet for the combustion turbines was selected based on dispersion modeling that showed that this height was adequate to largely avoid increases in predicted air quality impacts that can result from the effects of building induced downwash on stacks that are below Good Engineering Practice stack height.

The electric transmission lines required to connect the Project to the existing transmission infrastructure were originally proposed to be above ground within the Project site, but based on the Planning Board's evaluation of underground alternatives, those lines are being placed underground to avoid the visual impacts associated with towers and wires of an

aboveground electrical interconnection. This change to the Project after acceptance of the DEIS responds to and resolves a number of comments on the DEIS.

The proposed Landscaping Plan is intended to enhance the appearance and natural beauty of the property, and to provide visual buffering for the surrounding areas. Various small sections of the entrance to the Project site will be graded and seeded after construction. Approximately 7.0 acres of land will be temporarily used as equipment and construction materials laydown and parking during construction. This land, as well as other land to be left as buffer outside the Facility fence line after construction will be restored to its current open space use after construction.

The existing natural vegetation, which provides large buffer areas surrounding the Facility, and proposed landscaping will help shield full views of the Facility from off site locations. Other landscaping plans include adding trees and shrubs at select areas on the site. These landscaping areas will be protected by protective barriers, curbs, or other damage control measures and from storm water runoff. The Project will incorporate measures to protect landscaping and vegetation adjacent to parking areas, loading areas and driveways. To the maximum practical extent and where applicable, mature shade trees, vegetation, and unique site features such as stone walls will be preserved. The applicant will be required to implement the final landscaping plan, and this requirement will be incorporated as an enforceable permit condition as part of the Site Plan and Special Use Permit Approval.

The buildings (i.e., doors, siding, etc.) will be painted a neutral beige color to mitigate visibility. The steel stack will be painted a neutral gray tone to complement the generation

building. Non-reflective materials will be specified, to further soften the Facility appearance and minimize the potential for glare.

Normal lighting and emergency temporary lighting customary for these types of installations will be provided throughout the Facility. The Project's proposed lighting design will minimize off-site impacts, while providing sufficient lighting to ensure worker safety during routine operations and maintenance. The site lighting will be designed according to the latest edition of the Illuminating Engineering Society (IES) Lighting Handbook and the International Dark Sky guidelines.

An FAA Determination of No Hazard to Air Navigation is required for the CPV Valley Energy Center because the stack height would be greater than 200 feet. Stack lighting will be in accordance with FAA advisory circular No. 70/7460-2 called Obstruction Marking and Lighting, a med-duel system — Chapters 4, 8 (M-Duel), &12. The FAA allows several options for the type of lighting and stack marking. The options include for example: Red Obstruction Lights, Medium Intensity Flashing White Obstruction Lights, High Intensity Flashing White Lights, Dual Lighting (red lighting for nighttime and high or medium intensity white lighting for day time and twilight). Red lighting will be used at night to mark the stacks, so as to reduce any potential impacts associated with white lights shining into homes during nighttime hours. Based on communication with FAA representatives, the red lighting for night time is typically preferred by surrounding residents and the public in general (compared to white lighting).

D. Community Services

This section discusses the Project's potential impacts to local community services, such as the school systems, transportation and emergency response services. Each community function was examined for possible impact on service and capital outlay demands. Particular attention and focus was paid to transportation/highway and emergency services, including police protection, fire, and emergency medical services. The primary service providers of community services were contacted in an effort to determine their capacity to serve and respond to the proposed Project. For each relevant community service, when necessary, an analysis was performed to assess potential impacts of the Project including any suitable mitigation measures.

Police services are provided by New York State Troopers, Troop F.

The closest fire departments to the Project are the New Hampton Fire Company (1 mile east of the Project, in Wawayanda), the Slate Hill Fire Department (2.6 miles southwest of the Project, in Slate Hill), and the City of Middletown Fire Department (2.7 miles northeast of the Project, in Middletown).

The Project's primary structures are located within the New Hampton Fire Company district, which is the closest fire department to the Project. The New Hampton Fire company is located at 5024 Route 17M in New Hampton, NY and provides fire and rescue type calls. The New Hampton Fire Company has three cars, two engines and one 3,500 gallon tanker.

The Facility is proposed to be located in the Minisink Valley Central School District. The Minisink Valley Central District has five public schools including: one high school, one middle school, one intermediate school, and two elementary schools (Town of Wawayanda, 2008). The district comprises approximately 4,700 students. The nearest school to the Project is a private school, Our Lady of Mount Carmel Elementary School. It is located on Wawayanda Avenue in Wallkill, approximately 1.3 miles north of the Project. Our Lady of Mount Carmel Elementary covers pre-kindergarten to eighth grade and has a total of 216 students. The nearest public school is the Truman Moon Elementary School, located at 53 Bedford Avenue in Middletown, approximately 1.9 miles northeast of the Project. The Truman Moon Elementary School is a primary center of approximately 400 students in kindergarten and first grade and is part of the Middletown City School District.

Hospital services in Orange County, and specifically in the vicinity of the Project, are provided by the Orange Regional Medical Center, located on East Main Street in the Town of Wallkill. Other hospitals include Saint Luke's Cornwall Hospital with campuses in Cornwall and Newburgh for a combined 183 staffed beds; Bon Secours Community Hospital in Port Jervis with 183 staffed beds; and Saint Anthony Community Hospital in Warwick with 73 staffed beds (AHD, 2008). Currently, the nearest hospital to the Project is the Orange Regional Medical Center's Horton Campus, approximately 2.7 miles northeast of the Project site.

There are no houses of worship within 1 mile of the Project site. The nearest houses of worship are the Middletown Islamic Center; located 1.1 miles East of the site, Our Lady of

Mount Carmel Catholic Church; located 1.3 miles directly north of the Project site, at 90 Eculid Avenue in Middletown, and Middletown Alliance, also located about 1.3 miles from the site to the North. Both facilities are located in Wallkill.

The construction of the CPV Valley Energy Center is expected to generate approximately 660 temporary construction jobs and 25 permanent operations jobs. Considering a worst case in which the total of 660 temporary positions were filled by workers from outside the current service area of New York State Police Troop F, the influx of project workers would represent a less than 0.07 percent increase in the population currently served by Troop F. In addition, the Project will have private security during construction, thereby requiring minimal to no police services.

Once constructed, the perimeter of the Project site will be secured with a chain link fence, sliding gates and surveillance equipment so as to permit only authorized access to the facility's service drive, structures and operations. One gate would provide access into the Project site, thereby restricting access to this area. The gate will be locked at all times with access provided by Facility personnel. The Facility security will be controlled by the Facility's operators in the control room 24 hours per day, 7 days per week, 365 days per year. All site security personnel would be equipped with communication equipment to maintain contact with construction and operations management personnel and/or the New York State Police Troop F and the New Hampton Fire, Rescue, and Emergency Services. Accordingly, any increase in the demand for police services resulting from construction and operation of the Project would be negligible.

The Facility would be equipped with fire supression systems as well as emergency fire protection backup pumping capacity. The 1,000,000 gallon raw water/fire water storage tank, of which 500,000 gallons are dedicated solely for fire protection purposes, would provide additional capacity for emergency fire fighting use. The remaining balance (up to 500,000 gallons) will be used for Facility process water, and if required, can be used for fire protection. The fire supression systems would be used only during emergencies or during periodic testing of emergency systems, as required. The use of the raw water tank would allow the Project to avoid impacting the local water distribution system for fire protection.

It is not anticipated that the Project would result in significant impacts related to fire and emergency services as the Project has been designed to provide a high level of safety and redundancy and to meet all National Fire Protection Association (NFPA), state, and local requirements. CPV Valley intends to have its Facility personnel trained as an on-site fire brigade, working cooperatively with the fire department, to function as the first line of defense in the event of a fire at the Facility. As part of this training effort, a safety orientation program and fire response plan will be in place during Project construction and operation. A Preliminary Emergency Response Plan has been established, and prior to the commencement of Project construction and operation, CPV Valley will be required, as part of the Site Plan and Special Use Permit approval, to finalize the Emergency Response Plan in consultation with the Town. Based on operational experience of similar type facilities, incidence of fire is remote due to the combination of fire protection systems incorporated in the design of the facility and operator training. The trained operating personnel on site familiar with fire safety and the on-site dedicated fire water storage help mitigate potential

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cost impacts to fire and emergency services in the area. Emergency medical services are available via the hospitals and any costs of such ambulance or hospital services would be addressed by the individual users and therefore would not result in added costs to the municipality.

Consultation with the New Hampton Fire Company will continue throughout the Site Plan process and the design of the facility's fire protection system so as to address and mitigate potential impacts that may be identified. In addition, this consultation with the New Hampton Fire Company will continue through the operation phase to facilitate communication of emergency protocols, coordination of safety programs, review material storage locations on site, etc.

Due to the limited number of operational employees (approximately 25), the proposed Facility will not result in the placement of a significant number of additional students in local schools or impact the ability of local religious institutions to serve their community.

The number of construction workers and employees do not represent a significant increase in the population served by the closest hospital; therefore, the Project is not expected to impact the hospital's resources.

Although construction and operation of the Project is not expected to bring a measurable number of additional school-age children into the districts, when completed the CPV Valley Energy Center will represent a long-term source of incremental revenue for the Town of

Wawayanda and the Minisink Valley Central School District through a Payment in Lieu of Taxes (PILOT) agreement with the Orange County Industrial Development Agency (IDA).

Distributions of a percentage of the PILOT payments to the Minisink Valley Central School District will not impact school aid that the school district receives from the state. The PILOT arrangement through the IDA will allow the school district to realize its percentage distribution of the PILOT payments in addition to the school aid the district currently receives. This financial benefit without any significant increase in students resulting from the Project provides a positive economic impact for the school district. In addition, the Town of Wawayanda will also receive a percentage distribution of the PILOT payments.

E. Socioeconomics and Environmental Justice

This section assesses direct and indirect social and economic effects associated with the construction and operation of the Project, including an evaluation of the local and regional socioeconomic impacts and benefits of the construction and operation of the Project. An Environmental Justice (EJ) Analysis, which addresses potential impacts to low-income and minority populations, is contained in the EIS Documents. Based on the EIS Documents, the Planning Board's findings are that positive socioeconomic impacts will result from the project with no adverse EJ impacts.

The Project will have both direct and indirect positive economic effects on the state, town, county, and school district. These effects will commence during construction and continue throughout the operating life of the Project. The Project will result in an estimated capital

investment of approximately \$900 million for the development and construction of the Facility. In the short term, benefits will include additional employment and expenditures associated with construction of the Project. It is expected that the Project would require approximately 660 employees during the peak construction months, and approximately 300 construction employees on average. Construction is expected to be completed within an estimated 26 to 29-month timeframe. It is expected that the peak construction period would last approximately four to five months. It is anticipated that the required construction labor force for the Project would be readily met with the available trades and union workforce in Orange County. In the long term, the operating Project will represent a source of additional revenue or local jurisdictions through a Payment in Lieu of Taxes (PILOT) agreement, purchases of goods and services, and the Host Community Agreement (HCA). The Project will also provide about 25 fulltime permanent jobs once the Facility is completed. All of these results should have a beneficial effect on local community and businesses.

In addition to the jobs created during construction and the wages paid to the work force, this Project is expected to have an indirect impact on the local economy through the purchase of goods and services, which will support local businesses and perhaps result in the creation of additional new jobs. An input-output (I/O) methodology model was used to determine the economic and fiscal impacts of the Project on the regional economy. The analysis was included in the DEIS and estimated that the Project's direct positive impact on Orange County and New York will result in total output of \$466.5 million in the state of New York, of which \$393.9 million will occur within Orange County, based on

the then current project costs, which have increased since that time. This means that these values would be greater when the project is financed and built.

The job impacts from construction activity will be large, and with indirect and induced (multiplier) impacts occurring across many industries. The construction of the Facility will result in a total job impact of 1,797 across the State of New York during each year of the construction phase of the Project. The total increase in labor incomes from construction in the State is estimated at \$182.4 million.

The operation of the Facility is expected to create approximately 25 new full-time jobs. In addition, another 49 indirect and induced jobs will be created in the region as a result of the operation of the Facility and the income earned from the direct and indirect employment impacts for a total annual impact of 74 jobs in the region. Finally, 20 jobs will be created or "leak" from the region into other areas of New York as a result of CPV Valley Energy Center annual operations. The total job impacts in New York resulting from the annual Facility operations are estimated to be 94.

The total annual direct, indirect and induced income impacts (including all non-wage salary and benefits) in the region are estimated to be \$5.24 million with another \$940,000 of labor income increases occurring in other New York counties, for a total impact on labor income of \$6.18 million. The direct and indirect labor income impacts suggest that the average annual wages resulting from Facility operations will be significantly higher than the current average annual wages in the region.

As noted in the previous section, the economic impacts to the Minisink School District and the Town are expected to be positive.

The PILOT payments will increase the revenues of the local taxing jurisdictions, and will represent a significant portion of their total tax levy. The PILOT payments will serve to offset any minor increases in community service costs that may be associated with long-term operation and maintenance of the Project (e.g., small number of additional school children.)

An EJ analysis of the Project was conducted consistent with the principles set forth in Executive Order 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations" and NYSDEC Policy CP-29.

The intent of this EJ analysis was to determine whether the construction and operation of the proposed Project would have a significant adverse and disproportionate affect on an "environmental justice community."

An EJ area located in the City of Middletown, with a small portion located in Wallkill, was identified. The southwestern most point of the census block is 0.94 miles northeast from the Facility Site. The analysis demonstrates that the Project's potential air emission concentrations do not cause violations of the National Ambient Air Quality Standards (NAAQS) within the EJ study area, and therefore are not adverse. Furthermore, the maximum modeled air quality impact locations do not fall within the potential EJ areas and thus are not considered disproportionate.

Regarding hazardous materials, the use of oil, aqueous ammonia, and other chemicals at the Project site would not result in a disproportionate or adverse impact to the identified potential EJ area. The storage of fuel oil or use of aqueous ammonia or other chemicals at the Project site would comply with all local, state and federal requirements and would not jeopardize public health or impact groundwater quality. The use and/or presence of fuel oil, chemicals, and other materials is currently occurring throughout the two-mile Project study area and is not concentrated within the EJ area. The Facility would also be required to comply with NYSDEC and Town of Wawayanda noise standards at all locations within the Project study area, and therefore, would not cause any adverse impact to any EJ area.

Facility views from within the EJ area are likely to be intermittent and minimal, and limited to the top of the Project stack. Any views that do exist will be within a commercial/industrial context and visual impacts will be minimal. In addition, views of the stack would not be limited to those from within the EJ area. Therefore, visual impacts within the EJ area are not considered adverse or disproportionate.

Because of the socioeconomic benefits arising from the Project, and the avoidance of impacts to any identified EJ areas, no specific mitigation measures are warranted. Although, the PILOT and HCA are outside of the Planning Board's jurisdiction; they will provide significant socioeconomic benefits to the area.

F. Traffic and Transportation

Based on the EIS Documents, the Planning Board had determined that impacts to traffic and transportation would be minimal subject to the mitigation discussed herein

Impacts

The Project site is bounded on the north and west by U.S. Route 6, on the east by N.Y. Route 17M and on the south by Interstate 84 (I-84).

A traffic analysis of the Project is contained in the EIS Documents. The initial stage of the traffic analysis consisted of a detailed review of existing land-use, roadway, and traffic conditions near the proposed site. Existing traffic volumes were recorded in November 2007. Next, in order to identify potential Project impacts, the study estimated and analyzed future conditions and then compared them to existing conditions.

During the construction of the proposed Project, additional vehicle trips would be generated by the construction workforce, and by the delivery of equipment and materials to the Project site. Construction of the facility is expected to take approximately 26-29 months.

It is expected that the highest level of potential traffic impact would occur during the middle 4 to 5 months of the construction period, when the highest level of workers will be on-site. Any traffic impacts associated with Project construction would be temporary in nature limited to the duration of construction.

The traffic impact analysis conducted was conservative in its approach because it included 30 percent of the construction worker trips within the peak hours. As described in the EIS Documents, based on experience with other projects, most construction related trips would arrive and depart before the respective AM and PM peak commuter roadway hours. In this case, 70 percent of the workforce are expected to arrive by 7:00 AM — a full half-hour before the peak hour of the adjacent street, which was determined to be 7:30 to 8:30 AM. Similarly, most of the construction workers would have left the site by 4:00 PM — in advance of the 4:30 to 5:30 PM peak hour.

There are a few instances when construction-related traffic would cause deterioration in Level of Service (LOS) at a study location. The drop in LOS is generally moderate and will be temporary in nature, lasting only during the 4 to 5 months of peak construction activity. Thereafter, conditions will return to pre-construction levels.

Construction involving crossing of Route 6 or Route 17M will utilize directional drilling to minimize the potential for traffic disruption. Construction involving use of roadway right-of-way will be conducted generally during off-peak hour periods with associated informational signing, safety barriers, and police officer control. With construction utilizing the unpaved portion of the roadway rights-of-way, no rerouting of traffic is anticipated. CPV will provide the necessary Maintenance and Protection of Traffic plans for work in the public roadway right-of-way associated with construction of the off-site utility work and obtain necessary permits. Requirements of the NYSDOT will be met. If required by NYSDOT, State Police

traffic officer control, paid by the Project applicant, will be utilized at the intersection of Route 6 and Kirbytown Road, and the Facility site access drive.

Operation

Under full time, post construction operating conditions, at all locations and under both AM and PM peak hour traffic conditions, the impacts from the proposed Project will be negligible in that no LOS would change as a result of the traffic generated by the proposed Facility, compared to the "no build" scenario. The Project site entrance has been located so as to provide sight distances that meet or exceed applicable standards to ensure safe ingress and egress to and from the Project site. Therefore, no additional mitigation measures are necessary.

G. Air Quality

The CPV Valley Energy Center will not result in any significant adverse impacts to air quality. The Project will not only be required to comply with a variety of state and federally issued regulations and guidelines, but it is also designed to be one of the most efficient and clean power generation facilities in New York. The Project is designed to utilize natural gas, as well as state of the art, highly efficient gas turbines in a combined cycle configuration. It will also employ highly effective emission control equipment, including an SCR to control NO_x and an oxidation catalyst to control CO and VOC emissions, at the Facility. These design characteristics play an important role in minimizing and avoiding potential adverse impacts.

The dispersion modeling and other analyses that have been performed demonstrate that not only will the Project comply with all of the various air permitting requirements, but its maximum air quality impacts, both alone and in combination with those of other existing source emissions, will be substantially smaller than the federal and State ambient air quality standards that were established to:

- Protect both public health, with an adequate margin of safety for sensitive individuals such as those with respiratory illnesses, the elderly and children, and public welfare (e.g. flora, flauna and property), and
- Prohibit air pollutant concentration increases that are excessive, which effectively keeps cleaner air clean.

The CPV Valley Energy Center is considered a major stationary source that will be located in an attainment area for a regulated air pollutant, and therefore it is subject to the Clean Air Act's requirement for a Prevention of Significant Deterioration (PSD) permit review. The Project is subject to PSD review for NO_x, CO, particulate matter sized 10 and 2.5 microns or smaller (PM₁₀ and PM_{2.5}, respectively), and sulfur dioxide (SO₂). The Project is subject to Best Available Control Technology (BACT) and ambient air quality impact compliance demonstration requirements for these applicable PSD pollutants. The Project will also be located in an area that is non-attainment for ozone and PM_{2.5}, which means that it is subject to the Clean Air Act's non-attainment new source review program if certain of its potential emissions (of precursor pollutants) exceed a designated yearly threshold. Since the Project's potential emissions exceed the yearly threshold for NO_x and VOC, the Project is required to

meet Lowest Achievable Emission Reduction Rate (LAER) limits and acquire emission offsets at a ratio of 1.15 to 1 for those pollutants. This means the Facility will offset 1.15 times more than what it will actually emit, resulting in a net air quality benefit.

The Project has submitted an application for regulatory agency review in conjunction with the federal and State PSD and non-attainment new source review requirements and process.

The Project will utilize natural gas as the main fuel for generating electricity, and will incorporate an SCR system to limit NO_x emissions. The combustion turbines will also be equipped with an advanced dry low NO_x combustion system. The dry low NO_x combustion system will limit NO_x formation by controlling the combustion process through optimization of the air and fuel mixture. Water injection will be used to control NO_x emissions when the combustion turbines are operating on ultra-low sulfur light distillate oil. The CO emissions from the combustion turbines (and duct burners) will be reduced using an oxidation catalyst (also referred to as a CO catalyst). Exhaust gases from the turbines will be passed over a catalyst bed where excess air will oxidizes the CO. The oxidation catalyst system will greatly decrease CO concentrations. The Facility will incorporate oil as a backup fuel for situations when natural gas use may be curtailed, but under those circumstances the Facility will use ultra-low sulfur distillate to further reduce any emissions associated with the Project.

Maximum predicted Project impacts at identified sensitive receptors within a radius of 5 miles from the Project were determined using typical modeling procedures, with impacts based on the results of a single year of meteorological data. For each combination of

pollutant and averaging period, the year for which the Project had overall predicted maximum impacts was used for the modeling to predict impacts at the sensitive receptors. Receptors representing historic parks, other parks, golf courses, public nature preserves, conservation easements, cemeteries, churches, fire stations, hospitals, nursing homes, police stations, schools, pre-schools, and other recreational areas within 5 miles were identified and included as receptors for the modeling. Maximum Project impacts were predicted for nitrogen dioxide (NO₂), CO, PM₁₀, and SO₂. All predicted impacts were well below the concentration levels that were established by EPA to protect public health and welfare, and to prevent excessive air pollutant concentration increases, respectively.

New (or revised) NAAQS and PSD increments became applicable to the Project after November 2008. The new (or revised) NAAQS pertain to NO₂, SO₂ and lead (Pb). The new PSD increments pertain to PM_{2.5}. The new standards are much more stringent than the ones that applied to those air pollutants in 2008. Supplemental dispersion modeling analyses performed in 2012 and included in the FEIS (Section 3.3.2 and Appendix 3B) demonstrate that the Project and its state-of-the-art air pollutant emission controls are more than adequate to ensure compliance with the new NAAQS and PSD increments.

The Project will not result in any significant adverse impacts to air quality, therefore no mitigation is necessary. The Project will provide an annual summary of fuel use and emissions data to the Town.

H. Noise

A detailed noise assessment of the proposed Project was conducted. The assessment included an ambient noise monitoring program, conducted during the leaf-off season when no insect noise was present (January 28-29, 2008) and a computer noise modeling study. The ambient program was conducted in order to quantify the existing noise environment, including during winter late night hours when ambient noise levels are typically lowest. The computer modeling study included Project source specific noise emission data, as provided by the proposed equipment manufacturers. The modeling conducted included topographic features, and was conservative in that no credit was taken for tree cover or any intervening off site structures that would act to reduce noise levels. Design noise control measures, including enclosing most major sources inside buildings, acoustical specifications for building walls, and noise limits for the air cooled condensers, were included in the model.

The resulting calculated Facility noise levels were compared to minimum late night ambient noise levels from each noise monitoring location in order to determine if any increases in noise would occur, and if so, whether those increases would be below NYSDEC's noise impact screening criterion. The criterion establishes increases in noise of 6 dBA and greater to have the potential for an adverse impact. The Town of Wawayanda noise requirement that noise generated is no greater than 65 dBA at a distance of 100 feet from the Project lot line was also analyzed. The EIS Documents demonstrate the Project noise levels would be in compliance with both the NYSDEC criterion and the Town of Wawayanda noise ordinance,

and that no additional mitigation measures are necessary beyond those proposed in the EIS Documents.

Noise Impacts of Project Operation

Based on the EIS Documents, the noise analysis revealed that no increases in noise from operation of the Project would be expected at any of the noise monitoring locations, with the lone exception being at the Uhlig Road location, where an increase of 4 dBA was projected, which is below the NYSDEC impact criterion. The Town of Wawayanda noise standard will be complied with. A review of this analysis reveals that Project noise levels would be below 65 dBA even within the Project lot line, and are well below 65 dBA 100 feet from the lot line. Accordingly, no significant noise impacts are anticipated due to Project operation, and the Project noise levels would be in compliance with the Town of Wawayanda noise ordinance.

The design of the Facility includes the following noise attenuation features:

- Locating major Facility sources, including the combustion turbines, Heat Recovery
 Steam Generators (HRSGs), steam turbine and ancillary sources within buildings;
- Building walls will be designed to provide a nominal 20 dBA attenuation of interior noise;
- HRSG exhaust stack silencers;
- Acoustically treated building ventilation louvers; and

- An air cooled condenser (ACC) with a noise specification not to exceed 59 dBA at a distance of 100 meters from the edge of the ACC.
- No additional measures are necessary to mitigate operational noise.

Noise Impacts of Project Construction

Construction equipment utilized will differ from phase to phase. In general, heavy equipment (bulldozers, dump trucks, cement mixers) will be used during excavation and concrete pouring activities. Noise is generated during construction primarily from diesel engines, which power the equipment. Exhaust noise usually is the predominant source of diesel engine noise.

Construction equipment is not generally operated continuously, nor is the equipment always operated simultaneously. There will therefore be times when no equipment is operating and noise will be at ambient levels. Also, it should be noted that the construction noise levels modeled are those, which would be experienced for people outdoors. A building (house) will provide significant attenuation for those who are indoors. Sound levels can be expected to be up to 27 dBA lower indoors with the windows closed. Even in homes with the windows open, indoor sound levels can be reduced by up to 17 dBA (USEPA, 1978). Construction noise will also be temporary in nature. As such, no adverse or long term noise impacts from construction noise are anticipated.

Calculated construction noise levels were shown to be below measured average noise levels at all locations. Therefore no additional mitigation measures are required. However, the

Project will nonetheless make use of functional mufflers on all equipment engine exhausts. Further, construction activities are currently scheduled to occur primarily during daytime hours. In addition, noise compliance monitoring will be done during construction and operation subject to final "Noise Compliance Testing Protocol" that is subject to the review and finalization by the Planning Board during the Site Plan approval process.

I. Soil, Geology and Seismology

The topography of the Project Site is nearly flat, with a gentle slope decreasing from west to east. The elevation change is approximately 10 feet.

Based on the preliminary geotechnical analysis in the EIS Documents, the unconsolidated material at the Project Site is suitable to support the proposed Facility. Construction of the Project will require the excavation of soils and the reworking of the unconsolidated surficial material. Site preparation would require heavy equipment for grading and excavation. This would include excavators, bulldozers, graders, front-end loaders, concrete trucks, and dump trucks. This will not impact the geologic setting. Foundations will be shallow and deep, depending upon the requirements of the specific equipment building structure component. The surficial geology at the CPV Valley Energy Center consists of coarse to fine gravel and/or sand, and silts, clays, and oxidized fine sand and gravel. The depth to bedrock is 52 to 80 feet below ground surface. The soils are not contaminated chemically or physically and should be suitable for multiple uses on or offsite. Foundation construction will be completed with standard construction techniques and no blasting of bedrock is anticipated.

Prevention of contamination to soils due to operation of the Facility will be accomplished in part by development and implementation of the best management practices incorporated in the Storm Water Pollution Prevention Plan (SWPPP) that will be consistent with local and NYDEC permits.

Sediment and erosion of soils will be mitigated during construction with common engineering controls. Excavation and grading for the proposed facilities will include reworking to promote good site drainage and runoff control. Given the flat topography that exists at the Project Site, some excavation and fill activity will likely be needed to achieve a site level suitable for construction. Where necessary soils unsuitable as structural fill will be removed from the Project Site. It is anticipated that unsuitable soils will be recycled offsite for landscaping or non-engineering grade fill.

Due to the relatively shallow groundwater at the Project Site, dewatering will likely be required to support foundation construction at select locations. Groundwater will be brought down approximately 1 foot below the proposed sub-grade, prior to excavating to final subgrade. The groundwater will be maintained at that level until the subgrade is prepared and concrete placed in order to minimize disturbance of the ground. This will be temporary and will only be a localized condition. Erosion and sediment control will be installed to prevent impacts to soil and exposed surficial materials.

Guidelines established for agricultural soil removal and restoration will be followed as the site is developed. NYS Department of Agriculture and Markets farm land reclamation notes will be added to the site plan, making these procedures a condition of the site plan approval

for the project. Implementation of the Agriculture and Markets guidelines is a mitigation measure that will be undertaken by the applicant to assure conservation of the agricultural soil resource.

The methods proposed for stripping, stockpiling and stabilizing the agricultural soil profiles are in accordance with NYS Department of Agriculture and Markets and NYSDEC guidelines.

Soils and surface topography will be re-established to original conditions following the installation of the water/wastewater lines and electrical interconnect. Cut material not suitable for re-use as backfill will be recycled off-site.

A third party environmental inspector will be present during construction. The inspector will be trained to screen cut material for evidence of contamination. If contaminated soils are identified, they will be stockpiled separately and sampled for chemical parameters required by the licensed receiving facility permit. The environmental inspector will be paid for by CPV Valley.

Erosion and sediment controls will be maintained throughout construction and during postconstruction restoration. Vehicle exits will be designed to prevent unconsolidated surface materials from being transported to offsite local roadways.

Given that soil nutrients and agricultural chemicals are bound on the soil colloid fraction, and that the exposure period will be shorter in duration than the agricultural tillage cycle, releases from the site related to this temporary use are expected to be less than those associated with the planting of row crops or re-seeding the hay crop.

Operation

During operation, commonly used oils (e.g., fuel oil, lube oil) and chemicals (e.g., aqueous ammonia, water treatment chemicals) will be utilized. The state of the art storage and containment facilities proposed will be operated with management plans to prevent a release to the environment. The mitigation measures to protect geologic resources, as well as other resources, are addressed as part of the *Spill Prevention and Contingency Plan*.

Based upon the above analysis, significant adverse impacts on soils and geology are not anticipated, and mitigation measures in addition to the avoidance, minimization and mitigation measures proposed in the EIS Documents are not required.

J. Water Resources & Infrastructure

Several advanced technologies and sound water resources management policies and practices have been incorporated into the Facility's overall design to minimize impacts to water resources during construction and operation. These include:

- Use of combined-cycle technology for power generation, thereby increasing the overall water and fuel efficiency of the Facility when compared to traditional steam electric generating plants;
- Selection of an air-cooled condenser to dissipate heat, thereby eliminating the need for large volumes of water for cooling purposes;

- Reuse of tertiary treated effluent from the City of Middletown's Sewage Treatment

 Plant to satisfy process makeup requirements for power generation, thereby

 minimizing water withdrawals from the municipal water supply systems or ground

 or surface waters;
- Use of inlet air cooling to enhance the overall performance characteristics of the
 combustion turbines during the peak summer electrical demand season, thereby
 decreasing reliance on older generating assets within the Lower Hudson River Basin
 that require large amounts of water for cooling purposes (i.e., existing facilities
 currently using surface waters of the State in once-through cooling systems);
- Development of best management practices (BMPs), including both structural and non-structural controls, to ensure the proper storage, handling and management of fuel oils, lubricants, transformer oils, water treatment additives and boiler additives; and
- Development of an erosion and sediment control plan to ensure that applicable site specific controls are in place and properly maintained throughout the construction process.

Potential impacts to groundwater resources, wetlands, and surface waters have each been analyzed. In order to reduce the energy of stormwater during construction, flow within temporary swales will be interrupted by a series of stone check dams. The effects of

stormwater runoff will also be controlled through the use of temporary filter fencing installed to protect areas downgradient of construction activity.

Sedimentation/detention basins, properly sized and located, have been included in the Project design. The purpose of the basins is threefold. In addition to providing a controlled location for sediment deposition and retention, the basins will provide storage volume to compensate for that lost through development of the site and will serve to limit peak flows of stormwater runoff to levels which do not exceed current or pre development peak discharge rates (for the 100 year design storm). As the basins are multi-functional (i.e., sedimentation and treatment as well as stormwater detention), they have been designed to control runoff during the 100 year storm event. Removal of accumulated sediments contained within the basins will be performed as needed. The SWPPP included in the EIS Documents details the pre and post developmental drainage conditions as well as the stormwater runoff model and calculations used in development of the basin design. In addition to limiting the peak rate of stormwater discharge, the stormwater management facilities provide the required Water Quality Volume (WQV) for stormwater treatment, as well as the regulatory Channel Protection volume, designed to protect receiving waters from high velocity discharges that would damage or overtop stream banks.

The impacts to water resources include those related to the construction of the Project and the respective interconnects, as well as the long term use of process water and discharge of treated stormwater. These impacts fall into three categories: Impacts attributed to construction of the Project, which will be minimized and mitigated by the design features,

including erosion and sediment control, wetland creation, etc., incorporated in the SWPPP, impacts attributed to operation of the Facility's stormwater management system, which will be minimized and mitigated through the maintenance and operation of a system that meets all regulatory guidelines at the time of construction, and impacts related to the long term use of process water for cooling are expected to be minimal. The use of process water from the City of Middletown Sewage Treatment Plant will have no impact on water resources in general, or on the operation of the Sewage Treatment Plant in particular.

Considering the resource evaluation and analyses prepared for the Project, it is anticipated that construction and operation of the proposed action will have a negligible cumulative impact on water resources. Additionally, the Project should not generate significant negative impacts to water supply or quality in the aquifer or surface waters.

Proper sequencing of construction activities represents a key element in the Project's Construction CSWPPP. BMPs for sediment and erosion control would be implemented early in the construction process and prior to the start of major earthwork activities. These include installation of stabilized construction entrances and installation of silt fencing. Temporary sedimentation basins and diversion swales would also be used as construction progresses. In addition, procedures for the stabilization of soil stockpiles and for protecting catch basins would be implemented on an as needed basis.

All stormwater management, treatment, erosion and sediment control measures proposed for the CPV Valley site have been designed in accordance with the April 2008 New York State Stormwater Management Design Manual (SMDM), NYSDEC's Division of Water TOG

5.1.8 and 5.1.10 and NYSDEC's *Better Site Design, April 2008*⁸. Further, in accordance with Article 17 of the Environmental Conservation Law (which mandates SPDES permit authorization for stormwater discharges associated with construction activity), a comprehensive erosion and sediment control/stormwater management plan is required for the proposed development. The plan under development will detail the erosion and sediment control measures to be utilized on-site during the construction phase.

The project SWPPP has been developed in accordance with NYSDEC guidelines, and the site plans include design measures to minimize and mitigate the effects of these pollutants, given the increase in impervious area brought about by implementation of the proposed project. All stormwater generated by the completed project is treated for quality enhancement in accordance with prevailing guidelines. Current NYSDEC pond and outlet designs have been developed to mitigate impacts from paved areas, and, by definition, are the accepted method for controlling pollution from paved surfaces. These measures, depicted on the Site Plans, and detailed in the SWPPP to be maintained on-site during construction, conform to New York State's Guidelines for Urban Erosion and Sediment Control, particularly the 2008 New York State SMDM and the New York Standards and Specifications for Erosion and Sediment Controls. The stormwater management plan and all proposed control measures shall comply with the requirements of current NYSDEC regulations under ECL Article 17, Titles 7 and 8 as well as 6NYCRR Parts 700-705. All relevant

⁸ Pursuant to NYSDEC DOW -1.2.5: New York State Stormwater Design Manual 2010 Update Transition Policy, the SWPPP for the Project may comply with the 2008 Design Manual because CPV Valley made applications to governmental entities prior to March 1, 2011, which included a preliminary SWPPP, developed using the 2008 version of the Design Manual.

conditions of the SPDES General Permit will be met, including the SMDM requirements for Runoff Reduction and Green Infrastructure, which provide for increased groundwater recharge in the vicinity around newly developed sites.

No significant impacts to surface waters and wetlands are anticipated from construction of the Project. The Facility has incorporated mitigation and avoidance measures into its construction plans, therefore, no additional mitigation is necessary.

Operation

The Project will use an air cooled condenser for heat dissipation to minimize both water supply and wastewater discharge requirements. The Facility's process makeup water requirements will be addressed using tertiary treated effluent from the City of Middletown Sewage Treatment Plant. Process wastewater will be discharged to the City of Middletown Sewage Treatment Plant. The City of Middletown Sewage Treatment Plant currently discharges treated effluent to the Wallkill River. Potable water for on-site staff and visitors would be obtained from the municipal water distribution system. Sanitary wastewater will be discharged to the City of Middletown Sewage Treatment Plant via the town sewer system. Stormwater runoff from construction and operation would discharge to on-site wetlands, which ultimately drain to Monhagen Brook.

The Project site area will be covered in gravel, except for designated roads, tanks, and buildings, and will be approximately 23 percent impervious (i.e., approximately 8 acres will

be impervious). The switchyard area and area beneath the air cooed condenser will be covered with crushed rock.

Potential groundwater impacts attributable to the proposed Project are related to the storage of fuel oil and ammonia, process water usage, and stormwater runoff from the Project site.

Mitigation measures proposed to reduce/eliminate potential water quantity and quality impacts include:

- Aboveground fuel storage to facilitate leak detection will be provided, with secondary containment capable of containing 110 percent of the tank contents. A leak detection system will be incorporated into this containment area.
- Ammonia tanks to be underlain and surrounded by a concrete dike for containment,
 maintenance and leak detection.
- The proposed detention ponds will incorporate measures to provide stormwater treatment in accordance with the 2003 NYSDEC Manual, revised in 2008 and 2010.
- Water quality inlets in heavily trafficked areas of the site will serve to remove sediments from the stormwater stream.
- No de-icing chemicals will be used on site roadways or parking areas.
- The site will not use pesticides or herbicides for site maintenance.

In order to mitigate the potential impacts, such as the increased surface water runoff, peak rate of discharge, and erosion and sedimentation, the preliminary site plan for the Facility includes a series of structural and non-structural stormwater management and erosion control measures. These measures, along with the other design features, adequately mitigate the potential impacts identified.

Facility operation requires the use and storage of oil and hazardous materials (OHM), such as natural gas, fuel oil, and aqueous ammonia. These are well known and have been safely used by commercial and industrial facilities throughout New York State in a wide range of applications, including electric power generation. The majority of the OHM required to support operations would be consumed in the electrical generation process or recycled offsite. The Facility design incorporates a number of features to mitigation potential impacts associated with the release of these materials, including locating major processing equipment indoors, installing indoor storage areas for water treatment chemicals in the water treatment buildings, stores chemicals, used oils and other lubricants in designated storage enclosures within the gas turbine building, the maintenance warehouse and the water demineralization building (the enclosures would be constructed with an impervious, chemically resistant pad on which to place portable containers), proper labeling and handling procedures, hazardous materials training programs for employee, and proper truck unloading procedures.

All piping, fittings and connections associated with the transfer of oil or hazardous materials would be fabricated, constructed and installed in a manner that would prevent the escape of any potentially toxic materials to the ground, ground water or surface waters.

As part of final design and in accordance with New York State regulations, a Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) would be prepared for the Facility with asbuilt drawings. The SPCC Plan will be subject to the review and approval of NYSDEC.

An emergency response plan also will be developed to detail procedures to prevent a release of OHM to the environment and to direct response actions at the Facility in the event of an emergency. The plan will evolve as part of final design and construction, ultimately completed using as-built plans and implemented with Facility staff.

The Facility will acquire process water from the City of Middletown Sewage Treatment Plant (STP), and will return the discharge back to the headworks of the STP. Due to the minimal volumes of process water required for operation and relatively unchanged characteristics of the discharge water, no impacts associated with the Facility's process water are anticipated.

The impact avoidance, minimization, and mitigation measures proposed in the EIS Documents minimize adverse impacts to the maximum extent practicable; therefore, no additional mitigation measures are necessary.

K. Ecology

The NYSDEC list of Species of Greatest Conservation Need, NYS Comprehensive Wildlife Strategy (NYSDEC, 2008) was consulted and reviewed with respect to the potential

occurrence of these species or their habitat on-site and any potential impacts associated with project construction.

The CPV Valley Energy Center would be located on approximately a 21.25 acre portion of 122 acres of open land comprising the site, consisting primarily of agricultural cropland, hayfield, and small portions of adjacent federal jurisdictional wetlands. An additional 7 acres of land, primarily old field and hayfields, within the 122 acre parcel would be temporarily disturbed during construction for materials lay down, equipment storage, and construction parking.

As a result of the CPV Valley Energy Center project construction, permanent impacts will occur to 21.25 acres of cropland/row crop ecological community and permanent filling of 0.33 acres of Federal jurisdictional wetlands. The Facility has been designed to minimize and/or avoid impacts to wetlands to the maximum extent practicable. The layout and footprint of the Facility is focused on the upland portions of the site; however small fringe wetland areas within the fields, adjacent drainage ditches, and broad swale along I-84 containing invasive species common reed (*Phragmitis sp.*) could not be entirely avoided. Permanent wetland impacts of Federal jurisdictional wetlands, as a result of the main facility footprint are 0.246 acres. For construction laydown/parking areas, approximately 7 acres of Successional old field and hayfield will be temporarily impacted, and will be restored upon completion of construction. Approximately 0.09 acres⁹ of wetland, including

⁹ Although the amount of permanent wetland impacts may vary slightly during the Site Plan approval process, the identified mitigation area exceeds the required amount of mitigation and will sufficiently offset any additional (Footnote continued on next page)

a temporary bridge across Carpenter Creek, will be temporarily impacted to provide access to the laydown areas.

The routing of the underground electric transmission line has also been optimized to avoid wetlands. The electrical transmission line extending east from the Facility will be placed underground, reducing the right-of-way clearing requirements to further reduce impacts to forested wetlands. Given siting constraints such as extensive wetlands around the site and the ability to site the transmission line in the roadway, the on-site underground electrical transmission line option will consist of an underground duct bank containing insulated, three phase conductors, and up to three precast concrete manholes approximately 20 feet long by 9 feet wide by 8.5 feet deep in dimension (540 square feet each, for a total of 1,620 square feet [0037 acres]).

The on-site underground electrical transmission route would follow the same general route as the originally proposed overhead route. The construction corridor will occur within approximately 2,077 linear feet of wetlands (240 linear feet of which are currently forested). Use of a 75 foot construction corridor would result in approximately 3.56 acres of temporary construction impacts. Approximately 0.46 acres of permanent impacts will occur to wetlands in the form of conversion of forested to non-forested vegetation. This arrangement results in a reduction from the above ground option that consisted of a 130 foot right-of-way width resulting in approximately 6.2 acres of temporary wetland impacts, and 0.92 acres of permanent impacts to wetlands in the form of conversion of forested to impacts. To the extent the permanent wetland impacts are reduced, the mitigation amount will remain in excess of

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amounts required.

non-forested vegetation. A permanent corridor of 20 feet will be maintained for the electric transmission line within the site proper (i.e., from the switching station to the crossing of Carpenter Creek at Route 17M).

The underground duct bank for the electrical transmission line will cross the two streams; an unnamed tributary to Carpenter Creek (NYSDEC Class B, south of where it joins Carpenter Creek and Carpenter Creek itself where it crosses Route 17M. These crossings will result in 600 square feet (0.01 acre) of temporary impact to the stream and its banks. Open cut construction methods will be used. Following construction, the trenched areas and the disturbed corridor will be re-graded, stabilized, and re-vegetated. The stream bed and banks will also require restoration to pre-existing grades, with bank stabilization measures and monitoring to prevent soil erosion. The Freshwater Wetlands Permit issued by NYSDEC and the Nationwide Permit issued by the U.S. Army Corps of Engineers (ACOE) will address the construction of the underground electrical transmission line. Wetland and stream restoration monitoring will be implemented according to permit conditions.

The riser poles at the GIS building site location in Middletown would permanently impact approximately 0.05 acres of wetlands. Given the pre-existing disturbed conditions of the wetland area and the developed nature of the area, the impacts associated with the pole installation are considered to be insignificant. The process water supply/return lines will be routed to avoid impact wetlands.

A wetland mitigation plan has been prepared in accordance with the NYSDEC and ACOE Joint Application review process and associated mitigation standards, in which both the

permanent "fill" impacts and "forest conversion" impacts associated with the project will be compensated on the site. Wetland fill impacts will be compensated for on the site by creating a wetland replacement area, subject to the review and approval of NYSDEC and the ACOE. The wetlands will be replaced on site on a greater than 2:1 ratio, resulting in the creation of 0.80 replacement acres¹⁰. This wetland replication area will also provide enhanced wildlife habitat functions for the site. Conversion of forested wetlands to nonforested wetlands within the electrical interconnect will be compensated by creating a permanent forested buffer along Carpenter Creek where there are currently fields in agricultural use. The NYSDEC SPDES General Permit for Stormwater will contain conditions that will further protect wetland resources, including a provision for a Stormwater Pollution Prevention Plan. The additional field studies for the site included study of the resource value of the existing vernal pools. The vernal pools were found to have "low" (Tier III) overall biological quality according to the assessment manual, "Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States" (Calhoun and Klemens, 2002), which was recommended by the Town's DEIS consultant. Construction of the Facility and the transmission line will avoid and not have direct impacts on the vernal pools.

In response to ecological comments received on the DEIS, supplemental studies were conducted for plant species of conservation concern, summer roosting habitat for the

¹⁰ Although the amount of permanent wetland impacts may vary slightly during the Site Plan approval process, the identified mitigation area exceeds the required amount of mitigation and will sufficiently offset any additional impacts. To the extent the permanent wetland impacts are reduced, the mitigation amount will remain in excess of amounts required

Indiana bat, and potential turtle habitat species complexes. As summarized in Section 3.2 of the FEIS no significant impacts on ecological resources have been identified for either Facility construction or operation.

Although the limited amount of wetlands impacts are unavoidable, the optimization of the Facility's design and layout have significantly minimized, the impacts, to the maximum extent practicable.

Impacts to wildlife habitat will be minimized due to utilization of agricultural fields for the majority of the proposed Facility. Losses of forested habitat will be minimized through the southern routing of the electrical interconnect, selection of an underground construction methodology, maintenance of only a 20 foot wide permanent electrical corridor, and the use of roadway shoulders where possible. No impacts to Federal or State listed Threatened or Endangered species are anticipated. By locating the electrical interconnect route in a corridor requiring the least amount of tree removal, losses of potential forested summer roosting habitat of the Indiana bat will be minimized. The water/wastewater line route will use existing roadways, non-forested areas, and existing overland utility corridors to minimize use of any new overland routes/corridors.

No significant impacts to Federal or State listed Threatened or Endangered species are anticipated; therefore no further mitigation is warranted. However, based on recommendations made during agency reviews, several large trees in the vicinity of the wetland mitigation area that are in continuum with the adjacent forested area, and that could potentially provide summer roosting habitat for Indiana bat, will be preserved and

integrated into the mitigation area. In addition, all tree clearings shall be conducted between the dates of November 15 and March 31 to further protect the federally listed endangered Indiana Bat.

L. Community Character

The EIS Documents evaluated the impacts on the community character of the area in the vicinity of the Project. Community character is defined as:

- The built environment which may include historic buildings, development and landuse patterns, architectural landscape, roads, sidewalks, and visual character. The natural, or "un-built" environment often encompasses stream corridors, open spaces, farms, geographical features, critical habitats, and air and water quality. The interaction between the built and un-built environment is also an element of community character.
- The social and cultural characteristics of a community can include those attributes that reflect its overall quality of life (i.e., quality of schools, poverty and crime rates, demographics, etc.) and represent its cultural resources (i.e., hospitals, museums, social gatherings, local arts, community activities, etc.).
- The community's economic environment may include the number and quality of jobs, unemployment rates, type of business, and presence and/or vitality of a downtown area.

The Town of Wawayanda is a rural-suburban community located in western Orange County, New York. The Town was incorporated in 1849, and its roots lie in agriculture due to its acres of fertile "black dirt" located in the floodplain around the Wallkill River. The Town encompasses a mix of small-town, suburban and rural settings and is home to several historic hamlets. According to the Town's Comprehensive Plan, Wawayanda has been experiencing significant growth pressures since before 2000 as neighboring areas to the east and south continued to accommodate the movement of populations outward from the New York City metropolitan area. Residential development has largely been incremental. There is a large amount of vacant land primarily due to environmental constraints such as poor soil conditions for development, wetlands, floodplains and steep slopes. Since 2000, the Town's population has continued to increase due to its proximity to transportation, highways and its affordability relative to other communities. (Saratoga, 2006).

The Town of Wawayanda's most recent Comprehensive Plan was adopted in August, 2006. It places emphasis on appropriate economic development together with preservation and protection of natural and community resources. The plan sets forth environmental, cultural, and agricultural priorities. The Town of Wawayanda's most recent Comprehensive Plan centers around four major themes: promoting economic development and diversity, maintaining and supporting Wawayanda's rural character, protecting natural resources and open space, and cultivating a sense of community.

With respect to industrial development, the Town's Comprehensive Plan seeks to channel commercial and industrial uses into designated zones. The Project site and surrounding area is proposed to be within a Mixed Commercial Zone. This targeted area was created based on a set of environmentally-based criteria, existing land use and zoning, current land use planning principles, and residents' preferences.

The area has seen some recent developments along this corridor, including a project directly northeast of the Project site, the Horizons at Wawayanda. This housing development consists of several large three story buildings. Across the street from the Project site, a large warehouse with building heights of 35-40 feet was recently built, the Pannatonni project. Just west of the Project site along Route 6 is the New York Department of Transportation (NYDOT) facility which has some large buildings, including a very tall shed and cell tower. North of Kirbytown Road runs an abandoned railroad bed and the NYPA right-of-way and electric transmission lines and towers that are as high as 130 feet.

The primary focus of the Route 17M corridor centers on automotive and commercial uses while the Route 6 corridor is more diversified and includes more industry and a large-scale dairy operation, Elvree Farms, with closely massed large scale buildings and several silos up to 85 feet in height. Other industrial uses that set the tone for this portion of Route 6 include the Thruway Authority/NYSDOT maintenance facility, which has several large buildings, salt sheds, and a 180 foot cell tower, Eason's Auto Body, Thermo King, and the Tetz facility which houses a concrete batch plant, a crushing and screening plant, and truck/equipment repair facilities.

The community character during construction of the Project would be affected only relatively close to the Project site as a result of traffic and noise. However, such impacts would be relatively minor and temporary, and will be mitigated (e.g., by offsetting construction work day hours from peak traffic periods on local roads, use of noise attenuation measures on construction equipment). The construction workforce is not expected to result in any required in-migration of workers, and thus no temporary impacts to community character are expected from the need to accommodate such workers in homes in the area or provide municipal services to these workers.

As the Project will not result in any discernible in-migration of workers, it will not have an effect on the character of the area in terms of changing the number or type of people living in the area, or affecting costs associated with additional school enrollment or other town services. As well, traffic impacts during operation will be negligible compared to existing traffic volumes. Other environmental factors such as changes in noise levels, air emissions, and water impacts will generally not be discernible, and will not affect community character. Visual impacts could result in minor changes to the character of the area in limited locations that are both very close to the Project and have a view of the Project, as the landscape at the Project site would change from open/agricultural land to industrial. However, the extent of visibility is limited due to topography, trees, and structures in the area, and due to the undergrounding of the electrical interconnection. Thus overall, the Project would not change the community character of the area except in limited locations very close to the Project site where views exist.

With respect to positive impacts, the significant revenues going to the Town of Wawayanda, and more specifically the Minisink Valley Central School District, will allow the Town to improve its services to residents, and the school district to improve the general quality and character of its school system. Additionally, 25 jobs will be created for operation of the Project. CPV expects all 25 positions to be filled locally.

As stated previously, the Project site is located within an area specifically targeted for mixed commercial use, and will be consistent with the uses currently authorized in that area, as well as futures use proposed under the Comprehensive Plan.

The Project would aid in economic development and diversity by broadening the community's revenue base and creating stable new jobs in the energy industry. The siting of the Project allows economic development without threatening the goals of the other themes in the Town's Comprehensive Plan. One of the recommendations in the Town's plan is to balance commercial and industrial growth in the town's three school districts.

Relative to scale and size, portions of the Facility will be higher than the existing structures in the area, including the generation building (113 feet), Air Cooled Condensers (115 feet), and the Facility stacks (275 feet). The Facility's placement at the southern center portion of the Parcel helps to mitigate visual effects of the Facility structures from residential areas to the north of the site.

The Facility's combustion turbine stacks are the most visually prominent feature. One way to minimize stack height is to limit the height of nearby structures that determine the Good

Engineering Practice stack height. Preliminary modeling considered stack heights of up to 325 feet based on Good Engineering Practice stack height associated with an initial Facility design. Project design changes, including the reduction in the height of the air cooled condenser to 115 feet, reduced the Good Engineering Practice stack height to 287.5 feet. The final stack height of 275 feet for the combustion turbines was selected based on modeling that showed that this height was adequate to largely avoid increases in predicted impacts that can result from the effects of building induced downwash on stacks that are below Good Engineering Practice stack height.

The proposed landscaping plan is intended to enhance the appearance and natural beauty of the historical agricultural use of the existing property, and to enhance property values in the surrounding areas. Various small sections of the entrance to the Project site will be graded and seeded after construction. Land outside the Facility fence line will be left as buffer after construction and will be restored to its current open space use.

Other landscaping plans include adding trees and shrubs in areas on the site. To the maximum practical extent and when applicable, mature shade trees, vegetation, and unique site features such as stone walls will be preserved. A buffer area will be placed along the Route 6 boundary; and one shade tree (minimum caliper of three inches at four feet) will be planted for each 40 feet of lot frontage.

The natural vegetation, large buffer areas surrounding the Facility, and proposed landscaping will help shield full views of the Facility from off site locations. The exterior architectural treatment of the buildings (i.e., windows, doors, siding, etc.) will be painted a

neutral beige color to reduce visibility. The steel stack will be painted a neutral gray tone to complement the generation building. Non-reflective materials will be specified, where feasible, to further soften the Facility appearance and minimize the potential for glare.

The proposed transmission line interconnect will consist of an underground duct bank configuration routing within a 20-foot wide right-of-way. The underground alignment will basically parallel I-84. It will then parallel Route 17M and cross Route 6, eventually connecting to NYPA's Marcy South 345 kV right-of-way electric transmission system. The transmission line was placed underground to mitigate visual impacts and to avoid any change to the character of the area.

The Project will not have significant adverse impacts on the character of the surrounding community because it will not generate significant operational traffic, it is a use consistent with the existing and planned future character of the surrounding area, its visual impacts will be small given the landscaping and screening features incorporated into the Project design, its noise impacts will comply with applicable criteria, and it will not burden community services. The following are some of the Project attributes that will allow the Facility to blend with the existing community character:

 The Facility's placement at the southern center portion of the Parcel helps to mitigate visual effects of the Facility structures from residential areas to the north of the site.

- Various small sections of the entrance to the Project site will be graded and seeded
 after construction. Land outside the Facility fence line will be left as buffer after
 construction and will be restored to its current open space use.
- To the maximum practical extent and when applicable, mature shade trees, vegetation, and unique site features such as stone walls will be preserved. A buffer area will be placed along the Route 6 boundary; and one shade tree (minimum caliper of three inches at four feet) will be planted for each 40 feet of lot frontage.
- The exterior architectural treatment of the buildings (i.e., windows, doors, siding, etc.) will be painted a neutral beige color to reduce visibility. The steel stack will be painted a neutral gray tone to complement the generation building. Non-reflective materials will be specified, where feasible, to further soften the Facility appearance and minimize the potential for glare.

Based upon the analysis above, no additional mitigation for impacts to community character are required.

Unavoidable Adverse Impacts

As discussed previously, the proposed Project will result in significant long-term economic and other benefits to the Town of Wawayanda, the local school districts, special districts, Orange County, as well as the state as whole. When fully operational, the Project is capable of

providing a peak of approximately 630¹¹ MW of highly efficient, low cost electric power generation. The development of the site is consistent with the Town's zoning and comprehensive plan.

Despite the positive effects anticipated as a result of the Project, its construction and operation will necessarily result in certain unavoidable adverse impacts to the environment. The majority of the adverse environmental impacts associated with the Project will be temporary, and will result from construction activities. Site preparation (e.g., clearing, grading), and construction of the facility (including the electrical interconnection and water and sewer connections) will have short-term and localized adverse impacts on the soil, water, agricultural, and ecological resources of the site. This construction will also have short-term impacts on the local transportation system, air quality, and noise levels. These impacts will largely result from the movement and operation of construction equipment and vehicles, which will occur during the construction of the Project. The level of impact to each of these resources has been described in the EIS Documents. They will generally be localized and/or of short duration.

Long-term unavoidable impacts associated with operation and maintenance of the Project include visibility of the stacks and air emissions from Project operation. While the presence of the stacks will result in a change in perceived land use from some viewpoints, their overall contrast with the landscape will likely be low to moderate in most locations. Although the project will be a source of new air emissions, the air impact analyses demonstrate that those

¹¹ CPV Valley, LLC is listed as queue position 251 in the NYISO Interconnection Queue and has a maximum summer output ("SP (MW)") rating of 678 MW. The output of the facility varies depending on weather conditions. The 678 MW output represents the facility's maximum summer net output @ 85°F.

emissions will not create any significant adverse impacts. Project development will also result in an increased level of sound at some receptor locations within the study area, a minor loss of cropland/row crop ecological community, the conversion of Red Maple-hardwood swamp to non-forested wetlands, and the conversion of upland Beech-maple mesic forest to non-forested upland. As described in the EIS Documents, these impacts are not considered significant.

Although adverse environmental impacts will occur, they will be minimized through the use of various general and site-specific avoidance and mitigation measures, as described in the herein. With the incorporation of these mitigation measures, the Project is expected to result in positive, long-term overall impacts that will offset the adverse effects that cannot otherwise be avoided.

Alternatives

The EIS Documents described and evaluated a range of alternatives to the proposed Project. These alternatives included alternate sites, fuels, electric and gas interconnect routing, air emission control technologies, condenser cooling technologies, designs, equipment selections, and water supply options. The discussion of alternatives was principally contained in Section 19 of the DEIS, and in the related sections of the FEIS and Responses to Comments. The no action alternative was also evaluated.

Alternative Project Sites

As a private applicant without the power of eminent domain, CPV Valley is only required to consider reasonable alternative sites that are under its control. Nonetheless, CPV Valley did

conduct an alternate site screening analysis which concluded that the proposed Project Site is the preferred site. Further, and in any event, there are no suitable alternative sites under the control of CPV Valley.

Based upon the discussion in the EIS Documents, the Planning Board finds that all practicable alternatives have been reviewed and analyzed in the EIS Documents and that, with the Project changes described in the FEIS, there are no practicable alternatives to the Project that would avoid or minimize adverse environmental impacts to a greater extent.

Alternative Electrical Interconnection Routing

Three alternate routings for the electrical interconnection were considered in the DEIS. For all of the alternatives, the first segment of the route, on the Project Site, would be the same up to the eastern Project Site boundary at Route 17M. Alternative 1 would continue north from that boundary along the western shoulder of Route 17M to the NYPA 345 kV line right-of-way. Alternative 2 follows the same route to the Project Site boundary, but would then continue east beneath Route 17M, cross beneath a culverted section of a stream flowing from the site, and then continue via underground conduits to the east, crossing Sunrise Park Drive and a second culverted section of the stream. From there, Alternative 2 would continue east across Monhagen Brook to a set of tie-in structures at the existing NYPA lines. Alternative 3 would share most of its route with Alternative 2, but would cross Sunrise Park Drive at more of an angle to the northeast, and then would immediately cross Monhagen Brook east of the Sunrise Park Drive. All of the alternatives included evaluation of both overhead and underground routing configurations.

After consultation with ACOE, NYSDEC and NYISO and the other involved transmission owners, and consideration of the comments on the DEIS, CPV proposed to utilize Alternative 1 with an underground arrangement that exits the site and travels along the west side of Route 17M, and terminates at the new 345 kV GIS substation adjacent to NYPA's Marcy South transmission right-of-way, just north of the intersection of NY Routes 6 and 17M. Based upon its consideration of the EIS Documents, the Board finds that this proposed alternative is the one best suited for the Project and the community, and will avoid and minimize adverse environmental impacts to the maximum extent practicable.

Alternative Gas Line Routing

The Project's natural gas fuel will transported to the Project via the Federal Energy Regulatory Commission (FERC) regulated Millennium Pipeline. The Project will interconnect to the existing Millennium Pipeline by a new 7 to 8 mile long gas transmission line, which would require approval from FERC. An alternative option of obtaining natural gas transportation service through Orange and Rockland Utilities, Inc. (O&R) was evaluated in the DEIS, which would have require the construction of a new 2 to 3 mile natural gas transmission line, which would require approval from the New York State Public Service Commission (PSC) under Public Service Law Article VII.

Section 17.5 of the DEIS provided a discussion of both alternatives. A map level and literature review of the potential environmental impacts to wildlife, wildlife habitats, wetlands, water bodies and resources, groundwater soils, vegetation, cultural resources and land use along the potential routing options was conducted. Details of the corridor level map and literature

review study are presented in Appendix 17-A of the DEIS. Routing options evaluated were anticipated to have relatively minimal environmental impacts and minimal cumulative environmental impacts with respect to the proposed Project.

CPV Valley has reached an agreement with Millennium Pipeline for the construction of the natural gas lateral connecting the Project to the pipeline. Millennium Pipeline has identified potential routes for the connecting pipe. The routes were evaluated based on utilization of existing rights-of-way and minimization of environmental impacts. The final routing will be the responsibility of Millennium Pipeline and will undergo its own separate environmental review and approval process.

Alternative Cooling Technologies

CPV Valley proposes to utilize air-cooled condensers to cool the exhaust from the steam turbine. Four alternatives to using an air-cooled condenser were evaluated in the EIS Documents: once-Through Cooling; mechanical draft (wet) cooling towers; hybrid (wet/dry) cooling towers; and natural draft cooling towers. For the reasons described in the EIS Documents, the Planning Board determines that use of an air-cooled condenser will avoid and minimize adverse environmental impacts to the maximum extent practicable.

Alternative Air Emissions Control Technologies

The proposed Facility design incorporates the use of SCR. SCR is an add-on NO_x control technique that is placed in the exhaust stream following the gas turbine/duct burner. SCR involves the injection of ammonia (NH3) into the exhaust gas stream upstream of a catalyst

bed. On the catalyst surface, NH3 reacts with NO_x contained within the flue gas to form nitrogen gas (N2) and water (H2O). Other air emissions control technologies evaluated in the EIS Documents included Selective Non-Catalytic Reduction (SNCR); XONON™; and SCONOX™. The Planning Board finds that, for the reasons described in the EIS Documents, use of SCR will avoid and minimize adverse environmental impacts to the maximum extent practicable.

Alternative Facility Designs

The EIS Documents evaluated a number of alternatives to the Project that would have resulted in a project of a smaller or larger generating capacity. The alternatives investigated included different turbine technologies, including "G" class turbines and a Siemens Westinghouse V84.3 steam turbine, and a project configuration without duct firing. The Planning Board agrees with the conclusions in the EIS Documents that use of the "F" technology with duct firing will provide the most cost-efficient facility, and will avoid and minimize adverse environmental impacts to the maximum extent practicable.

Alternate Site Layouts

The EIS Documents considered a number of potential site layouts on the 122 acre parcel. Locating the Facility at the south central portion of the 122 acre parcel was preferred for three reasons. First, it placed the proposed Facility proximate to nearby Route 6 and I-84 and proposed industrial properties; thereby providing for a continuation of the orderly development of the Project area by avoiding a fragmented development condition. Second, it placed the Project further away from nearby visual receptors in an effort to mitigate potential

visual impacts. Third, the location minimizes impacts to wetlands and vegetated habitats. The Planning Board concurs that the proposed layout will avoid and minimize adverse environmental impacts to the maximum extent practicable.

Alternate Stack Heights

The EIS Documents included evaluation of several ways to minimize the visibility of the proposed Facility, including changes to the Facility profile and size. The Facility's combustion turbine stacks are the most visually prominent feature. One way to minimize stack height is to limit the height of nearby structures that determine the Good Engineering Practice stack height. Preliminary modeling considered stack heights of up to 325 feet based on Good Engineering Practice stack height associated with an initial Facility design. Project design changes, including the reduction in the height of the air cooled condenser (ACC) to 115 feet, reduced the Good Engineering Practice stack height to 287.5 feet. The final stack height of 275 feet for the combustion turbines was selected based on modeling that showed that this height was adequate to largely avoid increases in predicted impacts that can result from the effects of building induced downwash on stacks that are below Good Engineering Practice stack height.

For the reasons described in the EIS Documents, the Planning Board finds that the 275 foot stacks will minimize adverse visual impacts, and enable the Project to blend with the surrounding area as much as possible.

Alternative Water Supply Option

CPV Valley proposes to utilize Treated Effluent from City of Middletown Sewage Treatment Plant for its process make-up water. The EIS Documents also considered the use of ground water, surface waters, and existing municipal potable water supplies for make-up water. Use of ground water and surface waters were found to be technically viable; however, existing municipal water supplies would not be able to meet the facilities make-up water needs. For the reasons described in the EIS Documents, the Planning Board determines that the proposed use of effluent from the City of Middletown Sewage Treatment Plant will avoid and minimize adverse environmental impacts to the maximum extent practicable.

Cumulative Impacts

Cumulative impacts potentially created by construction and operation of the Project are thoroughly evaluated in the EIS Documents. The evaluation focused on the projects for which sufficient location, layout, and design information was available to carry out a meaningful analysis. Based upon its review of the EIS Documents, and its knowledge of new land uses and developments proposed in the Town and the area near the Project Site, the Planning Board finds that the EIS Documents thoroughly analyzed the degree to which the impacts of the Project may have cumulative impacts with such other projects. Further, the Planning Board agrees with, and adopts the cumulative impact conclusions reached in, the EIS Documents, and finds that the Project will not cause or contribute to any significant adverse cumulative environmental impacts.

Certification of Findings To Approve

The Town of Wawayanda Planning Board has considered the relevant environmental impacts,

facts and conclusions disclosed in the EIS Documents and other pertinent information, and has

weighed and balanced relevant environmental impacts with social, economic and other

considerations.

Having considered the information and the facts and conclusions relied upon to meet the

requirements of 6 NYCRR 617.11, the Town of Wawayanda Planning Board certifies that:

1) The requirements of 6 NYCRR Part 617 have been met; and

2) Consistent with social, economic, and other essential considerations from

among the reasonable alternatives available, the action is one that avoids or

minimizes adverse environmental impacts to the maximum extent

practicable, and that adverse environmental impacts will be avoided or

minimized to the maximum extent practicable.

This Statement Is Not Complete Until Authorized As Follows:

Adopted By Resolution: May 93rd 2012

Chairperson: Burbara Tapsens

Chairperson: