State Environmental Quality Review Notice of Completion of Final EIS

Date: __February 8, 2012_

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.

A Final Environmental Impact Statement has been completed and accepted by the Town of Wawayanda Planning Board, as lead agency, for the proposed action described below.

Name of Action:

CPV Valley Energy Center

Description of Action:

The CPV Valley Energy Center (Project or Facility) is proposed to consist of a combined cycle natural gas powered electric generating facility nominally rated at 630 megawatts (MW) and an interconnection substation. The proposed Facility would generate nominally 630 MW of electricity, fueled primarily by natural gas. The Facility would use ultra-low sulfur distillate oil for back-up for reliability purposes. The Project is proposed to utilize "combined cycle" generation technology, one of the most efficient technologies for producing electricity. The Project is proposed to consist of two combined-cycle units, each consisting of a combustion turbine generator, a Heat Recovery Steam Generator (HRSG) with supplemental duct firing, and a steam turbine generator. Auxiliary equipment would include a low nitrogen oxide (NOx) natural gas-fired auxiliary boiler, needed to keep the HRSGs warm during periods of turbine shutdown and to provide sealing steam during startups. The Project is proposed to be equipped with dry low NOx burners and selective catalytic reduction (SCR) technology to control emissions of NOx, and an oxidation catalyst to control carbon monoxide (CO) and volatile organic compounds (VOC) emissions. The Facility would be limited to operating on the back-up fuel for the equivalent of 720 hours per year, per turbine. Water use will be minimized by the use of air cooled condensers. Process water supply is proposed to be treated wastewater supplied from the City of Middletown's Sewage Treatment Plant (STP). Wastewater generated by the CPV facility would be returned to the City of Middletown STP.

Location:

Route 6, Wawayanda, Orange County, New York.

The project site is located at the intersection of state Route 6 and 17M, and interstate Route 84. The project site is bounded to the north by Route 6, to the south by interstate Route 84 and to the east by Route 17M.

Potential Environmental Impacts:

The Final EIS evaluates the environmental impacts identified in the DEIS Scope, and the comments provided in response to the DEIS. Impacts evaluated include impacts on land and land use, visual resources, air quality, noise, wetlands and water resources, socioeconomics, traffic, cultural resources, soils, geology, and seismology, and wildlife.

A copy of the Final EIS may be obtained from:

Contact Person: Barbara Parsons, Chair, Town of Wawayanda Planning Board

Address: 80 Ridgebury Road, Slate Hill, New York 10973

Telephone Number: (845) 355-5712

A copy of this notice must be sent to:

Department of Environmental Conservation, 625 Broadway, Albany, New York 12233-1750

Chief Executive Officer of Municipality in which the project is located

Any person who has requested a copy of the Draft / Final EIS

Any other involved agencies

Environmental Notice Bulletin, 625 Broadway, Albany, NY 12233-1 750

Copies of the Final EIS will be distributed according to 6NYCRR 617.12(b).

Copies of the Final EIS are also available for public inspection at the following locations:

Town of Wawayanda Town Hall 80 Ridgebury Hill Road

Slate Hill, New York 10973

Goshen Library and Historical Society

203 Main Street

Goshen, New York 10924

City of Middletown

16 James Street

Middletown, New York 10940

Middletown Thrall Library

11-19 Depot Street

Middletown, New York 10941

Wallkill Town Hall

99 Tower Drive, Building A and B

Middletown, New York 10941

A copy of the FEIS and Appendices are also available for download at the following sites:

www.cpvvalley.com

www.townofWawayanda.com

Final Environmental Impact Statement

CPV Valley Energy Center

February 2012

VOLUME I

Submitted to:

Town of Wawayanda Planning Board 80 Ridgebury Hill Road Slate Hill, New York 10973 Prepared by:

TRC

Wannalancit Mills
650 Suffolk Street
Lowell, Massachusetts 01854





CPV Valley Energy Center Project 630 Megawatt, Natural Gas Fired Electrical Energy Generation Facility US Route 6 adjacent to Interstate-84, Wawayanda, Orange County, New York

Lead SEQRA Agency: Town of Wawayanda Planning Board

P.O. Box 296

Slate Hill, NY 10973 (845) 355-5712

DEIS (Rev. 1) Submittal to Lead Agency by Applicant: November 18, 2008

Planning Board Deems DEIS Incomplete: <u>January 14, 2009</u>

DEIS (Rev. 2) Submitted to Lead Agency by Applicant: February 19, 2009

Lead Agency Determination of Completeness: February 23, 2009

FEIS Submitted to Lead Agency by Applicant: November 30, 2011

FEIS Accepted and Issued by Lead Agency February 8, 2012

Lead Agency Issues Findings Statement:

For Further Information:

Contact Person:

Address:

Barbara Parsons, Chairperson
Town of Wawayanda Planning Board

Slate Hill, NY 10973 **Telephone:** (845) 355-5712

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FINAL ENVIRONMENTAL IMPACT STATEMENT

CPV VALLEY ENERGY CENTER

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ACRONYMS LIST

ACOE United States Army Corps of Engineers

AGC Annual Guideline Concentration

AIHA American Industrial Hygiene Association BACT Best Available Control Technology

BMP Best Management Practices

Btu/kWh British thermal units per kilowatt-hr

CAIR Clean Air Interstate Rule

CEMS Continuous Emissions Monitoring System

CFR Code of Federal Regulations

cm Centimeter
CO Carbon monoxide
CO₂ Carbon Dioxide
CPV CPV Valley

CSWPPP Construction Stormwater Pollution Prevention Plan

cy Cubic yards dB Decibels

dBA Decibels A-weighted

DEIS Draft Environmental Impact Statement

DLN Dry Low-NO_x

EAF Environmental Assessment Form
ECL Environmental Conservation Law
EIA Energy Information Administration
EIS Environmental Impact Statement
EMF Electric and Magnetic Fields
EMI Electromagnetic interferences

ENB New York State Environmental Notice Bulletin
EPA United States Environmental Protection Agency
ERPG-2 Emergency Response Planning Guidelines Level 2

ESA Endangered Species Act

°F Fahrenheit

FAA Federal Aviation Administration

FERC Federal Energy Regulatory Commission FEIS Final Environmental Impact Statement

FIRM Flood Insurance Rate Map
GIS Gas insulated switchgear

gpd Gallons per day
gpm Gallons per minute
GPS Global Positioning System

H₂SO₄ Sulfuric Acid

HAP Hazardous Air Pollutants HDD Horizontal Directional Drilling

HPS High-Pressure Sodium

HRSG Heat recovery steam generator

Hz Hertz

I-84 Interstate-84

IDA Industrial Development Agency
IES Illuminating Engineering Society

K Kelvin km Kilometer kV Kilovolt kV/m Kilovolts per meter

 $\begin{array}{ll} LAER & Lowest \ Achievable \ Emission \ Rate \\ L_{eq} & Equivalent \ Continuous \ Noise \ Level \\ LIPA & Long \ Island \ Power \ Authority \end{array}$

LOS Level of Service
MC1 Mixed Commercial 1

mG Milligauss

MHE McGoey Hauser and Edsall
MI Manufacturing Industrial District

Millennium Pipeline

MMTCE Million Metric Tons of Carbon Equivalent

MW Megawatt

NAACP National Association for the Advancement of Colored People

NAAQS National Ambient Air Quality Standards

NLCD National Land Cover Database NEPA National Environmental Policy Act

NESHAP National Emission Standards for Hazardous Air Pollutants

NH₃ Ammonia

NLCD National Land Cover Dataset

NO_x Oxides of Nitrogen NO₂ Nitrogen Dioxide

NWP Nationwide Permit Program

NYCRR New York Code of Rules and Regulations NYISO New York Independent System Operator NYNHP New York Natural Heritage Program

NYPA New York Power Authority

NYSDEC New York State Department of Environmental Conservation

NYSDOT New York State Department of Transportation

OPRHP New York State Office of Parks, Recreation, and Historic Preservation

 O_3 Ozone

O&R Orange & Rockland Utilities or Orange & Rockland, Inc.

OSHA Occupational Safety and Health Act

Pb Lead

pH Hydrogen ion concentration PILOT Payment in Lieu of Taxes

PM₁₀ Particulate Matter with aerodynamic diameter of 10 microns or less

PM_{2.5} Microscopic liquid or solid particle with an aerodynamic diameter equal to or

less than 2.5 microns

ppm Parts Per Million

Project or Facility CPV Valley Energy Center

PSC New York State Public Service Commission
PSD Prevention of Significant Deterioration

psi Pounds Per Square Inch
RBP Rapid Bioassessment Protocol
RFI radio frequency interference
RGGI Regional Greenhouse Gas Initiative
SCR Selective Catalytic Reduction

SEQRA New York State Environmental Quality Review Act

SGC Short-term Guideline Concentration SGCN Species of Greatest Conservation Need

SILs Significant Impact Levels SIP State Implementation Plan

SO₂ Sulfur Dioxide

SPCC Plan Spill Prevention, Control and Countermeasures Plan SPDES New York State Pollutant Discharge Elimination System

SPLSound Pressure LevelSRSuburban ResidentialSTGSteam Turbine Generator

SWPP Plan Stormwater Pollution Prevention Plan

TC Town Commercial ULSD ultra-low sulfur diesel

USDA United States Department of Agriculture USFWS United States Fish and Wildlife Service

VP Viewpoint

VOC Volatile organic compounds

WQC Water Quality Certification Program

1.0 INTRODUCTION

This Final Environmental Impact Statement (FEIS) for the proposed CPV Valley Energy Center has been prepared in accordance with the New York State Environmental Quality Review Act (SEQRA) pursuant to Article 8 of the Environmental Conservation Law (ECL §§8-0101 et seq) and its implementing regulations, 6 New York Code of Rules and Regulations (NYCRR) Part 617. The FEIS responds to comments received on the Draft Environmental Impact Statement (DEIS) from the Town of Wawayanda Planning Board in its capacity as Lead Agency for the Project's SEQRA review from elected officials, involved agencies, environmental interest groups, civic groups, and members of the general public. The FEIS also incorporates certain additional environmental impact studies performed subsequent to publication of the DEIS.

1.1 PROPOSED ACTION OVERVIEW

The proposed CPV Valley Energy Center (Project) will be located on an approximate 30 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 30 acre development footprint is located in the southwest quadrant of the broader site. The development site parcel is currently undeveloped land used 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 capable of generating a peak of approximately 630 megawatts (MW) of electricity. 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. The steam turbine generator will provide approximately 288 MW, the balance of the Facility's gross output. Approximately 23 MW are consumed within the Facility to power necessary systems, which leaves a net nominal electric output of 630 MW.

For environmental purposes, the Project will be equipped with state-of-the-art 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) emissions. 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.

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 965,000 gallon fuel oil tank on site has been designed to allow for three, twelve-hour days of operation on fuel oil for two combustion turbines, at base load and average ambient conditions.

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 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 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 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 interconnect to the municipal system along Route 6.

1.2 PROJECT SEQRA MILESTONES

Table 1-1 provides a chronology of the Project's SEQRA milestones. On February 23, 2009, the Town of Wawayanda released the DEIS for public review after finding that the DEIS was adequate in its scope and content for the purpose of commencing public review, as required under SEQRA. The DEIS was distributed to involved agencies, elected officials, and other interested parties (Table 1-2). The DEIS and its Appendices were also made available at five locations (public libraries and Town Halls) and were posted on the Project's website. Notice of the availability of the DEIS was also published in the New York State Environmental Notice Bulletin (ENB) on March 4, 2009 and in several local newspapers.

Table 1-1 SEQRA Milestones CPV Valley Energy Center			
SEQRA Milestone	Date		
Environmental Assessment Form (EAF) Submittal	May 9, 2008		
Lead Agency Designation	June 11, 2008		
Environmental Impact Statement (EIS) Positive Declaration	June 25, 2008		
Draft Environmental Impact Statement (DEIS) Scoping Meeting	August 27, 2008		
DEIS Scope Approval	October 14, 2008		
DEIS Deemed Complete and Released for Public Comment	February 23, 2009		
DEIS Public Hearing	April 8, 2009		
Close of DEIS Comment Period	May 14, 2009		
Additional Studies Comment Period	March 8 through March 22, 2010		

	Table 1-2 SEQRA DEIS Review Distribution		
	CPV Valley Energy Center		
A.	Town of Wawayanda		
	1. Planning Board Members		
	2. Planning Board Consultants		
	3. Town Supervisor		
	4. Town Board		
	5. Zoning Board		
B.	Involved or Interested Agencies		
	New York State Department of Environmental Conservation		
	2. State of New York Public Service Commission		
	3. New York State Department of Public Health		
	New York Power Authority		
	5. New York Department of Transportation		
	6. New York State Thruway Authority		
	7. New York State Office of Parks, Recreation and Historic Preservation		
	8. New York State Department of Agriculture and Markets		
	9. Orange County Industrial Development Agency		
	10. Orange County Planning Department		
	11. Federal Energy Regulatory Commission		
	12. U.S. Army Corps of Engineers		
	13. U.S. Environmental Protection Agency, Region 2		
C.	Document Repository Locations		
	Wawayanda Town Hall		
	2. Wallkill Town Hall		
	3. Middletown City Hall		
	4. Middletown Thrall Library		
	5. Goshen Library and Historical Society		
D.	CPV Valley Website (www.cpvvalley.com)		
E.	Municipalities		
	1. Town of Goshen		
	2. City of Middletown		
	3. Town of Wallkill		
	4. Mount Hope		
	5. Minisink		

A public hearing on the DEIS was held at 7:00 PM on Wednesday, April 8, 2009 at the Wawayanda municipal office building. In addition, the Planning Board held the public comment period open through May 14, 2009, to receive written comments. The written comments are included in Appendix 1A of this FEIS, and the Public Hearing Transcript is included in Appendix 1B.

1.3 PUBLIC COMMENTS ON THE DEIS

Table 1-3 provides a listing of parties who provided written and oral comments on the DEIS. The formal comment period extended from February 23, 2009 through May 14, 2009. The Town of Wawayanda Planning Board as SEQRA Lead Agency coordinated the receipt of comments on the DEIS.

Table 1-3 List of DEIS Review Comments CPV Valley Energy Center			
Town of Wawayanda Planning Board Consultants		Public Comment Letters	Public Hearing Speakers
PB1: GREENPLAN, memorandum dated April 22, 2009	L-1:	New York State Department of Environmental Conservation	H-1: Mr. Neil Halloran H-2: Ms. Carol Smith
PB2: George M. Janes & Associates, letter to GREENPLAN dated April 22, 2009	L-2:	State of New York Department of Public Service	H-3: Mr. Luigi Delfini
PB3: Hudson Group, Memorandum to GREENPLAN dated April 22, 2009	L-3:	State of New York Department of Transportation	H-4: Mr. Jimmy Bodrato H-5: Mr. Kevin Blackman
PB4: GREENPLAN, Memorandum to Town of Wawayanda Planning Board, dated May	L-4:	New York State Thruway Authority	H-6: Mr. Ed McKnight
13. 2009, from J. Theodore Fink, Mary Ann Johnson, Karen Schneller MacDonald	L-5:	Orange County Department of Planning	H-7: Ms. Deevy Greitzer H-8: Mr. Matthew Stoddard
PB5: ARC Engineering and Construction, PC,	L-6:	Town of Goshen	H9: Mr. Sam Fratto
Letter to Town of Wawayanda Planning Board, dated April 22, 2009	L-7:	Orange Environment	H-10: Mr. David Gawronski
PB6: McGoey-Hauser and Edsall Letter dated April 17, 2009	L-8:	Mr. Randolph and Ms. Carole Hurst, Wawayanda	H-11: Mr. Tom Klein H-12: Mr. Gerry Ebert
April 17, 2003	L-9:	Ms. Erika Meyers	H-13: Mr. Don Wickham
	L-10:	Mr. Robert F. Kiedaisch, Member of Board of Orange Environment and Resident of Warwick	H-14: Mr. Peter Oehlrich H-15: Mr. Frank Ippolitti
	L-11:	Deevy-Jane Greitzer, Town of Wawayanda	H-16: Ms. Erika Meyers H-17: Mr. Dan Meyers
	L-12:	Ms. Jonna Gaston, Slate Hill	H-18: Mr. Randolph Hurst
	L-13:	Mr. Mark and Ms. Kristine Lukasik, New Hampton	H-19: Ms. Carole Hurst H-20: Mr. Paul Libasi
	L-14:	Ms. Alicia R. Albertson	H-21: Mr. Geoffrey Duval
	L-15:	Mr. Criss Ittermann	H-22: Mr. Patrick Naughton
	L-16:	Mr. Christopher J Cerone	H-23: Mr. Chester Kmiec
	L-17:	Mr. Luigi Delfini	H-24: Mr. Mark Knisely
	L-18:	Ms. Virginia J. Hendry	H-25: Ms. Alicia Albertson
	L-19:	Mr. Jeffrey T. Diorio	
	L-20: L-21:	Mr. George Giveans Mr. Richard J. Messina	
	L-21:	Mr. Dean Tamburri	
	L-23:	Mr. Robert Cooper, Jr.	
	L-24:	Mr. Walter Moshier	
	L-25:	Mr. James A. Rollins, Sr., President, Middletown National Association for the Advancement of Colored People	

1.4 FEIS PRESENTATION

This FEIS incorporates the full content of the DEIS by reference, providing a complete and continuous SEQRA record for the Project to this point. Section 2.0 of the FEIS provides a summary of the engineering design and operational refinements that have been incorporated into the CPV Valley Energy Center Project since the DEIS was filed as a result of interaction with the Town Planning Board during the SEQRA and Site Plan review processes, and progression of the CPV Valley design efforts. Section 3.0 presents a summary of the additional analyses completed in response to comments received on the DEIS or as a fulfillment of commitments made in the DEIS. Section 3.0 also provides an updated Zoning Analysis to reflect the revisions to the Town of Wawayanda Zoning Law adopted in May 2009 and amended in November 2010. Section 4.0 includes an overview summary of the comments received on the DEIS and presents the responses to the written and oral review comments on the DEIS.

Additional appendices to the FEIS include the following supporting information:

- Technical Studies completed in responding to DEIS Review Comments
- Wetlands Permit Application submitted to the United States Army Corps of Engineers (ACOE) and New York State Department of Environmental Conservation (NYSDEC)
- New York State Pollutant Discharge Elimination System (SPDES) Permit Application for Permit to Discharge Industrial Wastewater
- Updated Site Plans

In response to comments received on the DEIS, the following technical memoranda were prepared and made available for public review from March 8 through March 22, 2010. The memoranda are included as appendices to the FEIS:

- Spring and Summer 2009 Ecological Field Survey Report, which provides the results and assessment of the seasonally dependent ecological surveys conducted as proposed on page 14-65 of the DEIS and agreed to by the Planning Board's consultants (Appendix 2A of the FEIS)
- Technical Memoranda regarding comments on the Visible Plume and Secondary Formation of Fine Particulate Matter (PM_{2.5}) (Appendix 3A of the FEIS)
- Technical Memorandum: Visual assessment further analyzing the impacts of the above ground electric transmission line. Additional photosimulations were prepared to complement the visual assessment included in the DEIS (Appendix 4 of the FEIS)

The comment letters received on the Additional Studies are provided in Appendix 1D of the FEIS.

Responses to comments received on these memoranda are addressed in Section 5.0 of this FEIS.

1.5 FEIS DISTRIBUTION

The FEIS distribution for the CPV Valley Energy Center is presented in Table 1-4.

Table 1-4 FEIS Distribution List				
CPV Valley Energy Center				
New York State Thruway Authority 200 Southern Boulevard P.O. Box 189 Albany, New York 12201-2700 ATTENTION: SEQRA COORDINATOR	City of Middletown City Hall 16 James Street Middletown, New York 10948 ATTENTION: JOSEPH M DESTEFANO, MAYOR			
US EPA Region 2 290 Broadway New York, New York 10007-1866 ATTENTION: SEQRA COORDINATOR	Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426 ATTENTION: SEQRA COORDINATOR			
New York Power Authority Secretary's Office 123 Main Street 15-M White Plains, New York 10601 ATTENTION: SEQRA COORDINATOR	New York State Thruway Authority 4 Executive Boulevard Suite 400 Suffern, New York 10901 ATTENTION: SEQRA COORDINATOR			
New York State Office of Parks, Recreation and Historic Preservation Empire State Plaza Agency Building I Albany, New York 12238 ATTENTION: SEQRA COORDINATOR	New York State Department of Public Service 3 Empire State Plaza Albany, New York 12223-1350 ATTENTION: SEQRA COORDINATOR			
Orange County Industrial Development Agency County Government Center Goshen, New York 10924 ATTENTION: SEQRA COORDINATOR	Orange County Planning Department 124 Main Street Goshen, New York 10924 ATTENTION: SEQRA COORDINATOR			
Town Board - Town of Wawayanda P.O. Box 106 80 Ridgebury Hill Road Slate Hill, New York 10973 ATTENTION: JOHN RAZZANO, SUPERVISOR	Town Board – Town of Goshen 41 Webster Avenue P.O. Box 217 Goshen, New York 10924 ATTENTION: DOUGLAS BLOOMFIELD, SUPERVISOR			
Town Board – Town of Wallkill 99 Tower Drive, Bldg. A & B Middletown, New York 10941-2026 ATTENTION: JOHN F. WARD, JR., SUPERVISOR	Zoning Board Town of Wawayanda P.O. Box 296 80 Ridgebury Hill Road Slate Hill, New York 10973 ATTENTION: RICHARD ONORATI, CHAIR			
U.S. Army Corps of Engineers Jacob Javits Federal Building 26 Federal Plaza New York, New York 10278 ATTENTION: SEQRA COORDINATOR	Minisink Valley Central School District P.O. Box 217 Slate Hill, New York 10973 ATTENTION: JOHN LATINI, SUPERINTENDENT			

Table 1-4 FEIS Distribution List CPV Valley Energy Center (CONTINUED)			
New York State Department of Agriculture & Markets 10 B Airline Drive Albany, New York 12235 ATTENTION: SEQRA COORDINATOR	New York State Department of Environmental Conservation Region 3 21 South Putt Corners New Paltz, New York 12561 ATTENTION: SEQRA COORDINATOR		
New York State Department of Environmental Conservation Division of Environmental Permits 625 Broadway Albany, New York 12233-4500 ATTENTION: CHRIS HOGAN, SEQRA COORDINATOR	New York State Department of Transportation Eleanor Roosevelt State Office Building 4 Burnett Boulevard Poughkeepsie, New York 12603 ATTENTION: SEQRA COORDINATOR		
Orange County Department of Health 1887 County Building 124 Main Street Goshen, New York 10924 ATTENTION: SEQRA COORDINATOR	Orange County Department of Planning Planning Commissioner 1887 County Building 124 Main Street Goshen, New York 10924 ATTENTION: MR. DAVID CHURCH		
Middletown Central School District Board of Education Office 223 Wisner Avenue Extension Middletown, New York 10940 ATTENTION: SUPERINTENDENT OF SCHOOLS	Town of Mt. Hope 1706 Route 211 W Otisville, New York 10963 ATTENTION: WILLIAM NOVAK JR., SUPERVISOR		
Town of Minisink P.O. Box 349 Westtown, New York 10998 ATTENTION: LEWIS LANE, SUPERVISOR	City of Middletown Planning Board City Hall 16 James Street Middletown, New York 10948 ATTENTION: LAURENCE RISDAL, CHAIRMAN		
Orange County Department of Public Works 2455-2459 Route 17M P.O. Box 509 Goshen, New York 10924 ATTENTION: CHARLES W. LEE, P.E., COMMISSIONER			
Document Repositories			
Town of Wawayanda Town Hall 80 Ridgebury Hill Road Slate Hill, New York 10973	Middletown Thrall Library 11-19 Depot Street Middletown, New York 10940		
Goshen Library and Historical Society 203 Main Street Goshen, New York 10924	Town of Wallkill Town Hall 99 Tower Drive/Building A & B Middletown, New York 10941 ATTENTION: LOISA INGRASSIA, TOWN CLERK		
City of Middletown City Hall 16 James Street Middletown, New York 10940 ATTENTION: CITY CLERK			

2.0 PROJECT REFINEMENTS SINCE FILING THE DEIS

2.1 SUMMARY OF PROJECT REFINEMENTS

This section summarizes the Project refinements that have occurred since the DEIS was filed. The Project refinements have been made as a result of Planning Board and public input received during the SEQRA process, as well as advancements in Project design. A summary of the refinements is provided below:

• Main Power Facility:

- o Increase in height of security fence surrounding the Facility from 6 feet to 8 feet;
- o Reduction in size of the switchyard.
- Electrical Interconnection: Addition of a small gas insulated switchgear (GIS) building adjacent to the NYPA Marcy South line in Middletown that would house the breakers and switches required to accommodate the installation of the underground electric transmission line on the Project site. This revised point of interconnection would replace the single riser pole originally proposed. The transmission lines would exit the building to a series of short poles where the transmission line would interconnect with the Marcy South Line. A building is proposed to ensure operational integrity and minimize visual impacts.
- **Electric Transmission Line:** Installation of the electric transmission line underground on the Project site rather than above ground; reduction in permanent right-of-way width from 130 feet to 20 feet, and reduction in construction right-of-way width to 75 feet. The underground installation would eliminate views of the aboveground wires and poles to nearby receptors, and reduce impacts to wetlands.
- **Process Water Supply/Return Routing:** Refinements in the routing of the offsite portion of the process water supply/return line. There are three alternatives under consideration. The routing alternatives are a minor change to what was proposed in the DEIS and will not result in additional significant environmental impacts. Impacts to wetlands will be avoided.

Figure 1 of the FEIS shows the location of the proposed GIS building, underground electric transmission line routing, and the alternative routing for the process water supply/return lines being evaluated.

The subsections below describe the proposed changes in more detail and include an assessment of environmental impacts if different than what was described in the DEIS.

The status of the process water supply/discharge, gas supply, and Host Community Agreements are also discussed in this section.

The site plan for the Project has been updated and refined to address comments received from the Planning Board and its Engineer, McGoey Hauser and Edsall (MHE). Comments received from MHE on the site plan and CPV Valley's responses are included in Appendix 5A of this FEIS. The updated plans are included in Appendix 5B of this FEIS. The site plans will continue to be refined as part of the site plan review and approval process with the Planning Board, which is expected to continue after issuance of this FEIS.

2.2 MAIN POWER FACILITY

There have been no significant changes to the main power Facility since the DEIS was submitted. A minor modification made since filing the DEIS is the height of the security fence, which has been increased in height from a 6 foot high chain linked fence to an 8 foot high chain linked fence with a return on the top for security purposes. As described in Section 195-17 of the Town's Local Zoning Law, this Accessory Use/Structure will "require site plan and/or special use approval from the Town of Wawayanda Planning Board."

The underground configuration of the electric transmission line on the Project site will require a smaller switchyard, consisting of two air insulated breakers at the Project site. The remaining infrastructure will be located in the City of Middletown as discussed further below. The CPV Valley Energy Center remains a combined-cycle facility capable of generating a peak of approximately 630 MW of electricity. 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 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. The steam turbine generator will provide approximately 288 MW, the balance of the Facility's gross output. Approximately 23 MW are consumed within the Facility to power necessary systems, which leaves a net nominal electric output of 630 MW. The Project will also be equipped with state-of-the-art emissions control technology; including SCR technology to control NO_x and an oxidation catalyst to control CO and VOC emissions. 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. The primary fuel will be natural gas from the Millennium Pipeline. To maintain high reliability of the Project, the Project will also have the capability of utilizing ultra-low sulfur distillate oil (also referred to elsewhere as distillate oil or diesel) as a back up fuel source.

2.3 ELECTRICAL INTERCONNECTION AND TRANSMISSION LINE

2.3.1 Electric Interconnection

The CPV Valley Energy Center's electrical point of interconnection will be to the NYPA 345 kV electric transmission line, commonly referred to as the "Marcy South" transmission line. The interconnection process involves significant technical studies to determine the configuration and required equipment for the interconnection. The DEIS evaluated the proposed route and equipment associated with the conceptual configuration of the interconnection to the Marcy South line. As the technical evaluation and review progressed with the NYISO and transmission owners, a modified interconnection design was identified as a potential alternative. This alternative would utilize the same transmission line routing previously evaluated in the DEIS; however, the interconnection infrastructure would include the use of GIS located adjacent to the physical point of interconnection with NYPA's Marcy South line and locating the transmission line underground.

Under this alternative, the breakers will be located adjacent to the Marcy South line instead of next to the Facility proper as contemplated in the base case. However, due to land constraints adjacent to the Marcy South line, this alternative would need to utilize GIS breakers to minimize the required footprint. The breakers would be housed in a small building to ensure operational integrity and mitigate visual impacts. The approximate footprint size of the building is still under design; however, the initial indications are that the building would be approximately 80 feet by 50 feet with a height of approximately 55 feet. The location of the building would be in the City of Middletown directly adjacent to the Marcy South line. The GIS site parcel is approximately 0.5 acres in size. As with the configuration outlined and

evaluated in the DEIS, the transmission line route connecting the Project and the GIS substation would extend from the eastern portion of the Project site proper and parallel I-84 towards Route 17M. However, because this alternative would place the substation in close proximity to the Marcy South line, the interconnecting line between the Project site proper and the GIS substation would carry only the power generated by the Project, at 345 kV. In contrast, for the alternative evaluated in the DEIS, because the Project substation was located at the Project site, the interconnecting line in that alternative had to be capable of carrying the full transmission capacity of the Marcy South line at that line's full 345 kV voltage level. Therefore, the interconnection utilities became concerned with placing the transmission lines underground. Because the interconnecting line in this new alternative would simply be a generator lead, which would have a lower transmission capacity, it appears practicable to place it underground on the Project site. Accordingly, for this new alternative, the interconnecting line is proposed to traverse the Project site underground, and then, at the eastern portion of the Project site, head north underground paralleling Route 17M, which is the route evaluated in the DEIS. The transmission lines would transition aboveground within the small building housing the GIS breakers instead of the riser pole discussed in the DEIS. The transmission lines would exit the building to a series of short poles where the transmission lines would interconnect with the Marcy South line.

The major differences between the GIS alternative and the base case presented in the DEIS are (a) the building to house the breakers; and (b) the underground routing of the line on the Project site. The GIS building would likely be of fabricated steel so as to match the existing nearby structures and mitigate the visual impacts of the exposed breakers. Figure 2 provides the interconnect general arrangement plan and Figure 3 provides a more detailed plan of the GIS building.

Based on the building size, material, and the use of the existing areas previously evaluated in the DEIS for the base case, it is anticipated that the GIS facility alternative would not pose any new significant environmental impacts. The results of the environmental assessment conducted of the GIS facility follows:

Land Use

The 0.5 acre parcel upon which the GIS facility will be located is currently a filled and terraced, unpaved, compacted surface used to park cars by the former adjacent auto dealership to the west. With respect to site area use, the GIS building footprint would be approximately 4,000 square feet in size. The building footprint, riser poles, and the area required for maintenance vehicle parking will physically occupy approximately 25 percent of the total site area. The GIS building will be fenced in for security and safety purposes.

Land use adjacent to the site consists of the NYPA Marcy South overhead transmission lines to the north, Route 17M to the east, a plumbing fixture and supply business to the south, and a garage formerly used by a car dealership to the west. Land use along the section of Route 17M east of the GIS site is highway retail commercial. The GIS building represents a compatible land use with the existing site area (see Figures 1 and 4 of the FEIS).

Because NYPA will own the substation once constructed and operational, it is expected that the approval process for the substation would be consistent with that for other public utility facilities within the City of Middletown. The building would be consistent with current City of Middletown zoning with respect to building height and setback requirements. CPV Valley has consulted with the City of Middletown Corporation Counsel's office and Department of Public Works, and has agreed to submit an application for site plan approval of the GIS building to the City of Middletown Planning Board.

Cultural Resources

An archaeological site walkover of the GIS parcel was conducted in 2008 as part of the archaeological surveys conducted for the overall project. No archaeological resources on the site proper or immediately contiguous areas were identified. No historic properties were found to be located in the vicinity of the GIS site parcel. The closest historic property is the Horton Webb House on 115 South Street in Middletown, which is over 1 mile northeast of the site.

Visual Resources

The GIS building will be an enclosed structure. The building would in high likelihood consist of fabricated steel which will be 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. The exterior architectural treatment of the approximate 4,000 square foot building will be designed to be consistent with the existing adjacent building structures. The building will not represent a major new viewshed element from adjacent visual receptor locations. In a vertical dimension, the NYPA Marcy South transmission structures represent the dominate viewshed feature.

Socioeconomics and Environmental Justice

Construction of the GIS facility is estimated to take approximately 3 to 4 months to complete. The on-site construction workforce will peak in the 10 to 15 worker range. The GIS facility will be remotely operated with no permanent on-site personnel required.

Given the existing highway retail commercial development along Route 17M and existing adjacent transmission infrastructure, no Environmental Justice considerations are associated with the GIS facility.

Traffic and Transportation

During the approximate 3 to 4 month construction period for the GIS facility, on-site construction workers and equipment deliveries will generate approximately 15 to 20 vehicle trips on a daily basis. The construction worker commutation will occur before the area wide commuter peak hours during both the AM and PM periods. Construction worker parking and material laydown will utilize temporary construction and lay down easements obtained from the former auto dealership. The construction of the GIS facility will occur during the same construction timeline as the overall CPV Valley Energy Center, and draw from the same the number of construction workers identified in the DEIS.

During facility operations, vehicle activity will be limited to scheduled inspections and maintenance.

Air Quality

The GIS equipment itself results in no air emissions. A small, natural-gas fired emergency engine may be required at the GIS building. It is anticipated that the engine, if incorporated as part of the final design, may qualify for an exemption from air permitting requirements pursuant to 6 NYCRR 201-3.2(c)(3)(i). If the engine does not qualify for a permit exemption, then an application for a minor facility registration will be submitted to NYSDEC pursuant to 6 NYCRR 201-4.

Noise

Automobile and truck vehicle traffic on Route 17M defines the background (ambient) noise levels adjacent to the GIS site parcel. The current plan to enclose the GIS equipment within a building will help

to attenuate the noise generated by the facility operation. Given the highway and retail-commercial land use abutting the GIS site parcel, no impact on area noise levels is expected. The closest residence is located over 1,400 feet southwest of the site on Apple Lane Drive in Wawayanda.

Infrastructure

The GIS equipment proper does not require any water use. Water use and wastewater generated will be limited to the on-site sanitary facilities available for maintenance worker use.

Wetlands and Ecology

The field walkover of the GIS parcel established that the GIS facility will not be located within wetlands. The six riser poles would be placed at the toe of slope which marks the upper edge of the wetland that occurs beneath the Marcy South right-of-way. Figure 4 of the FEIS shows the location of the wetland relative to the GIS building footprint. Since the wetland is maintained as a wet meadow through mowing, no vegetation changes will occur to the wetland. The riser poles 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, including the NYPA right-of-way, an adjacent Orange and Rockland gas line, Route 17M, and the former adjacent auto dealership (currently a plumbing supply store), the impacts associated with the pole installation are insignificant.

The natural resource walkover of the GIS site parcel indicated that no habitat for threatened and/or endangered plant or animal species, including bog turtle (*Clemmys muhlenbergii*) and Indiana bat (*Myotis sodalis*) was present. Given the disturbed nature of the 0.5 acre parcel due to the former automobile parking lot, no significant habitat of any resource value is present.

2.3.2 Electric Transmission Line

As noted above, the alternative of placing the GIS switchyard adjacent to the Marcy South line would enable CPV to place the interconnecting transmission line underground within the Project site. This underground option appears practicable, but CPV's ability to implement it remains subject to final approval by the City of Middletown (and potentially other regulatory agencies, such as the NYSDEC and ACOE).

Such underground placement would address comments made during the DEIS comment period regarding the above ground electric transmission line option. Therefore, the applicant is proposing to install the electric transmission line underground within the Project site. The underground installation of the electric wires eliminates the visibility impacts of the overhead transmission wires and supporting pole structures.

The following provides a summary of the layout and design of both the underground and aboveground electric transmission line options and associated impacts to wetlands and watercourses for comparative purposes. Figure 5 provides an aerial photograph of the Project site showing the underground line routing and reduced right-of-way width (permanent and temporary).

Underground Option:

Wetlands and Ecology

The underground option would consist of the transmission cables being placed underground. There may be up to three manhole access points along the route, each approximately 20 feet long by 9 feet wide by 8.5 feet deep in dimension.

There will be temporary land disturbance associated with the installation of the underground cable, including uplands, a roadway road shoulder, wetlands (both NYSDEC-mapped and federal-only wetlands), and two streams. The installation process will entail open cut trenching and backfilling. The natural topsoil containing the root mats and seed of non-woody vegetation will be replaced at the surface of the trench, so that vegetation will be allowed to return to its natural state. As necessary, the disturbed areas will be seeded for stabilization. Non-woody vegetation will be maintained within the electrical right-of-way.

The on-site underground electrical transmission line route alternative would follow the same general route as the originally proposed overhead route. The center line has been moved slightly from that presented in the DEIS to avoid directly impacting a vernal pool. A 75 foot construction corridor will be established, within which vegetation will be cleared for trenching, soil stockpiling, conduit assembly, and operation of construction equipment. The construction corridor will occur within approximately 2,077 linear feet of wetlands (240 feet of which are currently forested). Use of this construction corridor would result in approximately 3.56 acres of temporary wetland impacts and approximately 0.46 acres of permanent impacts to wetlands in the form of conversion of forested to non-forested vegetation. This is a significant 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 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 interconnect will then continue north, parallel to Route 17M within a roadside corridor, cross beneath the Route 6 interchange, and connect to the GIS building and then to the NYPA 345 kV lines.

Prior to the start of construction, erosion and sedimentation controls will be installed along the construction corridor. A 12 foot wide by 4 foot deep trench will be excavated for electrical conduits. A temporary access road using swamp mats and possibly gravel road fill sufficient to accommodate large cement mixers or dump trucks for trench backfill will be installed and maintained for conduit installation. Topsoil excavated from the trench will be stockpiled within the construction corridor so that it may be placed back over the completed electric transmission line. However, most of the subsoil from the trench will be removed from site in order to backfill the trench with suitable materials. Erosion and sedimentation controls will be placed around temporary soil stockpiles to avoid sedimentation of surrounding wetlands. The trench will be dewatered as necessary during conduit installation. Trench water will be directed to temporary above-ground basins composed of haybales and filter fabric, which will allow water to infiltrate back into the ground.

The trench will cross the unnamed tributary to Carpenter Creek, south of where it joins Carpenter Creek, requiring 600 square feet (0.01 acre) of temporary impact to the stream and its banks. Open cut construction methods will be used. The methodology for stream crossings is outlined in the Joint Wetlands Application for Permit, which is included in Appendix 2B of the FEIS.

Following construction, the trench area and the disturbed corridor will be re-graded, stabilized, and revegetated. The stream bed and banks will also require restoration to pre-existing grades, with bank stabilization measures and monitoring to prevent soil erosion. Wetland and stream restoration monitoring will be implemented according to permit conditions.

In response to comments received from NYSDEC on the above ground electric transmission line alternative, the conversion of forested wetlands to non-forested wetlands within the electrical transmission line right-of-way will be compensated by creating a permanent forested riparian buffer along Carpenter Creek within the site boundaries. This riparian buffer planting area will be approximately 70 feet wide (25 to 30 feet on either side of the bank, not including the stream width), and extend for most of the entire length of Carpenter Creek on the site, about 4,000 linear feet. The riparian buffer area will therefore encompass approximately 6.4 acres on the site. The area will be planted with tree seedlings including flood-tolerant species suitable for riparian zones and valuable for mast production and cover habitat species such as pin oak (*Quercus palustris*), silver maple (*Acer saccharinum*), and quaking aspen (*Populus tremuloides*). The riparian buffer area will be permanently protected from clearing or access from agricultural activities through placement of markers along the field edges, and through direct control and management of the land leases by CPV Valley. This same mitigation will be included with the underground option as well.

The Project refinements will be addressed in the Joint Wetlands Permit Application with the NYSDEC and ACOE. The revised plans and documentation will be provided to the Planning Board.

Visual

The underground installation of the electric transmission lines eliminates the visual impacts of the overhead wires and supporting pole structures. Once the electric transmission line is constructed, only the maintained corridor will be visible.

The underground installation will not change the assessments of other types of environmental impacts evaluated in the DEIS.

Aboveground Option:

A description of the above ground line is provided below as a comparison.

Wetlands and Ecology

The electrical interconnect was originally proposed to extend from the Facility's electrical substation to the northeast toward Route 17M, and then north to the NYPA Marcy South overhead power line. Between the substation and Route 17M, the interconnect was originally proposed to consist of a double-circuited, overhead line on single poles (or dual poles if required by NYPA) within a 130 foot-wide cleared corridor. As the interconnect approached Route 17M, it would have transitioned to a set of underground conduits within a trench. The interconnect would then have continued north, parallel to Route 17M within a roadside corridor, crossed beneath the Route 6 interchange, and continued 500 feet to join the NYPA 345 kV lines. From the on-site substation to the Marcy South line, the total length of the interconnect route is less than one mile.

For the aboveground option, new utility pole installation would have resulted in the filling of approximately 675 square feet of wetlands located within the proposed utility easement. Installation of the underground conduit at the eastern end of the site would have resulted in temporary disturbance of 0.14 acres (6,000 square feet) of Shallow emergent marsh wetland community and Carpenter Creek,

which was to be restored following construction. The vegetation clearing of the proposed utility easement for the aboveground option would have resulted in the conversion of approximately 0.92 acres of existing Red maple-hardwood swamps to Shrub swamp wetland and/or Shallow emergent marsh communities. The aboveground option would have aerially crossed the on-site tributary to Carpenter Creek, but would not have impacted the creek.

Visual

The photographic simulations prepared for the CPV Valley Energy Project provided insight into the extent and nature of the potential visual impacts associated with the transmission pole structures and electrical wires comprising the overhead segment of the transmission interconnect to the NYPA Marcy South system (see Appendix 4 of the FEIS). For the near-field viewpoint locations represented by Balchem Corporation, the I-84 westbound entrance ramp, and the Horizons at Wawayanda complex, a number of the pole structures would have represented new vertical-oriented visual elements in the viewshed that have visual impacts on these viewpoints. However, the existing quality of the views on which the poles had the largest impacts was not high, and the view would have been often fleetingly experienced, thereby mitigating the impacts.

For near-field viewshed receptor locations, the neutral color (light gray) and relatively small diameter (2 to 3 inches) of the conductor wires would reduce their prominence. The photosimulations for the midfield receptor locations represented by Kirbytown Road, Bates Gates Road, and I-84 eastbound approaching the Facility site indicated that the pole structures would be only minimally visible and do not add significantly to the visual impacts previously disclosed.

2.4 PROCESS WATER SUPPLY/RETURN ROUTING

CPV Valley is currently working with the City of Middletown and property owners in refining the location of the end portion of the Project's process water/wastewater line along Dolsontown Road and connection to the City of Middletown Sewage Treatment Plant. Three alternatives are being evaluated, which are a slight change from what was presented in the DEIS. Figure 1 shows the location of the three routing alternatives, as well as the original route that was evaluated in the DEIS.

- Alternative 1A: Route 6 to Route 17M north (along the east shoulder of 17M) and then east down the driveway of the Middletown Sewage Treatment Plant. This alternative is approximately 8,960 feet in length.
- Alternative 1B: Route 6 to Route 17M north (along the west shoulder of 17M) and then east down the driveway of the Middletown Sewage Treatment Plant. This alternative is approximately 9,000 feet in length.
- Alternative 2: Route 6 to Route 17M north to Dolsontown Road, then north along the western edge of a private property boundary and then connect to the Middletown Sewage Treatment Plant. This alternative is approximately 10,855 feet in length.

The results of the environmental assessment conducted for the process water supply/return line routing alternatives follow:

Land Use, Zoning, and Public Policy

The process water supply line from the City of Middletown Sewage Treatment Plant and the wastewater return line from the CPV Valley Energy Center back to the treatment plant are small diameter pipes that

will be located in the same right-of-way. Alternatives 1A and 1B would both utilize available right-of-way within Route 6 and Route 17M to access the driveway of the City of Middletown Sewage Treatment Plant. Once constructed, the buried lines will have no impact on the land uses currently located along the right-of-way for each alternative. During construction, the trenching equipment used to install the pipes will be visible to adjacent land uses. The crossing of the access drives which serve the predominant existing highway retail-commercial development will require coordination with individual land owners.

For routing Alternative 2, the water supply and wastewater lines will utilize an alignment of Route 6 – Route 17M – Dolsontown Road to access land parcels north of Dolsontown Road on the final segment connecting to the Treatment Plant.

Under all three routing options under consideration, the use of available transportation corridor right-of-way to co-locate infrastructure facilities is consistent with public planning policy. For the segment of the water lines located in the City of Middletown, appropriate approvals will be obtained from the City of Middletown.

Community Resources

Police details will be required to manage traffic flow on Route 6, Route 17M, and Dolsontown Road during the construction of the process water lines. The police details will also contribute to both vehicle and construction worker safety during installation of the underground pipeline facilities. Police details will be funded by CPV Valley under agreements with the Town of Wawayanda and City of Middletown.

The City of Middletown has concluded that sufficient capacity exists at the expanded Treatment Plant to handle the wastewater from the CPV Valley Energy Center.

Cultural Resources

Construction of the process water supply and wastewater discharge lines will require disturbance of an approximate six foot wide area during equipment trenching. The six foot wide disturbed area will be within available right-of-way along Route 6 and Route 17M for Alternatives 1A and 1B and Route 6, Route 17M, and Dolsontown Road for Alternative 2. An archaeological walkover of the referenced highway right-of-way was conducted for the underground electric transmission line extending from the Project site to the NYPA transmission lines. No archaeological or historic resources were identified during the walkover. It is anticipated that the segment of Route 17M to the Sewage Treatment Plant driveway will not have any archaeological or historic resource value.

The private parcels comprising the northern segment of Alternative 2 from Dolsontown Road to the Sewage Treatment Plant were tested for archaeological resources by Calpine Energy in the 2001 period. No archaeological resources were found.

Visual Resources

Highway retail commercial land uses represent the existing development along the right-of-way alternatives under consideration. During the construction trenching activity, operating equipment will be visible to the existing land uses for a limited duration. Once the water lines are installed underground, there will be no visual impacts. Areas of unpaved highway right-of-way utilized will be restored and reseeded upon completion of construction.

Socioeconomics and Environmental Justice

Installation of the two pipelines will have a benefit to the local construction sector economy. Once operational, the City of Middletown will realize revenue through sale of the treated effluent for plant process water and treatment of the plant's wastewater stream.

Traffic and Transportation

Police officer details and construction signs will be utilized to maintain traffic flow on roadway facilities during the equipment trenching operations within rights-of-way. When physical crossings of Route 6, Route 17M, and Dolsontown Road are required, construction activity will be staged during off-commuter peak travel periods. Disturbed roadway crossing areas will be repaved on an expedited basis once the pipelines are installed.

Noise

The equipment required for pipeline trenching will represent a short-term source of elevated noise levels along the selected right-of-way alignment. Automobile and truck traffic on the roadway facilities define the noise character along the right-of-way alignments under consideration. These elevated noise levels will help to mitigate the noise attributable to the limited duration of equipment operation.

Geology, Seismology, and Soils

The geology and soils characterizing the right-of-way options should not present any extraordinary problems to the underground trenching construction activity. If blasting through areas of high bedrock is required, industry and community safety standards will be strictly adhered to. This includes use of blast mats and police officer control of vehicle traffic.

Wetlands and Ecology

An ecological assessment of the proposed route options for the process water supply/wastewater lines was conducted in October 2011. For the assessment, state and federal jurisdictional wetlands, potential roosting tree habitat for Indiana bat, habitat for bog turtle, and general ecological conditions were evaluated along the proposed route options.

Wetlands

Along Alternatives 1A and 1B (to the Middletown Sewage Treatment Plant driveway), the lines would extend within the paved road right-of-ways and the Sewage Treatment Plant driveway, then cross Monhegan Brook at the entrance to the Plant. The lines would either be attached to the bridge, as there is at least one attached line currently, or cross beneath the brook via Horizontal Directional Drilling (HDD) technology. Either method will avoid direct disturbance of the streambed or lower portions of the banks of the brook. The bridge attachment method may require minimal disturbance of the upper (upland) portion of the banks in order to attach and re-bury the lines at the bridge driveway level. For the HDD method, this is a common and effective practice for pipeline and conduit burial/installation since the drill path can be precisely guided both horizontally and vertically, which allows the pipes to be placed well below the bottom of the streambank with no disturbance.

The Alternative 2 route, after reaching Dolsontown Road from Route 17M, extends approximately 0.4 miles east down Dolsontown Road, and then turns north along the edge of an agricultural field and a forested property. After approximately 1,000 feet, the line then turns northeast along the edge of the field

and the back of the forested property, and continues to the Orange & Rockland Utilities (O&R) transmission right-of-way. The route then angles slightly more eastward and continues approximately 800 feet through the O&R right-of-way, and then through City of Middletown property into the Middletown Sewage Treatment Plant.

Within the O&R right-of-way, two wetlands occur in the vicinity of the proposed process water supply/return line route. Figure 6 of the FEIS shows the location of the wetlands. One wetland occurs south of the proposed route, as a headwater seep in an apparent stone-lined swale, adjacent to the transmission poles, which flows to the southwest and away from the route centerline. The wetland is dominated by phragmites and sedges, and contains standing water. The second wetland is another highly disturbed area that occurs adjacent to the O&R substation complex, north of the proposed water line route. It occurs as a depression within the right-of-way, and appears to direct flow to the northwest along the edge of the substation and away from the water line route centerline. This wetland contains a dense stand of phragmites with little other vegetation, and standing water where observable. With the available space between these two wetlands within the O&R right-of-way, the proposed water line will avoid impacting both of these wetlands.

A third wetland occurs at the northeast corner of the Middletown Sewage Treatment Plant. This area is a small, highly disturbed, isolated seep containing tussock sedge, cattail, bluejoint grass, and goldenrod. Up to several inches of standing water were observed on the ground surface. The area appears to be a remnant of past land disturbance and filling associated with the Sewage Treatment Plant and adjacent town land. An observation or sampling well is also located in the wetland, near the fence corner. As the proposed water line route enters the Middletown Sewage Treatment Plant from the west, it will avoid disturbing this wetland area by remaining south of the wetland.

Indiana Bat Habitat

In accordance with the methodology conducted for the Spring and Summer 2009 Ecological Field Surveys prepared for the Project by TRC, TRC conducted a field survey of forested areas crossed by the proposed water line route to determine if suitable roost trees are present for Indiana bat (*Myotis sodalis*). The vast majority of either route Alternatives 1A, 1B, or 2 occur within developed roadways, open field, and maintained electrical transmission right-of-way. The remainder of the overland route, Alternative 2, passes through a section of highly disturbed land containing scrub-shrub vegetation and patches of small trees of less than 5 inches in diameter breast height (d.b.h.). Therefore, no impacts to any trees with the potential to provide roosting habitat for Indiana bat are anticipated for the proposed process water supply and wastewater return route.

Bog Turtle

In accordance with the methodology conducted for the Phase 1 bog turtle (*Clemmys muhlenbergii*) habitat survey prepared for the Joint Wetlands Permit Application for the Project, the area of the proposed process water supply and wastewater return line route was surveyed for potential bog turtle habitat. Along the route, no wetland areas containing the requisite features, such as calcareous groundwater discharge in springs or seeps; deep soft sediments in which turtles may burrow easily; low vegetation less than 3.28 feet (1 meter) tall (often less than 19 inches (50 centimeters (cm)) at seasonal maturity; lack of a continuous, shade-casting canopy of tall shrubs or trees; and small areas of shallow, standing, or flowing surface waters, were observed. The wetlands within the O&R right-of-way are densely vegetated with phragmites and do not contain the required soil and microtopographic features, and the wetland area along the Middletown Sewage Treatment Plant fence is too small and narrow (<5,000 square feet), shallow, and disturbed to provide sufficient habitat. Therefore, no bog turtle habitat was observed in the vicinity of the proposed water line route.

2.5 FACILITY PROCESS WATER SUPPLY AND DISCHARGE

As described in the DEIS, to minimize water supply demands on the municipal distribution system, process make up water for the Facility, which is estimated to range from 44 gallons per minute (gpm) up to 426 gpm will be supplied through reuse of tertiary treated and disinfected effluent from the Middletown Sewage Treatment Plant. Reclaimed water remains the preferred source of water to meet the Project's process water needs.

CPV Valley remains engaged in active discussions with the City of Middletown regarding the purchase of the reclaimed water. Negotiations with the City of Middletown regarding process water have reached an advanced stage. It is expected that negotiations with respect to the agreement will be completed prior to the closure of the SEQRA process, with execution of the agreement occurring after completion of the FEIS. The potable and sanitary water needs will be purchased under contract with the Town of Wawayanda's water and sewer districts.

As described in the DEIS, process wastewater generated from the Facility would range from approximately 35 gpm to 65 gpm when using natural gas as fuel, and up to 155 gpm during the limited times that ultra-low sulfur distillate is used. As evaluated in the DEIS, this process wastewater would either be: 1) directed to the headworks of the Middletown Sewage Treatment Plant; or 2) discharged to the Middletown Sewage Treatment Plant outfall pipe, which discharges to the Wallkill River. The first option would require review and approval by the Middletown Department of Public Works. In the scenario where CPV Valley's process wastewater discharge is sent to the headworks of the City of Middletown Sewage Treatment Plant, the City has reviewed both the volumes and water quality characteristics associated with CPV Valley's discharge and concluded that there is sufficient capacity to accept the discharge and remain in compliance with the Sewage Treatment Plant's effluent limitations.

The second option would require a SPDES Permit through the NYSDEC. Both options were fully evaluated in Section 12.0 of the DEIS.

Recent discussions with the City of Middletown indicate an interest for the Project to discharge to the headworks of the City's Treatment Plant. The final decision on the preferred option will be determined by the City of Middletown.

The Project has commenced the SPDES Permit application process with NYSDEC in the event that the City ultimately prefers that the Project's process water be discharged directly to the outfall pipe. The Project can pursue either discharge option based on the City's final decision. Since filing the DEIS, CPV Valley submitted a SPDES permit application for the Project's discharge to the Wallkill River via the City of Middletown Water Treatment Facility Outfall pipe. A copy of the SPDES permit application is provided in Appendix 6 of this FEIS. To date, NYSDEC has not provided written comments on that application, but has indicated verbally that the application is complete. If the option of discharging to the headworks of the Middletown Sewage Treatment Plant is pursued, then the Project's stormwater discharge would be permitted under NYSDEC's Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity. In a meeting held with the applicant on October 18, 2011 and follow up correspondence dated October 26, 2011, the NYSDEC confirmed that an individual SPDES permit would not be required under this scenario (see correspondence from NYSDEC in Appendix 6B of the FEIS).

2.6 NATURAL GAS SUPPLY

As described in the DEIS, two alternatives were under evaluation for supplying natural gas to the Project. The first would utilize the existing Millennium Pipeline connected to the proposed Facility by a new 7 mile long gas transmission line, which would require approval from the FERC. The second alternative would utilize natural gas from Orange and Rockland Utilities, Inc. (O&R) through 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. Both processes include separate comprehensive environmental reviews.

CPV Valley has reached agreement with Millennium Pipeline for the construction of the natural gas lateral connecting the Project to the pipeline. Millennium has confirmed that it possesses adequate natural gas pipeline capacity to meet the Project's needs. A letter provided by Millennium Pipeline, included in Appendix 1E of the FEIS, confirms the agreement with the CPV Valley Project regarding the construction, permitting, and available capacity of the pipeline.

2.7 HOST COMMUNITY AGREEMENT

CPV Valley has been in active discussions with the Town of Wawayanda with regard to executing a Host Community Agreement. A final proposed Host Community Agreement is not yet available, and any such agreement cannot, in any event, be executed until after the FEIS is accepted. 6 NYCRR § 617.3(a) provides that no agency involved in an action may undertake, fund or approve the action until it has complied with the provisions of SEQRA. Where an Environmental Impact Statement (EIS) is prepared for an action, an involved agency may not undertake, fund, or approve the action until the FEIS has been accepted by the lead agency, and the involved agency has considered the FEIS and issued its own SEQRA Findings. Execution of the Host Community Agreement would constitute a form of approval of the CPV Valley Project by the Town Board. As an involved agency, the Town Board may not execute the Host Community Agreement until the Planning Board, as lead agency, accepts the FEIS, and the Town Board considers the FEIS and issues its own SEQRA Findings.

3.0 SUMMARY OF ENVIRONMENTAL STUDIES CONDUCTED SINCE FILING DEIS

3.1 INTRODUCTION

Since the close of the comment period on the DEIS, CPV Valley has performed certain additional studies and analyses either to fulfill commitments made in the DEIS, or to respond to comments on the DEIS. The technical memoranda documenting the studies performed and findings were made available for public review prior to issuing the FEIS. The following memoranda are included as appendices to the FEIS:

- Spring and Summer 2009 Ecological Field Survey Report, which provides the results and assessment of the seasonally dependent ecological surveys conducted as proposed on page 14-65 of the DEIS and agreed to by the Planning Board's consultants (Appendix 2A of the FEIS).
- Technical Memoranda regarding comments on the Visible Plume and Secondary Formation of Fine Particulate Matter (PM_{2.5}) (Appendix 3A of the FEIS).
- Technical Memorandum: Visual assessment further analyzing the impacts of the above ground electric transmission line. Additional photosimulations were prepared to complement the visual assessment included in the DEIS (Appendix 4 of the FEIS).

In addition, follow-up field work was conducted in response to comments received from the New York State Office of Parks Recreation, and Historic Preservation (OPRHP) on the archeological assessment that was submitted to the OPRHP in October 2008.

Periodically, the United States Environmental Protection Agency (EPA) reviews and updates the air quality standards to reflect the most recent scientific understanding of pollutant exposure effects. Section 3.3.2 of the FEIS provides a summary of the new or revised standards that have been promulgated since acceptance of the DEIS.

Section 3.7 presents an updated Zoning Analysis to reflect the revisions to the Town of Wawayanda Zoning Law that were adopted in May 2009 and November 2010 (revised Zoning Law).

3.2 SPRING AND SUMMER ECOLOGICAL FIELD SURVEYS

Ecological field surveys and observations were conducted in the Spring and Summer of 2009 in accordance with commitments made in Section 14 of the DEIS. Specifically, page 14-65 of the DEIS, stated that additional ecological field studies were to be conducted in the Spring of 2009 when field conditions were appropriate for conducting such studies. These studies included:

- Potential vernal pool characteristics and species present;
- Stream habitat assessment based on the EPA stream biomonitoring protocols;
- Potential summer roosting habitat for Indiana bat and other bats;
- Plant species surveys for plant species of conservation concern;
- Additional discussion of potential turtle habitat complexes, if present; and
- Additional site observations regarding wetland hydroperiod.

Field studies and/or additional observations were conducted for each of these ecological considerations. Prior to performing these studies, the Town of Wawayanda Planning Board's initial ecology consultant, GREENPLAN, was consulted regarding the methodology and timing for conducting the studies. After reviewing the field survey methodologies developed, the Town of Wawayanda's ecology consultant indicated that the methodologies were acceptable.

Due to the seasonal nature of the studies, the studies were performed during defined periods. The field studies were conducted on April 15-16, July 28-30, and September 8-10, 2009 at the CPV Valley Energy Center Project site to accommodate the seasonal nature of vernal pools, and flowering and fruiting phenology of the plant species to facilitate accurate identification.

The final report, "Spring and Summer 2009 Ecological Field Survey Report" was submitted to the Planning Board on November 4, 2009. The report is included in Appendix 2A of the FEIS. A summary of the results is presented below.

3.2.1 Vernal Pool Survey

A vernal pool survey was conducted in the Spring 2009. Only two vernal pools were identified on the Project site (VP-1 and VP-2) (see Figure 5). According to the methodology used to evaluate the vernal pools, described in the publication entitled "Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States" (Calhoun and Klemens, 2002), as prescribed by the Town's consultant, both vernal pools were rated as "low biological value." In terms of the potential impacts to the vernal pools from construction of the CPV Valley Energy Center, the majority of structures will be placed within the non-forested, former agricultural field areas of the site. Therefore, potential Project impacts will be quite limited, occurring only from construction of the electrical interconnect line through the forested areas east of the proposed energy facility itself. These impacts will include partial removal of tree cover for the electrical corridor, which will occur adjacent to VP-1. However, the pool itself will not be filled nor will the immediately surrounding land area be directly disturbed (except for tree clearing activities). The area immediately surrounding VP-2, which occurs partly on the cleared and maintained I-84 highway corridor, will not be disturbed, but a portion of nearby forested upland and wetland habitat will be cleared for the electrical line corridor.

Indirect impacts associated with the removal of forest cover adjacent to VP-1 may include increased solar heating during the spring when leaf cover would normally be shading the pool, which could result in a more rapid evaporation of the pool. Any such impacts will be insignificant. The pool is only marginally viable now and is of low biological value. Vernal pools ranging from low to high biological quality are routinely observed to occur within clearings and transmission right-of-ways throughout the northeast, indicating that the presence of an open or partially open canopy does not preclude or necessarily diminish the presence of viable vernal pools. Another potential indirect impact will be the loss of some forested upland and wetland that may be used as non-breeding habitat for mole salamanders. However, the vast majority of the existing forested area (approximately 90 %) will remain on the parcel in the immediate vicinity of the pools. Therefore, construction and operation activities will not have any direct impacts on vernal pools. The Project may indirectly impact the two vernal pools of low overall biological quality. The impacts on these two vernal pools will not be significant.

3.2.2 Bat Habitat Survey

The survey conducted in April 2009 of potential Indiana bat roosting trees within the Project site's main forested area found a total of 18 trees of the requisite size and "structural" characteristics containing loose, peeling bark (Figure 5). Trees identified included several different species. Based on the forest acreage and the requisite tree count, the area contains at least one potential roosting tree per 2.5 acres.

The construction of the electrical interconnect line will result in the loss of two trees identified as potential summer roosting habitat. The remainder of the potential roosting trees both to the north and south of the proposed line will not be impacted. Even with the loss of these two trees, the area will still maintain a density of at least one roost tree per 2.5 acres.

According to the U.S. Fish and Wildlife Service Draft Indiana Bat Revised Recovery Plan (FWS, 1999), the Indiana bat is fairly adaptable with regard to changes in roosts such as tree harvesting, and readily moves from one roost site to another within a season. As a result of this adaptability, as discussed in the Recovery Plan, the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) does not prohibit the clearing of trees, and the Service's primary goal is not the protection of every tree. Where clearing is necessary within known summer roosting habitat within 5 miles of a hibernaculum, such clearing is recommended to occur between November 15 and March 31.

Therefore, clearing of the Project's electrical interconnect route and the two potential roosting trees will not result in an impact to the potential summer roosting habitat for Indiana bat available on the site. In addition, in order to further eliminate any potential impacts to existing or future roosting habitat, the right-of-way corridor will be cleared between November 15 and March 31.

3.2.3 Plant Survey

A site survey was conducted for plant Species of Greatest Conservation Need (SGCN) under the NYSDEC State Wildlife Grants Program. The site-specific survey of potential SGCN plants included and focused on state-listed species of rare, threatened, or endangered plant species within the impact areas of the proposed Facility and associated transmission line right-of-way to document the presence or absence of plant species for which historical occurrences have been reported somewhere within Orange County. Although the New York Natural Heritage Program (NYNHP) lacks records of federally- or state-listed endangered/threatened or special concern species occurrences at the site and there is no protection in New York for state-listed RTE plants outside of jurisdictional wetlands, this survey was performed as an environmental best management practice (BMP).

A total of 71 SGCN plants that had been found somewhere in Orange County since the late 19th century, including 42 wetland species of 34 different genera, were considered to potentially occur in onsite habitats to be altered by the Project. Due to the large number of target species/genera and the labor-intensive nature of searches for SGCN plants, the survey was focused primarily on wetland impact areas within fill areas of the proposed Facility footprint, adjacent upland buffer zones, and the transmission right-of-way to be disturbed temporarily and/or cleared of trees to convert forested habitats to upland or wetland meadows. The surveys were conducted in July and September to target the fruiting and flowering periods of the species and facilitate identification. Only one of the target species was identified within the upland and/or wetland portions of the main Facility footprint and electric transmission line right-of-way areas:

Georgia bulrush (*Scirpus georgianus*), a State-Endangered Species (State Rank S1), inhabits wetland meadow and upland buffer zones within the transmission right-of-way and Facility footprint.

Scattered clumps of the Georgia bulrush are the only SGCN plant found within the wet meadow areas crossed by the electric transmission line right-of-way. These plants are unlikely to be adversely affected during transmission line construction or the long-term maintenance of the new right-of-way as a treeless wetland and upland meadow habitat. Since timber mats will be used in these wetlands during construction and the existing hydrology, soil features, and plant communities of these wet meadows will be preserved during/after transmission line construction, the Project poses no significant risk of adverse impact to SGCN plants within the electric transmission line right-of-way. Numerous scattered clumps of

Georgia bulrush inhabit the jurisdictional wetland meadows and/or adjacent upland meadow buffer zones within areas to be cleared, filled, and re-graded for construction of the Facility.

Prior to construction, these plants will be replanted within the proposed onsite mitigation wetland area. The sod of the Georgia bulrush clumps and adjacent native wetland plants will be excavated, transported on pallets to the mitigation wetland creation area, and replanted within that wetland to supplement the planting of seed and nursery stock of native wetland plant species obtained from commercial suppliers. This will benefit the wetland mitigation effort by preserving genetic material such as the seed bank, culms and rhizomes of plant populations already acclimated to the site, while reducing the cost of purchasing wetland seed and plants from commercial sources to populate the mitigation wetland.

3.2.4 Bog Turtle Survey Results

The surveys of appropriate habitat for the bog turtle found that while certain elements of ideal conditions may be present, the lack of a suitable combination of hydrology, soils, and vegetation indicate that the presence of appropriate onsite bog turtle habitat is highly unlikely.

Bog turtles typically prefer habitat with cool, shallow, slow-moving water, deep soft muck soils, and tussock-forming herbaceous vegetation (NYDEC, 2008). The onsite wetlands do provide some appropriate conditions including shallow, standing and/or flowing surface waters though they lack calcareous groundwater discharge in springs or seeps.

The deep (6+ inches deep) soft, mucky soils preferred by bog turtles are generally lacking on site. The soils with the highest muck content are located within forested wetlands in small wet pockets near the vernal pools. The forested wetlands do not provide appropriate habitat for bog turtles as they require a good deal of solar penetration for basking and nesting (NYDEC, 2008). The shallow emergent marshes and wet meadows which provide the greatest onsite potential for suitable bog turtle habitat are predominantly vegetated with tall species such as purple loosestrife and goldenrod. This tall vegetation reduces solar penetration and degrades potential basking and nesting sites.

Due to the lack of key habitat on the Project site, the potential for the occurrence of bog turtle on the Project site is highly unlikely. With regard to other aquatic and terrestrial turtles, because Project construction will occur mostly within existing agricultural fields and not in preferred turtle habitats, the entire aquatic community, as well as large riparian and wetland buffer areas within key turtle habitats will be retained. Therefore, impacts to bog turtles are not anticipated, and impacts to other turtle habitats will be minimal.

3.2.5 Stream Habitat Assessment

A stream habitat assessment including biological sampling of the macroinvertebrate community was also conducted in April 2009 within Carpenter Creek, which flows along the northern portion of the site.

Two Rapid Bioassessment Protocol (RBP) sample sites (each consisting of 100 meter length stream segments) were selected along Carpenter Creek in order to evaluate the representative habitat types previously observed within the stream system (see Figure 3-1 of Appendix 2A of the FEIS). One sampling station (RBP-1) was located in the "low-gradient" portion of the stream as indicated by the low gradient landscape and fine sediment substrate. This sampling site was approximately 800 feet upstream of the Route 17M culvert just above the confluence with Monhagen Brook. The other sampling station (RBP-2) was located in a "high-gradient" reach of Carpenter Creek approximately 500 feet downstream

of the Route 6 culvert. This portion of the stream was designated as high-gradient due to the gravel/cobble substrate and overall riffle/run stream morphology.

Overall, habitat quality was relatively higher in the upstream (western) portions of Carpenter Creek compared to downstream areas. The RBP-1 sample reach (downstream site) is rated as marginal habitat with a total score of 105. The lower habitat quality of this sampling reach is mainly attributable to the small percentage of stable habitat for epifaunal colonization and the absence of pools. In addition, although vegetation protection along stream banks was present, the majority of the vegetation was dominated by invasive, non-native species including loosestrife and reed canary grass. Stream habitat conditions improve upstream with a habitat score of 121 (suboptimal) calculated at RBP-2. The higher score is, in part, attributable to increased availability of epifaunal substrate in the form of cobble, snags, and undercut banks with minimal sediment deposition around existing gravel and cobble ("embeddedness") observed. Alternately, RBP-2 scored lower for the riparian zone width parameter due to the proximity of hayfields along the stream banks.

Within the site, Carpenter Creek appears to have been dredged and straightened in the past due to the presence of dredge spoils along portions of the banks (including a raised road in one area) and the relatively straight lines of the channel as it passes through the adjacent hayfields.

In general, the RBP sampling results indicate that the stream supports an abundance and diversity of macroinvertebrates that generally range from pollution-tolerant to somewhat sensitive. However, Ephemeroptera and Trichoptera, considered pollution sensitive taxa, were identified in greater numbers at the upstream sampling site. In addition, Ephemeroptera was not observed downstream at RBP-1. The low abundance/absence of these taxa is generally indicative of poor stream quality or a lack of stable habitat. For example, these taxa are generally abundant and often dominate habitat containing stable rock/cobble or woody debris (e.g., logs, root mats). Based on the habitat assessment, stable habitat for epifaunal colonization was limited at RBP-1. RBP-2, on the other hand, had a greater abundance of stable habitat in the form of cobble substrate.

Overall, tolerant species (e.g., *Oligochaeta, Chironomidae*) were observed at both locations which, as described above, may suggest impairment due to habitat and/or water quality degradation due to upstream historic and current land uses such as agriculture, roadway runoff, etc.

An assessment of potential direct and indirect impacts to the on-site streams (Carpenter Creek and tributary) resulting from Project construction, operation, maintenance, and stormwater discharges is provided in Sections 13 and 14 of the DEIS. With respect to impacts to aquatic habitat, direct impacts to the stream will be avoided to the maximum extent practicable. A temporary crossing (overhead bridge span) of Carpenter Creek is proposed to access a construction laydown area. This span will avoid any direct discharge of fill materials to the stream or destabilization of the banks, and will be removed at the end of Project construction. Where Carpenter Creek is proposed to be crossed for the construction of the underground portion of the electrical line, this impact will be temporary and limited to the far eastern end of the creek along Route 17M where a natural gas pipeline has recently crossed the stream. Details of this temporary crossing and restoration are provided in Appendix 14-I of the DEIS (Volume III). Construction of the electrical line through the central and eastern part of the site will avoid direct crossing of the streams with equipment. Installation of utility structures within wetlands will include use of swamp mats for vehicle access and installation of erosion and sedimentation controls within work areas. Accordingly, direct impacts to Carpenter Creek will be negligible.

Treated stormwater from the on-site stormwater treatment system will not be directed to Carpenter Creek or the southern tributary stream. Such stormwater will be discharged through an existing man-made

swale located more than 800 feet away from Carpenter Creek (see Section 13 of DEIS). Therefore, stormwater discharges will not adversely impact Carpenter Creek.

Other indirect impacts to the streams could occur from erosion and sedimentation during Project construction. Therefore, traditional and proven erosion and sedimentation controls will be installed and maintained around all areas of soil disturbance or storage, vehicle access, and where vegetation will be removed. In general, except for limited temporary crossings described above and a perimeter fence crossing, an undisturbed, vegetated riparian corridor of at least 120 feet from the banks of the streams will be maintained for the Project. These measures will prevent significant erosion and sedimentation impacts to the streams.

3.2.6 Wetland Hydroperiod

In assessing the wetlands on site, the hydroperiod, the annual cycle of inundation, flooding, and saturation, was considered. Site walkovers conducted during the months of January through October 2007-2008 and April through September 2009 indicate that inundation, flooding, and saturation in the wetlands in and adjacent to the proposed development area is exhibited primarily during periods outside the agricultural growing season. Evidence of bank overflow during two storm events over 1 inch during the summer of 2008 suggests that the wetlands within 50 feet of Carpenter Creek in the eastern portion of the site do exhibit several inundation events annually. Similar leaf staining and drift lines were not observed on the western half of the site. The wetland areas proposed to be filled are prior converted agricultural lands and the period of inundation, flooding, and saturation in the proposed impact areas has not been of sufficient duration to prevent their use for row crop production.

The wetlands in and adjacent to the proposed development area are croplands and are rarely inundated. They exhibited no ponding following the December 12, 2008 rainfall event totaling 4.3 inches of precipitation. Considering that Project-generated runoff will closely replicate the pre-development condition, changes/impacts to existing wetland conditions, water levels and hydroperiod related to the construction and operation of the site are expected to be insignificant. Site investigations indicate that the wetland hydroperiod over the downgradient wetlands, on the eastern portion of the site, are closely related to rainfall events greater than one inch in a 24 hour period. A small area of wetlands adjacent to the stream, approximately 1,000 feet downstream from the plant site proper, was briefly inundated following storm events in October and December of 2008. The period of inundation was not observed, as it occurred overnight. Evidence of inundation was evident, however, through fine sediment deposition on the wetland vegetation and drift lines along the stream banks.

In April 2009, vernal pools were observed within and adjacent to the forested swamp in the eastern part of the site (see Section 3.2.1 above). These observations revealed a maximum depth of ponding of 10 inches within a small pool along I-84, 8 inches of ponding within a nearby, second pool within the site, and up to 5 inches of ponding within other nearby wetlands that did not support vernal pool species. Further to the north within this same forested swamp, an approximately 2 acres portion of the swamp was observed to be ponded with 12-14 inches of standing water. This area is the most "isolated" portion of the wetland, essentially surrounded by elevated uplands and cut off from direct contact with Carpenter Creek or its tributaries and man-made ditches. Over the course of the growing season, each of these ponded areas dissipated to minimal amounts (0 to 3 inches) of standing water.

In the far western part of the site, the narrow portion of forested swamp contained up to several inches of standing water in the spring and early summer. Standing water in this area dissipates during the growing season. This area is hydrologically connected to the swale system along I-84, and likely drains through highway culverts and to some degree is retained within the swale itself.

Observations made over the same time period within the eastern marsh/wet meadow and along Carpenter Creek and its tributary revealed very little sustained ponding beyond the creek and tributary itself.

Based on these observations, interior portions of the eastern forested swamp, which are relatively isolated from local stream drainage, appear to retain varying amounts of standing water throughout the growing season, which dissipate during the season. Along Carpenter Creek and its tributary, marsh and wet meadow areas tend to drain out to the streams either over land or through the system of drainage ditches placed within the agricultural fields.

3.3 AIR QUALITY

3.3.1 Secondary Formation of PM_{2.5}

The DEIS presented potential Project emissions of primary particulate matter and their associated impacts. Primary particulate matter consists of fine particulates emitted directly to the air in solid or liquid form as well as condensable particulates that may form as a result of condensation in the atmosphere shortly after emissions exit from a stack.

Additional particulates may form in the atmosphere after the stack exhaust leaves the Project stacks as a result of chemical reactions among various gaseous substances, referred to as precursors, some of which may be emitted by the Project. These additional particulates are referred to as "secondary" particulates, and the portion of secondary particulates with diameters of 2.5 microns or less are referred to as secondary PM_{2.5}. The reactions that can lead to the formation of secondary PM_{2.5} generally occur over many hours or days, and the resulting secondary PM_{2.5} formation due to Project emissions would largely occur well outside of the Project area.

Comments submitted on the DEIS requested that CPV Valley provide estimates of the degree to which Project emissions might cause the formation of secondary $PM_{2.5}$. CPV consulted with both NYSDEC and EPA and confirmed that neither agency has approved or recommended any method to quantify the amount of potential secondary $PM_{2.5}$ formation due to an individual project. However, EPA has identified the following four substances as potential precursors for secondary $PM_{2.5}$: sulfur dioxide (SO₂), NO_x, VOC, and ammonia (NH₃). In addition, EPA has implemented required emission offset ratios for two potential $PM_{2.5}$ precursors (SO₂ and NO_x) in permitting actions involving new major sources or major modifications for $PM_{2.5}$ in $PM_{2.5}$ nonattainment areas. As such, EPA's requirement to obtain $PM_{2.5}$ precursor emission offsets acknowledges the need and provides a means to reduce the formation of secondary $PM_{2.5}$, but the applicability of that requirement is limited to new major sources and major modifications for $PM_{2.5}$ in $PM_{2.5}$ nonattainment areas. Due to its acceptance of an enforceable annual $PM_{2.5}$ emissions limit, the Project will not be a major source of $PM_{2.5}$, so it is not subject to the requirement to obtain $PM_{2.5}$ precursor emission offsets.

In order to respond to the request for estimates of potential secondary $PM_{2.5}$ formation due to Project emissions, CPV reviewed the scientific literature and found that some studies had been performed to estimate changes in regional ambient $PM_{2.5}$ levels that would result from regional changes in emissions of $PM_{2.5}$ precursors. In particular, two studies were found that specifically examined the changes in ambient $PM_{2.5}$ levels that might result from changes in emissions of the four substances identified by EPA as potential $PM_{2.5}$ precursors. These studies had been performed to provide technical support for EPA's Clean Air Interstate Rule (CAIR).

The results from these two studies were then used in analyses to estimate changes in ambient PM_{2.5} that might result due to emissions from the Project. The analyses accounted for the sensitivity of predicted PM_{2.5} levels to changes in precursor emissions for each of the four potential PM_{2.5} precursors and

considered potential Project emissions relative to historical emissions in Orange County along with ambient PM_{2.5} levels in Orange County.

The resulting estimates of secondary PM_{2.5} are presented in two memoranda in Appendix 3A of this FEIS along with more details of the analyses. The predicted increases in PM_{2.5} levels due to secondary PM_{2.5} formation attributable to Project emissions are very small (i.e., below EPA significant impact levels for PM_{2.5} and below significance thresholds used by NYSDEC for PM_{2.5}). In addition, it was demonstrated that the predicted level of secondary PM_{2.5} formation would not interfere with compliance with the National Ambient Air Quality Standards (NAAQS) for PM_{2.5}. Potential impacts associated with secondary PM_{2.5} formation are therefore deemed to be negligible.

3.3.2 **New Regulatory Requirements**

Periodically, EPA reviews and updates the air quality standards to reflect the most recent scientific understanding of pollutant exposure effects. Since the acceptance of the DEIS, EPA has established new or revised NAAOS and interim significant impact levels (SILs) for the following air pollutants and averaging periods:

- New (effective April 12, 2010) nitrogen dioxide (NO₂) 1-hour average (NAAQS: 188^a µg/m³; SIL: $7.5^{b} \,\mu g/m^{3}$);
- New (effective August 23, 2010) SO₂ 1-hour average (NAAQS: 196^c μg/m³; SIL: 7.8^b μg/m³);
- Revised (effective January 12, 2009) lead (Pb) rolling 3-month average (NAAQS decreased from 1.5 [calendar quarter] to $0.15^{\rm d} \,\mu \,{\rm g/m}^3$).

In addition, EPA has established new Prevention of Significant Deterioration (PSD) increments and SILs (effective December 20, 2010) for particulate matter less than or equal to 2.5 micrometers in diameter (PM_{2.5}). In conjunction with the existing PM_{2.5} NAAQS, the new PSD increments provide additional protection of air quality by further limiting PM_{2.5} concentration increases as follows:

- Class I Areas (Special areas of natural wonder and scenic beauty, such as national parks, national monuments, and wilderness areas, where air quality is given special protection.):
 - O PSD increments: 24-hour average: 2^e μg/m³, annual average: 1^d μg/m³
 - O SILs: 24-hour average: 0.07^f μg/m³, annual average: 0.06^g μg/m³
- Class II Areas (All areas of the country that are not Class I Areas):
 - o PSD increments: 24-hour average: $9^e \mu g/m^3$, annual average: $4^d \mu g/m^3$ o SILs: 24-hour average: $1.2^f \mu g/m^3$, annual average: $0.3^g \mu g/m^3$

^a The 3-year average of the 98th percentile of the annual distribution of daily maximum 1-hour concentrations

^b The 5-year average (modeling period of record) of the maximum 1-hour impact at each receptor in each year

^c The 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour concentrations

d Not to be exceeded

^e Not to be exceeded more than once per year

f EPA has not defined a period average or percentile to use for this SIL. Therefore, the highest 5-year average of the 5 maximum modeled 24-hour impacts at each receptor will be used.

^g EPA has not defined a period average or percentile to use for this SIL. Therefore, the highest 5-year average of the 5 modeled annual averages at each receptor will be used.

The DEIS evaluated these pollutants for the NAAQS and averaging periods that were applicable at the time. These included annual average NO₂ and SO₂, 24-hour and 3-hour average SO₂ concentrations, and calendar-quarter Pb concentrations. Annual and 24-hour average PM_{2.5} concentrations were evaluated in the DEIS; however, federal PSD increments and SILs were not previously available. The results of the air quality impact assessment that was presented in the DEIS have not changed, since no change has been made to the Project design that would affect its air quality impacts. These new standards are more stringent than the previous standards, and the Project will be required to comply with those standards in order to receive an Air Permit from NYSDEC.

The Project's greenhouse gas emissions are now subject to the PSD regulations, which now require the determination of the Best Available Control Technology (BACT) for greenhouse gas emissions.

Appendix 3B of the FEIS contains the analysis demonstrating that the air quality impacts from the Project will comply with all of the new requirements, including the BACT analysis for greenhouse gas emissions.

3.4 VISIBILITY OF PLUMES

A number of comments on the DEIS expressed concerns about the prediction of very long and high visible plumes from the combustion turbine stacks. The prediction of very long and high plumes was largely an artifact of the model used to predict plume formation, specifically a result of the predictive model being applied under certain conditions (very high relative humidity, when precipitation or natural fog occurs) for which the model was not suitable and for which any potentially visible plumes would be obscured by ambient conditions. Subsequent comments requested a fuller explanation. As a result, a follow up technical memorandum was submitted that provided more details and the results of a revised analysis. The technical memorandum is included in Appendix 3A, and a summary is provided below.

The model that was used for predicting visible vapor plume length and height relies upon the dilution of moist plume air with drier ambient air to determine when a plume would no longer be visible. If the ambient air is cold and moist, then the water vapor emitted by the combined cycle stacks may condense to form water droplets. This may produce a visible, white plume. As the plume travels downwind and mixes with the drier and cooler ambient air, water droplets in the plume would evaporate and the plume at some point would no longer be visible.

In modeling to estimate the extent of visible plumes, it is customary to exclude from the analysis those hours in which a plume would not actually be visible, such as hours with precipitation and/or fog, including hours when the ambient air is saturated or nearly saturated. Under these conditions, the mechanism used by the model to determine visible vapor plume length and height would not apply. If the ambient air is saturated, then no amount of mixing of saturated ambient air with the saturated water vapor plume will yield plume water vapor concentrations that are less than the saturation values. Under these conditions, the model will continue to predict visible plumes at all downwind distances considered along the plume path. The prediction of very long and high visible plumes for these hours when they would not actually be expected to occur is what was meant by the phrase "an artifact of modeling assumptions."

The visible plume statistics presented in Table 9-29 of the DEIS were based on all hours that were modeled over a 5-year period of meteorological data, including hours with naturally occurring fog and/or hours with saturated or near saturated ambient conditions. The very long ("six mile") and high visible plumes that were predicted for approximately 3 to 4% of daylight hours were associated with hours with saturated or near saturated ambient conditions.

In order to provide more meaningful results concerning the frequency and extent of visible plumes, a new summary was prepared that excluded hours for which natural occurring fog would be expected to occur (i.e., those hours with relative humidity $\geq 9\%$). These results are provided in a separate memorandum included in Appendix 3A of the FEIS along with a more detailed discussion and should be regarded as a more representative and physically meaningful estimate of likely visible plume effects.

The revised results presented in the technical memorandum in Appendix 3A show the following:

- Visible plumes with a length of 50 meters or greater were predicted to occur for 13.2% of modeled hours, meaning that the remaining 86.8% of modeled hours would be characterized by shorter visible plumes or by no visible plumes.
- Visible plumes are predicted to be most common in the winter and least common in the summer.
- Visible plume frequency decreases with increasing plume length (in other words, longer visible plumes are less frequent than shorter visible plumes).
- The frequency of very long and tall visible plumes is drastically reduced, and the "six mile" long plumes mentioned in a number of comments are not predicted to occur.

The plumes presented in the photosimulations are representative of the most frequent category of predicted plumes (i.e., plumes of less than 50 meters in length).

The plume heights mentioned in several review comments are not accurate. For clarity, the plume heights listed in Table 9-29 and in the revised table in the memorandum in Appendix 3A are heights above ground, not heights above stack top. They represent plume height, not plume rise.

3.5 VISUAL IMPACT ASSESSMENT OF ABOVE GROUND ELECTRIC TRANSMISSION LINE

This section is based on the on-site above ground electric transmission line alternative, and is presented for the sake of completeness. However, with the underground option discussed in Section 2.3 of the FEIS, the poles and wires described below would not be visible.

A visual impact assessment was prepared and documented in Section 5.0, Visual Resources and Aesthetics, of the DEIS. The viewshed mapping and photosimulations that were included in the DEIS focused on the electric generation buildings and the two 275 foot high exhaust stacks that represent the primary visual elements of the Project. The DEIS visual analyses described the physical configuration of the aboveground electric transmission line extending from the Project's on-site substation to a point on the western edge of the site along Route 17M where the transmission line will transition to an underground configuration and its potential visibility, but did not include simulations of the potential impacts of that transmission line on visual resources. In response to comments received on the DEIS, further assessment of visual impacts associated with the aboveground portion of the electric transmission line was conducted. Appendix 4 of the FEIS includes a Technical Memorandum that further analyzes the visual impacts of the above ground electric transmission line. This information serves to complement the information contained in Section 5.0, Visual Resources and Aesthetics, of the DEIS.

A viewshed map was prepared showing the potential incremental visibility of the overhead transmission line and its structures, including the impacts associated with clearing of trees for the right-of-way. The viewshed maps are a modification to Figure 5-1B from the DEIS. The viewshed maps include the height of the Facility stacks and overhead transmission line, as well as the right-of-way clearing.

Figure 2-2 of Appendix 4 was created to show the potential incremental viewshed of the Facility stacks and aboveground electrical transmission line based on the effects of topography and vegetation cover as represented by the National Land Cover Dataset (NLCD) of 2001. Figure 2-3 of Appendix 4 was created to show the potential viewshed of the Facility stacks and aboveground electrical transmission line based on topography only. It is important to note that this analysis is conservative, as it omits any structures (e.g., buildings, fences, etc.) that could further obscure visibility of the Facility's structures. The viewshed maps are color coded to demonstrate the incremental viewshed area (shaded in yellow) resulting from the inclusion of the overhead electric transmission line. As shown on Figures 2-2 and 2-3 of Appendix 4, there is little area that would have visibility to the overhead transmission wires that do not already have visibility to the main facility (5.5% of total viewshed area for Figure 2-3).

The viewshed mapping shows two of the viewpoints identified by the Planning Board, 349 Greeves Road (PB2) and Sutton Hills Apartments (PB3), located within/at the edge of the <u>incremental</u> viewshed area; however, further computer simulation analysis has demonstrated that due to distance, topography, and vegetation the aboveground electric transmission line is not visible from these viewpoints. There are no other visual resources located within the incremental viewshed area.

After consultation with the Planning Board's consultant, three of the viewpoints analyzed in the DEIS were selected for re-analysis with inclusion of the above ground transmission line. Viewpoints located at Bates Gates Road (VP5), Kirbytown Road (VP6), and Balchem Corp. (VP9) were chosen for further analysis because of their proximity to the site and potential views of the aboveground electric transmission line. These viewpoints provide representative views of the aboveground electric transmission line from the north, south, and east.

As recommended by the Planning Board's consultant, photographs were taken to capture a panoramic view of the aboveground electric transmission line and Facility from two locations along I-84. The entrance ramp to westbound I-84 at Route 17M was chosen as the best location to capture a panoramic view of the aboveground electric transmission line. A second photograph was taken on I-84 eastbound west of the site. Photographs from behind the Horizons at Wawayanda workforce housing complex were also taken to provide a representative view of the aboveground electric transmission line from the location of a playground area and picnic tables.

The additional photographic simulations prepared for the CPV Valley Energy Project provide insight into the extent and nature of the potential visual impacts associated with the transmission pole structures and electrical wires comprising the overhead segment of the transmission interconnect to the NYPA Marcy South system. For the near-field viewpoint locations represented by Balchem Corporation, the I-84 westbound entrance ramp, and the Horizons at Wawayanda complex, a number of the pole structures would represent new vertical-oriented physical elements in the viewshed that have visual impacts on these viewpoints. The existing quality of the views on which the poles have the largest impacts is not high, and the view would be often fleetingly experienced, thereby mitigating the impacts.

For near-field viewshed receptor locations, the neutral color (light gray) and relatively small diameter (2 to 3 inches) of the conductor wires reduces their prominence. The photosimulations for the mid-field receptor locations represented by Kirbytown Road, Bates Gates Road, and I-84 eastbound approaching the Facility site indicate that the pole structures would be only minimally visible and do not add significantly to the visual impacts previously disclosed.

3.6 CULTURAL RESOURCES

A Phase IA/IB Cultural Resource Report was submitted to the OPRHP on October 31, 2008. This report was included in Appendix 4 of the DEIS and Section 4.0, Cultural Resources, of the DEIS incorporated the findings.

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 conclusions of the DEIS, these additional investigations did not identify any significant archeological resources on the Project site. As such, no impacts to archeological resources will result from the construction, operation, and maintenance of the Project. The results of the September 2009 field work are included in Appendix 7 of the FEIS, and 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) in or eligible for inclusion in the State or National Register of Historic Places as stated in their letter dated November 5, 2009 (see Appendix 7 of the FEIS).

3.7 ZONING

Section 3.5, Zoning, of the DEIS provides an analysis of the Project's consistency with local municipal codes. As required by the SEQRA Scoping Document, the section evaluated compliance with the applicable sections of the Town's Zoning Law as adopted in 2002 including:

Section 195-9	Applicability of regulations;
Section 195-16	Parking, loading, access and traffic standards;
Section 195-19	General commercial and industrial standards;
Section 195-20	Landscaping, screening, ridge development and buffer regulations;
Section 195-21	Water Supply Protection; and
Section 195-66	Special Use Review Criteria.

On May 7, 2009, the Town Board of the Town of Wawayanda adopted a revised Zoning Law (the "2009 Zoning Law"). While the bulk of the 2009 Zoning Law remains consistent with the Zoning Law adopted in 2002 (the "2002 Zoning Code") which applied to the Project as discussed in the DEIS, there were a few notable changes applicable to the Project. These include the following:

- The zoning of the 122 acre Project site and surrounding area has been revised from the Manufacturing Industrial (MI) district in the 2002 Zoning Code to Mixed Commercial 1 (MC1).
- The 2009 Zoning Law permits Essential Services/Utilities by site plan approval (rather than by special use permit, plus site plan approval as in the 2002 Code).
- The Town's sign ordinance is now included in the 2009 Zoning Law (see Section 4.18 et. seq. of the 2009 Zoning Law).

In November 2010, the Town Board of the Town of Wawayanda amended the 2009 Zoning Law to require special use permit approval as well as site plan approval, as was the case in the 2002 Zoning Code. CPV Valley's pending Application to the Town Planning Board will be amended to address changes resulting from the 2010 amendment to the 2009 Zoning Law.

The following subsections provide an update of the Zoning Analysis presented in Section 3.5 of the DEIS. This text replaces the following subsections of the DEIS: 3.5.1 Existing Conditions; 3.5.1.2 Surrounding Zoning Districts; and 3.5.2.1 Code of the Town of Wawayanda – Existing Chapter 195.

Also, the following statements or slight variations thereof, are made throughout the DEIS (e.g., pages 1-6, 1-11, 2-1, 2-5, 3-21, 3-22, 3-27, 3-31, 3-67, 7-34, 13-17, 17-2, 18-4, and 18-8).

"The Project Site is located within the Town of Wawayanda's MI District, which allows "other industrial uses" as a Special Use. A Special Use requires individual consideration through a special use permit and site plan review process by the Planning Board."

With the 2009 and 2010 revisions to the Zoning Law, those statements are hereby revised to read as follows wherever they appear:

The Project Site is located within the Town of Wawayanda's MC1 District, which allows "Essential Services/Utilities" by site plan approval and special use permit approval by the Planning Board.

3.7.1 Existing Conditions (Section 3.5.1 of DEIS)

3.7.1.1 Project Site

The 122 acre site is located within the Town's Mixed Commercial 1 (MC1) zoning district (see Figure 3-2). The intent of the MC1 zoning district is to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses, and manufacturing. The Schedule of Zoning District Regulations for the MC1 zoning district lists principal permitted uses, special uses, and accessory uses allowed within the zone. The only principal permitted uses in the zoning district are Agriculture as defined by the New York State Department of Agriculture and Markets, agriculture, nurseries and greenhouses without retail, and minor wireless communications facilities. Among the site plan approval uses and special permit uses (uses which are permitted but require a site plan approval and special use permit by the Town Planning Board) is "Essential Services/Utilities," the category under which the Project would fall.

3.7.1.2 Surrounding Zoning Districts

Figure 3-2 is a map depicting the Town of Wawayanda and City of Middletown zoning districts within the primary study area (within a one-mile radius of the Project site) based on the changes to the Town's Zoning Law.

Town of Wawayanda zoning districts within the primary study area include: Mixed Commercial 1 (MC1), Mixed Commercial 2 (MC2), Town Commercial (TC), and Suburban Residential (SR). No portion of the Agricultural Residential (AR) zoning district, the Town of Wawayanda's largest and most rural district, is within the primary study area.

The City of Middletown portion of the primary study area is located in the City's General Business District (C-3), One-or-two family owner-occupied Residential District (OR-2), and Multi-Residence Low Density District (SR-3B).

The adjacent property to the west and south the Project site is zoned as Mixed Commercial 1 (MC1). Land to the northeastern side of the site is zoned Town Commercial (TC).

A segment of the Project site boundary (less than 0.2 miles in length) to the north is adjacent to land zoned as Suburban Residential (SR). The Facility and the on-site electric transmission lines will be located along the southern boundary of the site, maximizing the distance from the SR area. The Project site and the SR zone are separated by Route 6.

3.7.2 Analysis of Consistency with the Town of Wawayanda 2009 as Amended in 2010 Zoning Law (Section 3.5.2 of DEIS)

This section summarizes the applicable Zoning Law requirements (Existing Conditions) followed by a summary or statement of how the Project will comply in italics (Potential Impacts). This section discusses the Project's consistency with criteria relevant to issuance of local approvals such as the Site Plan approval and a Special Use Permit, as well as any variances required for the Project and the relevant standards for approval of such variances. Unless otherwise indicated, conformance with specific zoning criteria discussed herein is determined in reference to the 122 acre Project site. The text provides the updated analysis of the Zoning Law as presented on pages 3-49 through 3-62 of the DEIS. Table 3-1 provides a summary of the Zoning Law requirements.

Table 3-1 Summary of Zoning Law Compliance (2009 as amended in 2010)				
Article/Section	Section Title	Compliance Required?		
Article III	Zoning Districts and Zoning Map			
§195-11	Schedule of district regulations.	Full, permit from Town		
§195-12	Applicability of regulations concerning prohibited uses.	Full		
§195-13	Height restrictions.	Full, area variance from Town		
§195-14	Corner lots and through lots.	Full		
§195-17	Accessory structure and use standards.	Full		
Article IV	General Supplementary Regulations			
§195-19	Parking, loading, access and traffic standards.	Full		
§195-20	Floodplain development standards.	Full		
§195-23	General commercial and industrial standards.	Full		
§195-24	Landscaping, screening, ridge development and buffer regulations.	Full		
§195-25	Water supply protection.	Full		
§195-26	Agricultural buffer.	Full		
§195-29	Erosion and sedimentation control.	Full		
§195-36	Signs.	Full		
Article VII	Special Use and Site Plan Review Procedures	<u>.</u>		
§195.68	Application and site plan required.	Full		

Existing Zoning. This Section sets forth the existing zoning requirements applicable to the Project.

Article III. Zoning Districts and Zoning Maps.

Section 195-11. Schedule of District Regulations.

The restrictions and controls intended to regulate development in each district are set forth in the Schedule of District Regulations and supplemented by other sections of the Zoning Law. Any use identified as a principal permitted use shall be permitted as a matter of right upon application to the Building Inspector, provided the proposed use is in compliance with these regulations. Special uses are also subject to site plan review and, specifically, Planning Board approval as prerequisites to the Building Inspector issuing a permit for their establishment. Site plan review shall also be required for new nonresidential or nonagricultural uses. Accessory uses are permitted to accompany or precede principal permitted and special uses and permits for these uses shall be issued directly by the Building Inspector.

The requirements of the Schedule of District Regulations for the MC1 district are reproduced below:

District Intent: This district is intended to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses, and manufacturing.

Principal Permitted Uses: Agriculture as defined by New York State Department of Agriculture & Markets; agriculture, nurseries and greenhouses without retail; minor wireless communication facility.

Special Uses: Agriculture, livestock (2 acres or more); Bed and Breakfast; Daycare, Preschool, Nursery School; Hotel/Conference Center; Mining; Motel; Recreation, Commercial; Recycling Facility; Vehicle Services; Essential Services; Wireless communication facility, major.

Accessory Uses: Barns, silos, produce storage and packing warehouses; Off-street parking; Satellite stations/satellite antennas; Signs; Home Occupation, other.

Figure 2-7A demonstrates compliance with the following bulk and area regulations.

Uses Which Are Permitted But Require Site Plan Approval and Special Use Permit: Agriculture, on-farm food processing activities with wholesale and retail trade areas of less than 10,000 sq. ft. in gross floor area; agriculture, retail/wholesale, sale of farm, nursery, and related products; agriculture, tourism activities on ongoing farm operation; agriculture, warehousing/wholesaling farm/nursery products; dwelling, one unit in non-residential building (mixed use); essential services/utilities; home occupation, minimal impact; industrial uses; light manufacturing; offices and general retail; research/development laboratories; retail, large-product; restaurant, fast foot; restaurant or bar; non-fast food; services, business or personal; warehouse, storage and distribution facilities, wholesale operations.

The Facility qualifies as an "essential service/utility," and therefore requires site plan approval and special use permit.

Lot Area: A minimum lot area of 2 acres is required.

The Project site is approximately 122 acres. Therefore, the Project complies with this requirement.

Lot Width: A minimum lot width of 100 feet is required.

The Project site is more than 1,000 feet in width. Therefore, the Project complies with this requirement.

Front Yard: A minimum front yard of 50 feet is required.

The Project complies with this requirement.

Side Yard: Side yards must be a minimum of 15 feet.

The Project complies with this requirement.

Both Side Yards: Both side yards combined must be equal to or greater than 35 feet.

The Project complies with this requirement.

Rear Yard: A minimum rear yard of 30 feet is required.

The Project complies with this requirement.

Lot Coverage: Lot coverage of up to 70% is allowed.

Project buildings and impervious areas such as parking lots total approximately 21.25 acres or approximately 17% of the total Project site (122 acres). Therefore, the Project complies with this requirement.

Building Height: The maximum building height for principal buildings and structures is 65 feet.

A variance from this standard would be required for certain elements of the Project. The aircooled condenser is 115 feet tall, the generation building is 113 feet tall, the stacks are 275 feet tall, and the HRSG is 90 feet tall. Accessory buildings and structures are discussed under Section 3.11.

CPV Valley will seek one or more area variances from the Town's Zoning Board following the completion of the SEQRA process. The factors which may be considered by the Zoning Board of Appeals, as set forth in Section 195-85(c)(2) of the Zoning Law are as follows:

- Whether an undesirable change will be produced in the character of the neighborhood or a detriment to nearby properties will be created by the granting of the area variance;
- Whether the benefit sought by the applicant can be achieved by some method, feasible for the applicant to pursue, other than an area variance;
- Whether the requested area variance is substantial;

- Whether the proposed variance will have an adverse effect or impact on the physical or environmental conditions in the neighborhood or district; and
- Whether the alleged difficulty was self-created, which consideration shall be relevant to the decision of the Board of Appeals, but shall not necessarily preclude the granting of the area variance.
- The Board of Appeals, in the granting of area variances, shall grant the minimum variance that it shall deem necessary and adequate and at the same time preserve and protect the character of the neighborhood and the health, safety, and welfare of the community.

Section 195-12. Applicability of regulations concerning prohibited uses.

Subsection A. Any owner or occupant must acquire any permits or approvals required by this chapter prior to any change in land use or making any modification or improvements to the property or structures on the property.

All necessary permits or approvals required by the Zoning Law will be acquired.

Subsection C. Any use which is noxious, offensive or objectionable, by reason of the emission of smoke, dust, gas, odor, or other form of air pollution or by reason of the deposit, discharge or dispersal of liquid or solid wastes in any form in a manner or amount as to cause permanent damage to the soil and stream or to adversely affect the surrounding area or by reason of the creation of noise, vibration, electromagnetic or other disturbance or by reason of illumination by artificial light or where light reflection emanates, or which involves any dangerous fire, explosive, radioactive or other hazard or which causes injury, annoyance or disturbance to any of the surrounding properties or to their owners and occupants and any other process or use which is unwholesome and noisome and may be dangerous or prejudicial to health, safety or general welfare is prohibited. Further, the following uses and activities are expressly prohibited: dumps; junkyards; construction and demolition dumps; commercial stripping of topsoil, permanent installation or use of a sound-amplifier device audible beyond the premises; artificial lights as traffic hazards; or blinking and flashing signs.

The CPV Valley Energy Center will be operated in manner that will not create a nuisance in any manner described above. The Project will utilize the best available control technologies to minimize air pollution and will meet all applicable state and federal air quality requirements. The Project's proposed use does not include any expressly prohibited use or activity.

Section 195-13. Height restrictions.

Subsection A. General application. No building or structure shall exceed in building height the number of feet permitted as a maximum on the Schedule of District Regulations for the district where such building or structure is located.

Subsection B. Permitted exceptions. Height limitations stipulated elsewhere in this chapter shall not apply to church spires, belfries, cupolas, domes, monuments, water towers, chimneys, smokestacks, flagpoles, radio and transmission towers, farm buildings or similar non-inhabited structures under 100 feet in height. Structures over 100 feet in height may be permitted as special uses provided they are sufficiently setback from adjoining properties to avoid any safety hazard connected therewith and meet all state and federal air safety and electronic communications standards. Other height

exceptions may also be granted as special uses where fire-fighting capacity will not be threatened and buffers and setbacks are also proportionally greater.

As stated previously, the air-cooled condenser, and generation building will require area variances to be granted under this section. The proposed heights of the two stacks are 275 feet. The stacks, which are chimneys, are above 100 feet in height and therefore may require area variances. Since the stacks will be greater than 200 feet above ground surface, the Project has obtained approval from the Federal Aviation Administration (FAA).

The 275 foot high stacks are sufficiently set back from adjoining properties to avoid any safety hazard. There is an adequate fall zone between the stacks and the adjoining properties should the structures fail. The fall radii for each 275 foot stack is well within the confines of the Project site boundaries, as shown on Figure 2-7B. The stacks are identified as number 7 on this figure.

Section 195-14. Corner lots and through lots.

Wherever a side or rear yard is adjacent to a street, the front yard setback shall apply to such side or rear yard. Corner lots shall be deemed to have two front yards, one side yard, and one rear yard.

The setbacks for the Project comply with these requirements.

Section 195-17. Accessory structure and use standards.

Accessory structures to commercial or industrial uses shall require site plan and/or special use approval from the Town of Wawayanda Planning Board.

All buildings proposed are essential to the proposed use as an electric generating facility, and would therefore not be considered accessory structures. Appropriate fencing for the Facility will be determined during site plan review. The site plan conforms to all setback requirements. The site will be surrounded by an 8 foot high chain link fence with a return on the top for security purposes. The fence height is being reviewed by the Planning Board as part of the site plan approval process.

It should be noted that the transmission poles and conductors would be considered essential component of the Facility as they connect the electricity generated to the regional transmission grid. The transmission infrastructure is not an accessory structure under the applicable definition in the Zoning Law.

Note that an Accessory Use is defined as follows: ACCESSORY USES/STRUCTURES: All uses that are customarily incidental to and subordinate to a particular principal use or structure on the same lot; this includes but is not limited to garages, water towers, barns, silos, produce storage, packing warehouses, storage buildings, maintenance, storage, and repair of machinery, outdoor displays of merchandise, satellite stations/antennas, seasonal roadside stands, signs, and swimming pools. Accessory uses /Structures must be permitted within the zoning district in which it is located.

Article IV. General Supplementary Regulations.

Section 195-19. Parking, loading, access and traffic standards.

Subsection A. Off-street parking, loading and unloading facilities shall be provided as necessary in connection with every use. Parking needs with respect to non-residential uses shall be determined in conjunction with site plan review. Adequate access to non-residential off-street parking must be

provided. The Planning Board may require a traffic impact study involving an activity likely to generate more than 500 trip-ends per days (for industrial uses, trip-ends are estimated at 3.3 per employee). The Planning Board may require sidewalks as an element of a site development plan.

Adequate parking and access at the Facility will be provided to meet these requirements. A traffic study has been completed, which is discussed in detail in Section 8 of the DEIS, and included as an appendix. The site plan incorporates the parking necessary for all Facility employees as well as anticipated visitors, such as vendors, service providers, regulators, etc. The parking shown on the plan has been developed according to CPV's experience in owning and operating similar plants.

Unloading areas for the oil and ammonia storage facilities are shown on the site plan. These areas contain dedicated containment structures and re-capture equipment to contain and pump back any spilled fluids should an incident occur during off-loading. Given that the Facility is fueled by a natural gas pipeline, unloading areas are not necessary immediately adjacent to the main buildings. Wear parts and maintenance items are typically warehoused on site. Deliveries are infrequent and materials are off-loaded directly into the building.

Section 195-20. Floodplain development standards.

This section creates a floodplain development overlay zoning district congruent with special flood hazard areas on flood hazard boundary maps for the Town of Wawayanda, as issued by the Federal Insurance Administration or its successor. No development shall be permitted in this zone that does not comply with Chapter 92.

No portion of the Project is in the floodplain development overlay zone.

Section 195-23. General commercial and industrial standards.

Subsection A. Where a commercial or manufacturing use is contiguous to an existing residential use in any district (including those situated on the opposite side of a highway), the planning board may require that minimum front, side, and rear yards be increased by up to 50%. The board may also require separating or shielding residences with buffers or landscaping.

Setbacks required by the planning board will be complied with.

Subsection B. All activities involving the manufacturing, production, storage, transfer or disposal of inflammable and explosive materials shall be provided with adequate safety devices against the hazard of fire and explosion.

Adequate fire safety devices will be installed in accordance with the appropriate codes and documentation of such provided to the Planning Board during site plan review. This effort will be coordinated with the Fire District as the Project proceeds through the review process.

Subsection C. No activities shall be permitted which emit dangerous radioactivity or electrical disturbance adversely affecting equipment other than that of the creator of such disturbance.

The Project will be in compliance with this provision. Sections 18.7 through 18.10 of the DEIS provide an analysis of electric and magnetic fields associated with the proposed electric transmission lines and project. The Project will be designed to comply with the 200 milligauss

(mG) and the 1.6 kilovolts per meter (kV/m) levels permitted at the edges of a transmission right-of-away under the New York Public Service Commission guidelines.

Good engineering design practices have been incorporated in this project, which will minimize electromagnetic interference (EMI), radio frequency interference (RFI), audible noise and similar phenomena.

Subsection D. Noise shall not exceed an intensity of 65 decibels as measured 100 feet from the boundaries of the lot where such use is situated.

The Project will be in compliance with this provision as demonstrated in Section 10.0 of the DEIS. Specifically, as discussed in Section 10.4.2 of the DEIS, and as shown in Figure 10-4, the Project noise levels are projected to be well below 65 decibels A-weighted (dBA) even within the Project site boundaries, and well below 65 dBA at the property boundaries.

Subsection E. No vibration shall be permitted on a regular or continuing basis which is detectable without instruments at the property line.

The Project will be in compliance with this provision. The proposed combustion turbines are highly balanced, and are designed to operate without vibration. The turbines will be equipped with vibration sensors, which would immediately shut down the units should any vibration occur. As such, no ground borne vibration is expected to occur at any locations.

Subsection F. Lighting. All lighting shall be designed so as to avoid unnecessary or unsafe spillover of light and glare onto operators of motor vehicles, pedestrians, and proximate land uses.

The Project will be in compliance with this provision.

A description of the lighting plan is provided in Section 2.4.3.2 (Lighting) of the DEIS, which states:

Normal plant lighting and emergency temporary lighting 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 to meet the standards of the Illuminating Engineering Society (IES) Lighting Handbook.

Roadway lighting will consist of 400 watt High-Pressure Sodium (HPS) fixtures mounted at 30 feet above grade. These fixtures will include full cut-off optics to reduce unwanted glare and fugitive light. The fixtures will be oriented such that the emitted light is directed inwards toward the plant and be controlled by light sensing switches.

Entry door and truck access doorway lighting are anticipated to consist of 70 watt HPS and 100W HPS wall lighting fixtures, respectively. These fixtures will also include full cut-off optics to reduce unwanted glare and fugitive light. The doorway fixtures will be located above the doors and directed downward. Photovoltaic cells will control these fixtures.

Platform lighting is anticipated to consist of 70 watt, 100 watt and/or 150 watt HPS heavy-duty, stanchion mounted, area lights. The term "platform lighting" includes the top of the air-cooled condenser and associated access stairs, continuous emissions monitoring system (CEMS) equipment access platforms and any other equipment-related platforms. Typically, the stairway

fixtures are provided with photovoltaic cell control and the actual platform area lighting is controlled from locally mounted switches. This allows for the reduction of nighttime fugitive light. The fixtures are typically mounted 8 feet above the platform elevation.

The lighting plan is included in the Site Plan drawings.

Subsection G. No emission of fly ash, dust, fumes, vapors, gases and other forms of air pollution shall be permitted on a regular or continuing basis which can cause any damage to health, animals, vegetation, or other forms of property, or which can cause any excessive soiling.

Section 9.0 (Air Quality) of the DEIS provides a detailed assessment of potential air impacts from the Project. Information provided in Section 9.0 demonstrates that the Project will comply with:

- Primary National Ambient Air Quality Standards (NAAQS) established by EPA for criteria pollutants;
- Secondary NAAQS established by EPA for criteria pollutants;
- Annual Guideline Concentrations (AGC) and Short-term Guideline Concentrations (SGC) established by NYSDEC for non-criteria pollutants.

Primary NAAQS have been established at levels to protect human health for the most sensitive populations, such as asthmatics, the elderly, children and infants, while secondary NAAQS have been established to protect against adverse effects on animals, plants, and property. The secondary NAAQS for particulate matter with aerodynamic diameter of 10 microns or less (PM_{10}) has been set to protect against adverse impacts, including those associated with soiling and material damage. NYSDEC guideline concentrations have been established at levels to protect the general public from adverse exposure to toxic air contaminants.

A detailed assessment of Air Quality impacts is provided in Section 9.0, Air Quality, of the DEIS. The assessment demonstrates that Project impacts will be below levels that have been established by EPA and NYSDEC to protect human health and welfare. Therefore, the Project will not cause damage to health, animals, vegetation, or other forms of property.

Subsection H. All activities involving the possible contamination of surface or groundwater shall be provided with adequate safety devices to prevent such contamination.

The Project will be in compliance with this provision.

Section 12.5 (Stormwater Pollution Prevention) of the DEIS provides an overview of the techniques that will be used to minimize the potential for pollutants in stormwater runoff from the site during Facility operation. It addresses chemical storage areas, product delivery, plant maintenance, waste handling activities, vehicle maintenance, and Stormwater Pollution Prevention Plan (SWPPP) monitoring requirements. The complete Draft Operational SWPPP is contained in Appendix 12-A of the DEIS. Section 12.7 (Spill Prevention and Control Plan) summarizes the spill prevention and control measures that will be implemented for the Project.

Subsection J. The visual impacts of tanks, cupolas, vents, etc., and outdoor storage shall be considered during the site plan/special use review process. The Planning Board shall assure that adverse visual impacts are adequately mitigated.

The visual impacts of Project elements and proposed mitigation measures are discussed in Section 5.0 (Visual Resources and Aesthetics) of the DEIS and the additional visual impact analysis contained in this FEIS. An assessment of potential visual impacts has been conducted in accordance with NYSDEC Program Policy DEP-00-2.

There will be views of the Facility from locations nearby along Route 6, I-84, Wawayanda at Horizons to the east and some residences along Kirbytown Road to the north and Bates Gates Road to the south. It should be noted that, although the coloring and landscaping will help to soften views of the Facility to the extent possible from the nearfield location, the view of the Facility will not be fully blocked from all locations due to the scale of the Facility.

The Project has implemented a number of mitigation techniques to minimize off-site visual impacts. The techniques are consistent with the visual impact avoidance and mitigation tools recommended for analysis 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; preserving the natural vegetation to the extent practicable, and lighting options.

Section 195-24. Landscaping, screening, ridge development and buffer regulations.

To enhance the appearance and natural beauty of the town and protect property values, this section provides general landscaping requirements, as well as requirements for landscaped front and parking areas. The Planning Board may require a landscape plan be prepared as part of any site plan/special use or site plan application.

The landscaping provision in this section will be complied with. A landscaping plan is included with the Site Plan set.

Section 195-25. Water supply protection.

To assist in the preservation of public health, general welfare, and safety of the residents of the Town of Wawayanda and to facilitate the adequate provision of water through the elimination or prevention of groundwater contamination in the vicinity of wells that supply public water, two zoning overlay districts are created by this section (Overlay Zone W-1 and Overlay Zone W-2).

Subsection B. Applicants proposing a use in either overlay zone that requires site plan/special use approval shall include:

 Map(s), plan(s), and a narrative report completed by an engineer licensed to practice in the State of New York which details the location of the premises and all features of the system necessary for the satisfactory conveyance, storage, distribution, use and disposal of storm water, process wastes, wastewater, petroleum, hazardous substances and wastes, solid waste, and incidental wastes.

- A description of the means of water supply. For uses involving withdrawal of groundwater, an estimate of the total daily withdrawal rate.
- A complete list, including an estimate of the volume in pounds dry weight and liquid gallons, of all petroleum, chemicals, pesticides, fuels and other hazardous substances/wastes to be used, generated, and stored on the premises.
- A description of proposed measures as required herein to protect all storage containers or facilities associated with such materials, from vandalism, accidental damage, corrosion and leakage.
- A description of the procedures for containing and cleaning up a spill of hazardous substances/waste and notifying the Town of Wawayanda and other appropriate local and state officials of a spill, leak, or other discharge.
- A description of proposed storage facilities for hazardous wastes and provisions for the disposal of these wastes by licensed waste haulers.

The Project site is located within a Watershed Protection Overlay Zone (W-2 Overlay Zone). Applicants proposing developments within these overlay zones are required to obtain Site Plan/Special Use permit approvals. These additional items will be provided in the application to the Planning Board. Information addressing the listed items was included in the DEIS.

Section 12.2 (Water Supply) of the DEIS provides a description of the Project's water requirements and the proposed water supply sources.

To meet the Project process water requirements, CPV is actively pursuing the use of the City of Middletown's treated discharge water, which is of a suitable quality whereby the City can currently discharge to the Wallkill River. As a prudent course of action, CPV has identified alternatives to use of City of Middletown grey water such that, should this option become not viable, the Project can still proceed. CPV is pursuing the primary option of purchasing treated discharge water from the City of Middletown and discharging process water back to the City. The City of Middletown has engaged a consultant to assist the City in determining the technical feasibility of supplying grey water to, and accepting process discharge water from the Project. The results of the analysis have demonstrated that the City is capable of supplying grey water and accepting the processed discharge water back from the Project.

Section 12.5 (Stormwater Pollution Prevention) of the DEIS provides an overview of the techniques that will be used to minimize the potential for pollutants in stormwater runoff from the site during Facility operation. This section addresses chemical storage areas, product delivery, plant maintenance, waste handling activities, vehicle maintenance, and SWPPP monitoring requirements. A Draft Operational SWPPP is contained in Appendix 12-A of the DEIS.

Tables 12-7 and 12-8 of the DEIS list oil and chemicals to be stored at the Facility, including quantities and type of container and secondary containment measures.

Subsection C. Water supply protection overlay zones. There are hereby established within the Town of Wawayanda, two water supply protection overlay zones. These zones are delineated on a map entitled Official Zoning Map of the Town of Wawayanda 12. These zones are described as follows:

- Water Supply Protection Overlay Zone (W-1 Overlay Zone). This zone generally consists of the consolidated or unconsolidated groundwater aquifer dedicated to municipal water supply and the immediate, contiguous areas which drain directly into the aquifer area.
- Watershed Protection Overlay Zone (W-2 Overlay Zone). This zone generally consists of the remaining land that contributes surface water runoff to the aquifer and the W-1 Overlay Zone.

The Project site is located within the Watershed Protection Overlay Zone (W-2 Overlay Zone). All additional requirements of this zone will be complied with.

Subsection E. Prohibited uses. The following uses are prohibited in the W-2 Overlay Zone:

• Disposal of snow containing deicing salts/chemicals removed from streets, roads, and parking areas to the area within 100 feet of streams and watercourses.

Figure 2-7A shows the designated snow storage areas. The plan notes that use of deicing chemicals on site is prohibited.

- Disposal of any solid waste, petroleum, radioactive material, hazardous substance, hazardous waste, or nonsewage wastewater into or onto land or a surface water body. Uses which commonly dispose of solid waste, petroleum, hazardous substances, hazardous waste, or non sewage wastewater into or onto land or a surface water body include but are not limited to: appliance/small engine repair shops; auto repair and body shops; boat service, repair, and washing establishments; chemical/biological laboratories; chemical processing/manufacturing cleaning services (dry cleaning, laundromat, commercial laundry); electric/electronic/communications equipment manufacturers: furniture manufacturers/strippers/painters; jewelry and metal platers; machine shops; metal manufacturers/fabricators/finishers; petroleum product refiners and manufacturers; photo processors and printers; and wood preserving/treating establishments.
- Surface land application of septage, sludge, or human excreta.
- Disposal of any solid waste, petroleum, radioactive material, hazardous substance, hazardous waste, or nonsewage wastewater into or onto land or a surface water body (Normal maintenance of stormwater management facilities is exempt).
- Outdoor uncovered stockpiling or bulk storage of coal, deicing chloride compounds (unless bagged), or artificial fertilizers.

No component of the proposed Project use is prohibited in the W-2 Overlay Zone.

Subsection G. Stormwater runoff. Proposed uses within either the W-1 Overlay Zones or the W-2 Overlay Zones shall meet the following standards for stormwater runoff:

 There shall be no exceeding of pre-development peak flow rate for the one-hundred-yearreturn-frequency storm. The pre-development peak flow rate for the one-hundred year-return-frequency storm will not be exceeded by the Project.

• The off-site impacts of erosion and sedimentation from the proposed use shall not be any greater during and following land disturbance activities under predevelopment conditions.

Off-site impacts of erosion and sedimentation from the Project will not be greater than predevelopment conditions.

• All stormwater runoff from new impervious surface areas shall be discharged using infiltration basins, pits, trenches or impoundments in accordance with the design criteria for these storm water management techniques as described in Chapter 6 of the NYSDEC manual "Reducing the Impacts of Stormwater Runoff from New Development," as amended or superseded. For commercial/industrial parking lots which produce significant loads of grit and oil, oil/grit separators (water quality inlets) are required to remove sediment and hydrocarbons which would clog soils and lead to failure of the infiltration structure.

Appropriate infiltration basins and other stormwater control mechanisms will be constructed as described in the current NYSDEC manual.

• The applicant shall prepare or have prepared a stormwater management and erosion control plan using the outline presented in Chapter 4 of the NYSDEC manual "Reducing the Impacts of Stormwater Runoff from New Development," as amended or superseded.

A stormwater management and erosion control plan will be provided in accordance with the current NYSDEC manual as part of the site plan.

• Dry wells, infiltration trenches, and infiltration basins shall be used to dispose of stormwater only where other methods may not be feasible, as determined by the Planning Board, due to physical constraints of the site. No such infiltration systems for disposal of stormwater shall be located within 1,000 feet of a public water supply well.

The Project does not intend to utilize these disposal methods, unless other means of disposal are not feasible, as determined by the Planning Board.

 Surface infiltration trenches must have grass buffers and dry wells and subsurface infiltration trenches must have oil, grease and sediment traps (water quality inlets) to capture excess loads of sediment, grease, oils, and settleable solids and other objectionable materials including floatable organic materials before stormwater is allowed to enter the infiltration system.

The Project does not intend to utilize these disposal methods.

- Dry wells shall be equipped with an accessible cap and underground infiltration trenches shall be equipped with observation well(s). All caps to dry wells and observation wells shall be locked or constructed to prevent vandalism.
- There must be a vertical separation distance of at least four feet between the bottom of the infiltration system and the season high-water table or bedrock. The required separation

distance must be verified by test pits/soil borings under the direction of a professional engineer licensed to practice in the State of New York.

Section 195-26. Agricultural Buffer.

Wherever agricultural uses and other new uses unrelated to agriculture operations abut, buffers shall be required to reduce the exposure of the nonagricultural uses to odors, noise and other potential Nuisances related to the agricultural operation.

Given the nature of the Project, a buffer is unnecessary.

Section 195-29. Erosion and sedimentation control.

Any land use approval shall comply with the Town Code regarding the requirements of stormwater runoff and erosion and sediment control.

The Project will comply with this requirement. SWPPPs are included in Appendix 12-A of the DEIS, one for construction and one for operation.

Section 195-36. Signs.

All signs not specifically permitted by this chapter are prohibited.

The Project will comply with this requirement.

Article VII. Special Use and Site Plan Review Procedures.

Section 195-68. Application and site plan required.

The Planning Board shall be under no obligation to schedule a public hearing or take any action with respect to an application until formal application has been made on forms provided by the Board and a detailed site plan providing the following information has been submitted:

- The location of all existing watercourses, wooded areas, rights-of-way, roads, structures or any
 other significant man-made or natural feature, if such feature has an effect upon the use of said
 property.
- The location, use and floor or ground area of each proposed building, structure or any other land use, including sewage disposal and water supply systems.
- The location of all significant landscaping and ground cover features, both existing and proposed, including detailed planting plans and a visual depiction or rendering of the final appearance of the property after all landscaping and other physical improvements are completed.
- The location, dimensions and capacity of any proposed roads, off-street parking areas or loading berths, including typical cross-sections for all paving or regrading involved.
- The location and treatment of proposed entrances and exits to public rights-of-way, including traffic signals, channelizations, acceleration and deceleration lanes, widenings or any other measure having an impact on traffic safety conditions.

- The location and identification of proposed open spaces, parks or other recreation areas.
- The location and design of buffer areas and screening devices to be maintained.
- The location of trails, walkways and all other areas proposed to be devoted to pedestrian use.
- The location of public and private utilities, including maintenance facilities.
- The specific locations of all signs existing and proposed, including a visual depiction of the latter.
- Preliminary architectural plans for the proposed buildings or structures, indicating typical floor plans, elevations, height and general design or architectural styling.
- A completed SEQRA environmental assessment.
- Any other information required by the Planning Board which is clearly necessary to ascertain compliance with the provisions of this chapter and limited to such information.
- Stormwater pollution prevention plan: A stormwater pollution prevention plan consistent with the requirements of Town Code. The SWPPP shall meet the performance and design criteria and standards set forth in the Town Code. The site plan shall not be approved unless it is determined to be consistent with the provisions of the Town Code.

Each of these items will be provided to the Planning Board with CPV Valley's site plan application.

Section 195-76. Special use review criteria.

The Planning Board, in reviewing the site plan, shall consider its conformity to the Town of Wawayanda Comprehensive Plan and the various other plans, laws and ordinances of the Town. Conservation features, aesthetics, landscaping and impact on surrounding development as well as on the entire Town shall also be part of the Planning Board review. The Board, in acting upon the site plan, shall also be approving, approving with modifications, or disapproving the special use permit application connected therewith. Traffic flow, circulation and parking shall be reviewed to ensure the safety of the public and of the users of the facility and to ensure that there is no unreasonable interference with traffic on surrounding streets. The Board shall further consider the following:

- Building design and location
- Large commercial buildings
- Lighting and signage
- Parking and accessory buildings
- Drainage systems
- Driveway and road construction
- Construction on slopes
- Tree borders
- Development at intersections
- Streets and sidewalks
- Setbacks
- Adjacent properties
- Conditioned approval

- Community impacts
- Hamlet areas

These are the special use review criteria that will be considered by the Planning Board in reviewing the site plan.

3.7.3 Summary of Impacts and Mitigation (Section 3.5.2.3 of DEIS)

The proposed CPV Valley Energy Center, located in a Mixed Commercial 1 (MC1) zoning district, would serve a vital public need by improving system reliability and providing additional electric power to the lower Hudson Valley communities. The proposed Facility would comply with the substantive requirements of the Town of Wawayanda Zoning Code, with the exception of exceeding the maximum height requirement, due to engineering design and air quality control considerations. No mitigation is necessary as a result of compliance with municipal codes.

4.0 RESPONSE TO COMMENTS ON THE DEIS

4.1 SUMMARY OF RESPONSE TO COMMENTS ON DEIS

This section provides a summary of the responses to the primary issues that were raised in the comments received on the DEIS for the CPV Valley Energy Center. Responses to individual comments received on the DEIS are presented in Section 4.2 of the FEIS, and the actual comments are reproduced in Appendix 1A of the FEIS.

4.1.1 Project Need

A number of review comments pertained to the need for a new generating facility in Orange County. Within New York State, the NYISO plays a lead role in determining the adequacy of the State's electrical supply. The NYISO is evaluating a proposal to create a new stand alone capacity zone for the Lower Hudson Valley. In addition, the electricity provided by the Project will increase overall system reliability and improve the competitive power market in New York.

4.1.2 Natural Gas Supply

Inquiries were made relative to the adequacy of the supply of natural gas required by the Project and the plan to deliver the gas to the Project. According to information available from the U.S. Department of Energy, proven resources of natural gas in the United States have continued to increase in recent years. Between 2006 and 2008 proven reserves of natural gas in the United States increased by approximately 16%. Advancements in production technology have opened access to the significant quantities of gas in shale formations. On August 24, 2009, CPV Valley met with the PSC to provide an update on the Project's status including plans for procuring the supply of natural gas. The PSC confirmed the approval process for the two alternatives under consideration (Millennium Pipeline and Orange and Rockland Utilities).

As noted in Section 2.6, CPV Valley has reached agreement with Millennium Pipeline regarding the construction of the natural gas lateral and available transportation capacity on the pipeline.

4.1.3 Project Electric Transmission Lines

Comments were received on the DEIS requesting additional details on the alignment and potential visibility of the Project's proposed above ground electric transmission lines. As discussed in Section 2.3 of the FEIS, CPV Valley is pursuing an underground option for the electric transmission line within the Project site. The on-site underground electrical transmission line would follow the same general route as the originally proposed overhead route. The center line has been moved slightly from that presented in the DEIS to avoid directly impacting a vernal pool. For the underground option, the right-of-way width would be 20 feet compared to the above ground configuration of 130 feet. For the initially proposed above ground configuration within the site boundary, the electric line would run from the substation to a riser pole structure near the intersection with Route 17M where it would transition to an underground configuration. The originally proposed aboveground portion of the line would consist of five pole structures ranging in height from 110 to 130 feet. As referenced in Section 3.5, a technical memorandum that analyzes the visual impact of the aboveground electric transmission line and presents additional photosimulations is included in Appendix 4 of this FEIS.

4.1.4 Land Use and Community Character

The issue of the compatibility of the proposed Facility with contiguous land use development was raised during the DEIS review comment process. It is recognized that the energy Facility changes the site setting from one of forested, open space, and agricultural fields to a developed industrial setting. The fact that the developed portion of the site and the transmission line right-of-way represent use of approximately 30 acres of the total 122 acre site area helps to limit the impact to the overall site area land use setting. Preservation of undeveloped areas of the site and selective landscaping will further reduce the scale of land use impacts. The Project is compatible with the Town of Wawayanda's Comprehensive Plan and land use zoning. The Comprehensive Plan targets the area of the Project site for mixed commercial use. The site was recently re-zoned as mixed commercial (MC). The stated purpose of the MC district is "to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses, and manufacturing." The schedule of Zoning District Regulations for the MC District lists "Essential Services/Utilities" and "Industrial Uses" as permissible with Site Plan Approval and a Special Use Permit.

Additionally, the Project would not change the community character of the area. The proposed Project is consistent with the character of existing developments along the Route 6 corridor including: Pannattoni, NYSDOT, Frontier Communications, Tetz's gravel pit/concrete plant, Elvree Thermo-King, and other commercial/industrial uses.

4.1.5 Cultural Resources

As recommended by the OPRHP, additional field shovel testing was conducted on the Project site. No significant archaeological resources were identified. The OPRHP has determined that the Project will have No Adverse Impact on resources eligible for inclusion in the State or National Register of Historic Places.

4.1.6 Visual

Review comments were received on the DEIS that addressed potential visual impacts of the aboveground electric transmission lines. Some review comments were also related to the overall visibility of the Facility itself from residences near the Project site, and the visibility of the Facility while driving along I-84. In response to the comments, additional photosimulations were prepared from a number of vantage points to determine the relative visibility of the Facility and above ground electric transmission line. Locations for which photosimulations were prepared include I-84, Horizons at Wawayanda, Balchem Corporation, Bates Gates Road, and Kirbytown Road. Section 3.5 provides a summary of the analysis, and Appendix 4 to the FEIS includes a technical memorandum presenting the results and photosimulations. The additional photographic simulations prepared for the CPV Valley Energy Project provide insight into the extent and nature of the potential visual impacts that would have been associated with the transmission pole structures and electrical wires comprising the overhead segment of the transmission interconnect to the NYPA Marcy South transmission lines. For the near-field viewpoint locations represented by Balchem Corporation, the I-84 westbound entrance ramp, and the Horizons at Wawayanda complex, a number of the pole structures would have represented new vertical-oriented visual elements in the viewshed that would have visual impacts on these viewpoints. The existing quality of the views on which the poles would have had the largest impacts was not high, and the view would have been fleetingly experienced, thereby mitigating the impacts.

For near-field viewshed receptor locations, the neutral color (light gray) and relatively small diameter (2 to 3 inches) of the conductor wires would have reduced their prominence.

The photosimulations for the mid-field receptor locations represented by Kirbytown Road, Bates Gates Road, and I-84 eastbound approaching the Facility site indicate that the pole structures would have been only minimally visible and did not add significantly to the visual impacts previously disclosed.

With the underground installation of the electric transmission lines, there would be no view of the aboveground lines and poles.

Regarding the visibility of the CPV Valley Energy Center, as stated in the DEIS, the Facility 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 it is in their field of vision.

The Route 6 and I-84 viewpoints illustrate how the scale and form of the CPV Valley Energy Center will redefine current open space/agricultural use views to one of an industrial setting. Nearfield viewpoints - generally those within approximately 3,000 feet of the Facility - such as the ones represented by Route 6, I-84, the Horizons at Wawayanda parking lot, the unobstructed single family backyard location on Kirbytown Road, and the Bates Gates Road viewpoint, clearly illustrate that portions of the building structures and exhaust stacks will be visible from those locations.

4.1.7 Community Resources

DEIS review comments were received addressing the adequacy of town services to meet the potential emergency response needs of the Facility. CPV Valley has met with the New Hampton Fire Company to review emergency planning and fire protection requirements for the Project. A copy of the Preliminary Emergency Response Plan for the Facility operations was provided to the Fire Company. CPV Valley also provided a copy of the Emergency Response Plan to the New York State Police, and no comments were generated on the Plan based on the initial reviews conducted by those emergency response providers. Ongoing interaction with the emergency response providers, including police, fire, and medical services, will occur throughout development, construction, and operation of the Project.

4.1.8 Socioeconomics

Socioeconomics-related review comments were received on the financial benefits of the Project to the Town of Wawayanda and the potential impacts on property values of residential development contiguous to the Project Site. The Project will represent a significant new source of revenue for the Town via the Payment in Lieu of Taxes (PILOT) Agreement which is currently being negotiated with the Orange County Industrial Development Agency (IDA). The PILOT will be negotiated for a 20 year period. CPV Valley proposes to start the payments during the Facility's construction period. In addition, CPV Valley intends to execute a Host Community Benefits agreement with the Town of Wawayanda. The studies reviewed during the preparation of the DEIS indicate that the Facility would have no measureable impact on housing values.

4.1.9 Traffic

DEIS review comments related to traffic impacts focused on whether any construction affecting I-84 would be required, the maintenance of the traffic flow on Route 6 and Route 17M during construction, and the routes to be used by trucks during the construction phase of the Project. In response to NYS Thruway Authority comments, CPV Valley confirmed that no construction affecting I-84 will be required. During Project construction, police officer control, and information signing will be used to manage traffic flow on Route 6 and Route 17M. Construction worker shifts that avoid affecting the

morning and afternoon peak hour commuter travel periods on site access roadways will be used. Construction truck routes will be designated that utilize I-84 and arterial highways such as Route 6 and Route 17M. Construction contractors will be required to utilize the designated truck routes.

4.1.10 Air Quality

The Planning Board's air quality consultant, ARC Engineering & Construction, provided comments pertaining to $PM_{2.5}$ secondary formation, emission offsets, and plume visibility. In addition, review comments were received on the use of aqueous ammonia, non criteria pollutant emissions, and general questions of the Facility's impact on area wide air quality. Appendix 3A of the FEIS presents a technical memorandum prepared in response to the air quality considerations raised by ARC. The analysis demonstrated that the sums of the direct $PM_{2.5}$ Project impacts, indirect $PM_{2.5}$ formation, and existing ambient $PM_{2.5}$ levels are below the $PM_{2.5}$ NAAQS on both a 24-hour and annual average basis.

As a major new source of NO_x and VOC emissions located in an ozone nonattainment area, CPV Valley will be required to obtain offsets for these two pollutants at a 1.15 to 1 ratio to ensure that there is an actual reduction of regional emissions of these two pollutants. The applicable regulatory requirements for obtaining the necessary NO_x and VOC emission offsets are contained in Title 6 of the New York Codes, Rules and Regulations (NYCRR) Part 231-5.5(e), and the NYSDEC "Policy DAR-10: NYSDEC Guidelines on Dispersion Modeling Procedures for Air Quality Impact Analysis" (DAR-10).

As a major new source of NO_x and VOC emissions located in an ozone nonattainment area, the CPV Valley Energy Center by regulation will need to obtain offsets for these two pollutants. Potential emissions of these pollutants must be offset in at least a 1.15 to 1 ratio, thus ensuring that there will be an actual reduction of regional emissions of these pollutants. Ozone is formed in the atmosphere as a result of photochemical reactions among NO_x and VOC precursor pollutants. Ozone is created over a time scale of many hours to days and generally forms tens to hundreds of miles downwind of the sources of its precursors. Due to the nature of its formation, ozone is a regional scale pollutant and is appropriately regulated on a regional basis.

The Project site is an area currently designated as attainment for NO_2 . The PSD permitting program requires that any increases in impacts remain below established limits, referred to as PSD increments. The maximum predicted annual average NO_2 impact of Project emissions of NO_x is $0.85 \, \mu g/m^3$. This is well below the corresponding PSD increment limit of $25 \, \mu g/m^3$. This maximum predicted increase is also below the corresponding SIL of $1 \, \mu g/m^3$ and is regarded as negligible or "de minimis" by EPA.

The source or sources of NO_x and VOC offsets for the Project have not yet been identified. Offsets used for permitting the Project will satisfy applicable NYSDEC requirements from 6 NYCRR Part 231, including those related to location.

Emission offsets of NO_x and VOC for sources located in an ozone nonattainment area in New York State must meet certain requirements related to location. If the emission offsets are obtained from within New York State, then the offsets must either come from the same ozone nonattainment area or from some other ozone nonattainment area with the same or a higher degree of nonattainment (provided that emissions from the other nonattainment area contribute to a violation of the ozone NAAQS in the nonattainment area in which the source needing offsets will be located). Emission offsets may also be obtained from another ozone nonattainment area with the same or higher degree of nonattainment in another state, provided that the emissions from the other nonattainment area contribute to a violation of the ozone NAAQS in the nonattainment area in which the source needing offsets will be located and provided that an interstate reciprocal trading agreement is in place.

CPV will identify the source of offsets prior to issuance of a draft air permit. It is a requirement of the air permit application process that offsets be identified prior to issuance of the draft air permit. CPV Valley will provide additional information to the Planning Board regarding the source of emission offsets for NO_x and VOC once the offsets have been procured contractually.

As stated in the DEIS, the Facility has demonstrated compliance with NAAQS for all criteria pollutants. In response to comments, CPV Valley provided a revised visible plume analysis that provided a more realistic estimate of visible plume frequency and dimensions. The maximum predicted impacts of emissions of non criteria pollutants will not exceed guideline concentrations defined by NYSDEC. The assessment conducted of an accidental ammonia release scenario indicates that the nearest public receptor is located well beyond the calculated endpoint distance of 103 meters where the ammonia concentration falls below the 150 parts per million (ppm) threshold concentration for ammonia used in determining the potential for adverse health effects.

4.1.11 Noise

DEIS review comments on noise addressed the potential for pure tone impacts from equipment operation, the potential noise impact on Pine Hill Cemetery, and the post-construction noise monitoring plan. The equipment components that have the potential to generate tonal noises are the Facility transformers. The noise propagation modeling conducted of the Facility's operation indicated that the main and steam turbine transformers will be minimal contributors to the Facility related noise. As such, sound associated with the transformers is projected to be unnoticeable at locations outside of the Project site. During the 24-month construction phase of the Project, certain equipment operations may be discernible at the Pine Hill Cemetery. The calculated construction noise levels were found to be well below existing daytime Equivalent Continuous Noise Level (L_{eq}) (equivalent continuous noise level) noise levels at the Cemetery. A protocol for noise testing during Facility operations is included in Appendix 8 of this FEIS.

4.1.12 Soils, Geology, Seismology

DEIS review comments were received on whether any contaminated soils or groundwater are present at the site. Environmental field testing and laboratory analysis conducted by CPV Valley indicated no presence of contaminated soils or groundwater. There is an overall net need of fill to construct the Project. As referenced in the traffic summary, truck routes will be designated for all material and equipment transport. It is anticipated that approximately 90% of the fill trucks will use I-84 to access the site. The remaining 10% will arrive via an alignment of I-84/Route 6.

4.1.13 Infrastructure

Infrastructure related review comments addressed the grey water supply to the Facility and the potential for site development to adversely affect the groundwater well supply of adjacent residential areas. Although CPV would prefer to discharge process wastewater to the headworks of the City of Middletown's sewage treatment plant, both that option and discharging to the tailworks are under consideration. In the scenario where CPV Valley's process wastewater discharge is sent to the headworks of the City of Middletown Sewage Treatment Plant, the City has reviewed both the volumes and water quality characteristics associated with CPV Valley's discharge and concluded that there is sufficient capacity to accept the discharge and remain in compliance with the Sewage Treatment Plant's effluent limitations. Discussions are underway with the City of Middletown relative to development of an agreement for supporting the required grey water quantities.

A SPDES Permit Application has been submitted to the NYSDEC for the discharge of the process wastewater to the outfall pipe of the Middletown Sewage Treatment Plant. The application is included in

Appendix 6A of the FEIS. The NYSDEC has reviewed the potential impacts associated with the discharge, and concluded that impacts are minimal. The NYSDEC has indicated that it will be able to issue a SPDES permit to allow CPV Valley to discharge directly to the outfall pipe. The impacts associated with this option were analyzed, and the results were provided in Section 12.3.4 of the DEIS. If the option of discharging to the headworks of the Middletown Sewage Treatment Plant is pursued, then the Project's stormwater discharge would be permitted under NYSDEC's Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, and an individual SPDES permit would not be required.

The chemicals and ultra-low sulfur distillate oil stored on site will be housed in secured containment areas with fuel pipelines outside the containment system utilizing double-walled containment piping. Leak detection product sensors and alarm systems will serve as back ups to the physical containment areas. The Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) for the Facility will help to protect groundwater supplies, including off-site groundwater wells, from chemical or oil leaks.

CPV is currently working with the City of Middletown and property owners in refining the location of the end portion of the Project's process water/wastewater line and connection to the City of Middletown Sewage Treatment Plant. The portion along Dolsontown Road and connection to the City of Middletown Sewage Treatment Plant is currently being refined pending discussions with the property owners. The alternative routing locations are discussed in Section 2.4 of the FEIS. The refinements in the water line routing would present no significant additional environmental impacts.

4.1.14 Wetlands and Water Resources

Review comments were received on the Project's potential impacts on wetland resources, stream bodies, and storm water runoff patterns. Appendix 2A of the FEIS presents the results of the additional field studies and analysis conducted in response to stream and wetland considerations. Prior to any site layout efforts, a detailed inventory of wetlands on the site was conducted. The precise delineations of the wetland areas were then submitted for confirmation to the ACOE and NYSDEC. These agencies conducted their own site field reviews and concurred with the wetland delineation. With this task complete, the engineering layout of the Facility was initiated with the express objective of avoiding wetland impacts to the extent possible.

Wetland impacts as a result of the main facility footprint remain the same as presented in the DEIS. As stated in the DEIS, construction of the Facility will result in the filling of approximately 0.246 acres.

The on-site underground electrical transmission option would consist of the transmission cables being placed underground. There may be up to three manhole access points approximately 20 feet long by 9 feet wide by 8.5 feet deep in dimension (total of 540 square feet).

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 feet of which are currently forested). Use of the 75 foot construction corridor would result in approximately 3.56 acres of temporary impacts and of this approximately 0.46 acres of permanent impacts to wetlands in the form of conversion of forested to non-forested vegetation. This is 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 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 trench would cross the unnamed tributary to Carpenter Creek, south of where it joins Carpenter Creek, requiring 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 trench area and the disturbed corridor will be re-graded, stabilized, and revegetated. The stream bed and banks will also require restoration to pre-existing grades, with bank stabilization measures and monitoring to prevent soil erosion. 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 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. The wetlands will be replaced on site on a >2:1 areas basis, totaling 0.80 acres. Conversion of forested wetlands to non-forested 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 Discharge Permit for Stormwater will contain conditions that will further protect wetland resources. The SPDES permit will include provision of a Stormwater Pollution Prevention Plan. The additional field studies for the site included study of the resource value of the existing vernal pools. Construction of the Facility will not have direct impacts on the vernal pools, which were found to have low overall biological quality.

4.1.15 Ecology

In response to ecological comments received on the DEIS, supplemental studies were conducted for plant species of conservation concern, summer roosting habitat for the Indiana bat, and potential turtle habitat complexes. Appendix 2A of the FEIS presents the results of the field studies conducted. As summarized in Section 3.2, Ecology, no significant impacts on ecological resources have been identified for either Facility construction or operation.

4.1.16 Environmental Justice

A comment letter was received from the Middletown Chapter of the National Association for the Advancement of Colored People (NAACP) on November 17, 2009, voicing concerns regarding air quality, greenhouse gas emissions, hazardous chemical storage, and the impact on the environmental safety of all Americans and particularly African Americans currently living in direct proximity of the proposed Project. The David Moore Heights and its surrounding residential complexes in Middletown were noted as being a low income and minority community of particular concern. Section 7.5 of the DEIS provided a thorough analysis of Project-related impacts to the areas identified as minority and low income (Environmental Justice areas). The analysis was completed in accordance with NYSDEC Environmental Justice policies and guidance.

The analysis in the DEIS demonstrated that the Project's potential air emission concentrations do not cause violations of the NAAQS within the indentified environmental justice areas, which include the David Moore Heights and surrounding residential housing complexes. Furthermore, the maximum

modeled air quality impact locations do not fall within the potential environmental justice areas and, thus, do not create disproportionate impacts in such areas.

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 environmental justice areas. 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 2-mile Project study area and is not concentrated within the environmental justice areas.

Specific responses to the National Association for the Advancement of Colored People (NAACP) comment letter are provided in Section 4.2 of the FEIS (Response to Comments on Section 7.0 – Socioeconomics and Environmental Justice).

4.1.17 Decommissioning

As described in Section 7.4.9 of the DEIS, the typical operating life span for a new electric generating facility ranges from 30 to 40 years. With respect to funding for decommissioning, it is expected that the aboveground portion of the Facility's components would be offered for sale, for salvage or at least scrap value in the event of decommissioning. Even if there were no market for purchasing the Project's components for salvage purposes, the scrap value of the equipment, buildings, and structures on the Project site would be anticipated to be more than sufficient to offset the complete cost of demolition of the Facility.

Once operational, the Project would be one of the cleanest, most efficient, and reliable baseload electric generation facilities in the region. Thus, one would expect older less efficient plants in the current fleet to be retired well before the CPV Valley Project.

4.2 RESPONSE TO COMMENTS ON THE DEIS

This section presents responses to comments received on the DEIS, including written comments and comments made during the Public Hearing. The comment letters received on the DEIS and the public hearing transcript are included in Appendices 1A and 1B of the FEIS. The comment letters and comments provided at the Public Hearing were thoroughly reviewed, and responses were prepared to address each substantive comment.

Each comment letter and public hearing speaker comment was given a unique identification code as summarized in Table 1-3. Individual issues or comments within each comment letter and public speaker comment were then denoted by appending a sequential number to the comment identification code. For example, the first three comments in the GREENPLAN comment memorandum (PB1) were denoted by PB1-1, PB1-2, and PB1-3. The comments were then compiled and organized according to the applicable section in the DEIS as follows:

- 1.0 Executive Summary
- 2.0 Project Description
- 3.0 Land Use and Zoning
- 4.0 Cultural Resources
- 5.0 Visual Resources and Aesthetics
- 6.0 Community Facilities
- 7.0 Socioeconomics and Environmental Justice

- 8.0 Traffic and Transportation
- 9.0 Air Quality
- 10.0 Noise
- 11.0 Soil, Geology, and Seismology
- 12.0 Infrastructure
- 13.0 Water Resources
- 14.0 Ecology
- 15.0 Construction Impacts
- 16.0 Community Character
- 17.0 Cumulative Impacts
- 18.0 Other Environmental Impacts
- 19.0 Alternatives

The remainder of this section provides the responses to all the comments in a tabular format. The table indicates the DEIS section number for the subject of the comment, the comment number, the comment, and the response to the comment. The comments and corresponding responses are presented in order of the DEIS section topics, and then within each DEIS section topic are listed in sequential order by comment number. Appendix 1C includes an index listing of comments by commenter and the page number in which the response can be located within the FEIS. This will help each commenter locate the associated responses to the specific comments.

Several figures from the DEIS were revised in response to comments and are included in the figure section of the FEIS.

Response to Comments on Section 1.0 – Executive Summary				
DEIS Section	Comment Number	Comment/Response		
1.0 Executive Summary General	PB1-1	Our comments together with other Town consultants' comments, involved agency comments and comments from interested agencies and parties must be responded to in a Final Environmental Impact Statement (FEIS). We assume that the applicant will prepare draft responses to comments as well as preparing modifications to the DEIS.		
		The FEIS is to consist of the draft EIS, copies or a summary of substantive comments received, the lead agency's response to substantive comments and revisions to the draft EIS. Regardless of who prepares the FEIS, it is the lead agency's responsibility to ensure adequacy and accuracy of the document. It is crucial for the Planning Board to understand that this is your document more so even than the DEIS, and the language it contains must reflect your understanding of the proposed action. The lead agency has the ability to revise any responses to comments offered by the project sponsor. Moving forward the Findings Statement (the document which declares that all SEQRA requirements for making decisions on the action have been met) will rely upon information in this document along with the DEIS, to reach conclusions.		
		<u>Response:</u>		
		The FEIS includes a listing of the comments received on the DEIS and the associated response to each comment. The comments have been organized by section of the DEIS to facilitate review of the responses. Copies of the actual letters received and the Public Hearing transcript are provided in Appendix 1A and Appendix 1B of the FEIS. The FEIS incorporates the DEIS by reference.		
1.0 Executive Summary 1.1 Introduction	PB1-7	Page 1-1. The applicant needs to provide justification for the statement "Due to efficiency of natural gas combined cycle technology, the CPV Valley Energy Center is expected to help reduce dependency on the use of older and less efficient generators that currently serve the region, thus improving the region's environmental profile". Please define where the older and less efficient generators are located, describe how this region will be less dependent on them and describe the region's environmental profile pre and post construction of this facility.		
		Response:		
		The New York electricity market is managed by the New York State Independent System Operator (NYISO), which oversees the dispatch of generating plants to meet the state's instantaneous demand for electricity. In determining which facilities to turn on and off or up or down to meet New York's electricity needs, the NYISO selects the units that bid the lowest price first, and then accepts higher bids until it has secured sufficient energy to meet demand. Therefore, since more efficient facilities will burn less fuel to produce the same amount of		

Response to Comments on Section 1.0 – Executive Summary				
DEIS Section	Comment Number	Comment/Response		
		electricity, more efficient facilities will bid the lowest price, and the NYISO will utilize those facilities more often. These facilities tend to be natural gas fired combined cycle facilities. The nature of the regulated NYISO electricity market favors high efficiency combined cycle generation.		
		The CPV Valley Energy Center is located in NYISO Zone G, a zone currently dominated by older, less efficient technologies. Based on the most recent year of data available from NYISO on generation and generation capacity (2008), electric generating units whose primary fuel is coal or residual (No. 6) oil accounted for 59% of the nameplate generating capacity in Zone G until Lovett Unit 5 was retired, after which the remaining coal and residual oil firing units accounted for 56.4% of the remaining nameplate generating capacity in Zone G. These remaining electric generating units that primarily fire coal and residual oil are Danskammer Units 1 through 4, which have an associated total nameplate capacity of 532 MW, and Units 1 and 2 at Roseton, which has a total nameplate generating capacity of 1,242 MW. However, the collective actual generation from units that primarily fire coal or residual oil in 2008 in Zone G accounted for 86.1% of the actual generation in Zone G. Therefore, the actual generation in Zone G in 2008 was even more heavily weighted towards the older, less efficient, and higher emitting units than would be expected purely on the basis of nameplate capacity.		
		A commonly used metric of efficiency in electrical generation is the heat rate. Heat rate measures the efficiency in converting the useful energy in fuel to electricity and is calculated based on the ratio of heat input to generation. Heat rates are generally provided in units of British thermal units per kilowatt-hr (Btu/kWh). The lower the heat rate, the more efficient the plant.		
		Based on data submitted to the Energy Information Administration regarding net electrical generation and to the EPA regarding heat input (fuel consumption), annual average heat rates were calculated for Danskammer and Roseton for the last three years (2006, 2007, and 2008). For Danskammer, annual heat rates ranged from a minimum of 9,943 Btu/kWh to a maximum of 10,397 Btu/kWh, with an average of 10,172 Btu/kWh. For Roseton, annual heat rates ranged from a minimum of 10,493 Btu/kWh to a maximum of 11,121 Btu/kWh, with an average of 10,773 Btu/kWh. Data from NYISO show that typical average heat rates for New York State during this period were in the range of approximately 9,300 to 9,800 Btu/kWh, showing that Danskammer and Roseton have higher than average heat rates compared to the overall New York State electrical generating fleet and thus are less efficient than the average plant in New York.		
		The heat rate achieved by the Project will depend on details of its actual operation, including the mix of fuel use, the degree of duct firing, turbine load, and how the plant is dispatched. However, calculations using vendor data show that the proposed equipment would generally be expected to achieve heat rates in the range of 6,600 Btu/kWh to 7,000 Btu/kWh when operating at full capacity under normal expected conditions. These heat rates are much lower than those exhibited by Dankammer and Roseton, showing how much more efficient new, combined cycle projects can be compared to older generating units. Therefore, the costs associated with		

Response to Comments on Section 1.0 – Executive Summary		
DEIS Section	Comment Number	Comment/Response
		generation from a new, efficient plant would be correspondingly smaller than those from older, less efficient plants, and CPV Valley would have an incentive to bid its energy into the power market at rates lower than the older, existing plants would be able to bid. Even at reduced turbine loads at which higher heat rates would be expected, the Project heat rates would still be expected to be significantly lower than those exhibited by Danskammer and Roseton.
		Regional emissions from electric generating facilities are expected to decrease as a result of dispatch and operation of the Project due to the displacement of generation from the older, less efficient, and more polluting units. According to information cited in an April 21, 2009 news release from the NYISO and available in an associated briefing paper (New York State Power Plant Emissions: $1999 - 2008$), significant reductions in emissions from power plants in New York State have occurred. Over the last decade, power plant emissions in New York State have decreased by 77% for SO_2 , by 28% for carbon dioxide (CO_2), and by 61% for NO_x . These emissions decreases have occurred as more than 7,000 MW of new, more efficient and less polluting sources of electrical generation have come on line.
		Regional emissions of ozone precursor emissions (NO_x and VOC) will also decrease as a result of the Project due to the emission offsets (reductions in actual emissions) that are required for major sources of these pollutants in an ozone nonattainment area. The Project will purchase certified emission offsets of these pollutants that exceed the maximum potential Project emissions by 15%, thus ensuring that there will be an actual reduction in regional emissions.

	Response to Comments on Section 1.0 – Executive Summary			
DEIS Section	Comment Number	Comment/Response		
1.0 Executive Summary 1.3 Purpose and Need	PB1-8	New York State Energy Plan (2002). What is notably missing from the discussion on pages 1-4 to 1-5 is the State's goals related to energy conservation and increasing the share of renewable energy use. Specifically ¹ , "The Energy Plan adopts an energy efficiency goal of reducing primary energy use per unit of Gross State Product (GSP) 25% below the 1990 level by 2010" and "In addition to the energy efficiency goal, the Energy Plan adopts a renewable energy goal of increasing the share of renewable energy use 50%, by 2020, as a percentage of total primary energy use." While it is obvious the proposed action involves the generation of energy using non-renewable resources, the Planning Board may wish to consider how mitigation measures can assist in furthering some of these other goals of the State Energy Plan for which this action is not consistent.		
		Response:		
		The DEIS provided the excerpted sections and goals of the State's energy plan that the Project specifically achieved. While it may be ideal to have one action address all the elements of the state's "goals," only select various elements of the goals can be achieved by this Project. The Project addresses the electrical supply reliability goal pivotal to the State's energy plan. Since the DEIS was prepared, a new State Energy Plan was released.		
		The new Plan was designed to meet 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.		
		The energy plan further states "the production and use of in-state energy resources – renewable and natural gas		

¹ New York State Energy Plan. (2002). Pg. 1-34.

	Response to Comments on Section 1.0 – Executive Summary		
DEIS Section	Comment Number	Comment/Response	
		– can increase the reliability and security of our energy systems, reduce energy costs and contribute to meeting climate change, public health and environmental objectives."	
		The Project is a combined-cycle facility which is one of the most efficient methods of generating dispatchable electricity today. Further, the Project is designed to operate predominately on natural gas which is one of the cleanest forms of fossil fuel. These attributes allow the Project to produce energy and use energy (fuel) more efficiently, while reducing New York's greenhouse gas emissions. Also, since the Project is located within New York, it will constitute an instate energy supply. All of these Project attributes will serve to help New York achieve its goals as set forth in the State Energy Plan.	
1.0 Executive Summary 1.5 Discretionary Approvals	PB1-9	Interested Agencies. We had recommended, prior to the acceptance of the DEIS, that several additional communities be added to the list of interested agencies. These included Wallkill and Goshen. It appears from the public hearing that Goshen did receive a DEIS, but the FEIS should include all interested agencies in the list.	
		Response:	
		The communities of Wallkill and Goshen received copies of the DEIS; the FEIS includes the additional interested agencies that GREENPLAN had recommended prior to accepting the DEIS.	
1.0 Executive Summary 1.3 Purpose and Need	PB1-10	Page 1-11. The FEIS needs to clarify who will benefit from the construction of this facility. There are statements in this section indicating there is a need for 1050 MW in the <i>lower Hudson Valley</i> (define the specific geographic area), that the plant will generate enough power for 600,000 homes and the plant will provide additional electric power to Orange County.	
		<u>Response:</u>	
		The state of New York would benefit from this Facility on a number of levels. The Facility will improve electrical system reliability, reduce air emissions, create jobs, provide economic stimulus, and help to meet some of the goals identified in the New York State Energy Plan. The NYISO has identified the lower Hudson Valley as a region needing additional resources to address congestion issues on the system. Currently the NYISO is evaluating a proposal to create a new stand-alone capacity zone for the Lower Hudson Valley. That process at the NYISO would define the Lower Hudson Valley Capacity Zone and also define the boundaries of the lower Hudson Valley.	
		The Project represents an additional clean burning energy resource for New York's wholesale electric	

	Response to Comments on Section 1.0 – Executive Summary		
DEIS Section	Comment Number	Comment/Response	
		market. The wholesale electricity market began operating in 2000 and the competition inherent in the system has led to substantial reductions in wholesale electricity prices compared to what they would have been otherwise, based on an April 2009 press release issued by the NYISO. After adjusting for increases in fuel costs, NYISO stated that in 2008 alone, the effective annual reductions in electricity costs statewide due to the competitive markets amounted to over \$2.2 billion. This electricity can potentially benefit the community through increased system reliability and by its participation in New York's wholesale electric market. The ratepayers, including ratepayers in the community of Wawayanda, would realize these benefits. The NYISO also stated that emissions from electrical generating units in the State have decreased since the inception of the competitive market even as new clean burning natural gas facilities have been added.	
		The Project also meets many of the goals identified in the 2009 New York State Energy Plan. The plan calls for increased energy reliability, improving the State's economic competitiveness (through reduction in energy costs), reducing health and environmental risks associated with the production of energy, and improving the State's energy independence by developing in-state energy supply resources. The Project's combined-cycle technology, which reduces fuel consumption, along with the clean burning characteristics of natural gas and its location in the state, can help the State meet these objectives.	
1.0 Executive Summary 1.7.2 Cultural Resources	PB1-11	Section 1.7.2 indicates there are no significant impacts to archeological resources. However, the applicant is required to perform additional archeological field work according to a December 23, 2008 letter from the NYS Office of Parks, Recreation and Historic Preservation (OPRHP). Until this additional fieldwork has been conducted to the satisfaction of OPRHP, a conclusion related to impacts cannot be reached. The additional field work has been acknowledged by the applicant and this section of the DEIS needs to accurately reflect this situation. **Response:**	
		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 conclusions of the DEIS, this field work did not identify any significant archeological resources on the Project site or off site interconnections. As such, no impacts to archeological resources will result from the construction, operation, and maintenance of the Project. The results of the September 2009 field work are included in Appendix 7 of the FEIS, and 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 concurs with the conclusion, and has determined that the Project will have No Adverse Impact upon properties in or eligible for inclusion in the State or National Register of Historic Places as stated in their letter dated November 5, 2009 (see Appendix 7 of the FEIS).	

	Response to Comments on Section 1.0 – Executive Summary		
DEIS Section	Comment Number	Comment/Response	
1.0 Executive Summary 1.8 Conclusions	PB1-12	Section 1.8. Typically, this section identifies both the impact and the related mitigation measures. Table 1-2 should be revised to include the relevant impacts in each section noted.	
		<u>Response:</u>	
		Section 1.8 of the DEIS does identify the impacts and related mitigation measures for each DEIS topic. The impacts are described in text form. Table 1-2 of the DEIS summarizes the mitigation measures.	
1.0 Executive Summary 1.5 Discretionary Approvals	L-1-1	As indicated in Section 1.5 of the DEIS, the Department, pursuant to Environmental Conservation Law, has numerous jurisdictions over the proposed facility. The primary permits to be issued by the Department include air permits and a joint permit covering freshwater disturbances to onsite wetlands and streams. The Section 401 Water Quality Certificate (WQC) will be included as part of the Joint Permit.	
		Response:	
		The primary state permit applications that have been submitted to date to the New York State Department of Environmental Conservation for the CPV Valley Energy Center include applications for the following:	
		Air State Facility Permit	
		 State Pollutant Discharge Elimination System (SPDES) – Permit for stormwater and process water discharges 	
		Freshwater Wetlands Permit – Article 24 Wetlands Permit	
		Article 15 Stream Disturbance Permit	
		A Section 401 Water Quality Certificate (WQC)	
		A copy of the Air Permit Application is included in Appendix 9-A of the DEIS.	
		A copy of the Wetlands Permit Application (including the application for a WQC) is included in Appendix 2B of the FEIS, and a copy of the SPDES Application is included in Appendix 6 of the FEIS.	

	Response to Comments on Section 1.0 – Executive Summary		
DEIS Section	Comment Number	Comment/Response	
1.0 Executive Summary 1.5 Discretionary Approvals	L-1-2	The Stormwater SPDES Permits referenced in Section 1.5 are covered by general permits, not by individual permits. The project sponsor only needs to file a Notice of Intent to gain coverage. The project sponsor must adhere to all special conditions of the general permits, including the development and implementation of a Stormwater Pollution Prevention Plan. The Hazardous Substance Bulk Storage and Major Oil Storage Facility requirement referenced in this section are covered by registration.	
		Response:	
		CPV Valley will seek coverage under the New York State Department of Environmental Conservation's (NYSDEC's) General Permit for Stormwater Discharges from Construction Activity. Coverage under this permit will be requested through submittal of a Notice of Intent (NOI) to the NYSDEC. A project-specific SPDES Permit application has been submitted to NYSDEC for the discharge of process water to the City of Middletown Sewage Treatment Plant and for the discharge of stormwater from the Facility's on-site detention basin during operations.	
1.0 Executive Summary 1.5 Discretionary Approvals	L-1-3	The Department has numerous jurisdictions pursuant to current state air quality regulations. The Department will issue one Air State Facility (ASF) Permit that will cover the Department's jurisdiction pursuant to the following; Part 201; Part 231 (New Source Review); Part 237 (Acid Deposition Reduction NOx Budget Trading); Part 238 (Acid Deposition Reduction SO2 Budget Trading Program); Part 243 (CAIR NOx Ozone Season Trading Program); Part 244 (CAIR NOx Annual Trading Program); and Part 245 (CAIR 502 Trading Program). The ASF permit allows for the construction and operation of the facility. However, within one year of commencement of commercial operation the permittee must apply for a Title V Facility permit to operate. The Department will also issue a Title IV Acid Rain permit.	
		Response: Comment noted. The application for an Air State Facility Permit for the CPV Valley Energy Center has been reviewed by NYSDEC. NYSDEC indicated that the draft permit is nearly complete.	

	Response to Comments on Section 1.0 – Executive Summary		
DEIS Section	Comment Number	Comment/Response	
1.0 Executive Summary 1.5 Discretionary Approvals	L-1-4	Currently the U.S. Environmental Protection Agency (EPA) has the authority to issue approvals pursuant to Prevention of Significant Deterioration (PSD) regulations. Under a current agreement between the Department and EPA the conditions related to PSD will be included in the ASF permit.	
		Response:	
		On August 28, 2009, the Region 2 office of the U.S. EPA deemed the CPV Valley Energy Center's PSD application complete. The completeness determination was based on EPA's review of the compliance modeling analyses and BACT analysis submitted by CPV Valley in support of the PSD permit application. EPA has drafted the PSD permit for the Facility. However, the authority to issue PSD permits has been transferred to NYSDEC. Therefore, the overall PSD permit will be issued by NYSDEC with EPA's input.	
1.0 Executive Summary 1.5 Discretionary Approvals	L-1-5A	As proposed, the project will require the disturbance of a freshwater wetlands and/or its 100-foot adjacent area protected pursuant to 6 NYCRR Part 663 (Freshwater Wetlands). Further, the project will also require the disturbance of the bed and banks of a stream protected pursuant to 6 NYCRR Part 608 (Protection of Waters). The project will also impact a wetland protected by the U.S. Army Corps of Engineers (ACOE). As such, the Department in accordance with Section 401 of the Clean Water Act must issue a water quality certificate (WQC) indicating the project meets state water quality standards. In most cases the Department will issue a joint permit that covers all of the above jurisdictions. The Department is in receipt of the Project Sponsor's Joint Application (November 2008) for these permits.	
		Response: NYSDEC has confirmed the field delineation defining the extent of state regulated wetland areas on the 122 acre CPV Valley Energy Center site. NYSDEC is currently reviewing the applications for an Article 24 Freshwater Wetland Permit and an Article 15 Stream Disturbance Permit submitted for the CPV Valley Project.	

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1.0 Executive Summary 1.5 Discretionary Approvals	L-1-5B	Pursuant to 6 NYCRR Part 621 (Uniform Procedures), the Department will be required to issue a Notice of Complete Application for the individual permits required for the project. Part 621 also requires the Department to hold a public comment period for the project. The Department will only consider comments specific to the Department's jurisdiction over the project. At the time of the notice the Department will issue draft permits for the project sponsor and the public to review. It is also likely that the Department will hold a public hearing in the Town of Wawayanda to accept unsworn statements from public regarding the project. Currently, the Department has yet to determine when the complete notice will be published or when the public hearing will be held.	
		The Department has reviewed the DEIS for the CPV Valley project. As an involved agency for the environmental review of the project the Department will focus its comments on potential impacts related to the permit jurisdictions referenced above.	
		Response:	
		CPV Valley has maintained communication with both the NYSDEC Central and New Paltz offices to monitor the status of the state permits that the Project requires. CPV Valley has pursued a comprehensive public outreach program during the course of preparing the SEQRA Draft and Final Environmental Impact Statements and required NYSDEC permit applications. CPV Valley will support public outreach efforts pursued by NYSDEC as part of its 6 NYCRR Part 621 activity.	
1.0 Executive Summary 1.5 Discretionary Approvals	L-2-1	Pursuant to Public Service Law (PSL) §68, CPV will be required to obtain a Certificate of Public Convenience and Necessity (CPCN) from the PSC. The §68 review includes consideration of the capability of the developer to function as an electric corporation and to provide safe and reliable service. The §68 review can only proceed following receipt of an application by the developer, including proof of any required municipality's consent to use its municipal property. Consideration of a §68 petition will also require that DPS coordinate review with the Office of Parks, Recreation and Historic Preservation (OPRHP) pursuant to §14.09 of the Parks, Recreation and Historic Preservation Law, unless there is federal agency review that implements §106 of the National Historic Preservation Act.	
		DPS has received correspondence from OPRHP dated April 13, 2009, indicating that in the OPRHP's opinion the project will have no adverse impact on properties in or eligible for inclusion in the State and National Registers of Historic Places (see letter, Attachment A). Any measures to protect or restore the cemetery located at the site should be implemented in final project design and site plan details.	

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		A three-page information request (Attachment B) with this letter reflects the information to be provided to the PSC in a Petition for approval under Section 68 of the PSL. To the extent that this information relates to environmental issues or the site plan review to be undertaken by the Town of Wawayanda (e.g., outdoor lighting, access control fencing, landscape planting plans, etc.), the issues should be addressed in the Final Environmental Impact Statement (FEIS) or the Findings Statement to be prepared by the Town.	
		Response:	
		CPV Valley met with PSC staff members on August 24, 2009 to provide an update on the Project's status. At this meeting, the coordination of the Section 68 filing with environmental information and findings of the ongoing SEQRA review were discussed.	
		On November 14, 2010, CPV Valley filed a Petition with the New York Public Service Commission for approval of a lightened regulatory regime and financing in connection with a natural gas electric generating facility and was assigned case number 10-E-0501. On November 24, 2010 the New York Public Service Commission issued a notice under New York's Administrative Procedures Act, calling for public comments on CPV's Petition. The public comment period was open for forty-five (45) days and closed on January 10, 2011 without any comments.	
1.0 Executive Summary 1.1 Introduction (Fuel)	L-2-2	Page 1-1 of the Executive Summary (ES) indicates that the applicant intends to procure a natural gas supply from one of two potential sources. The first would utilize the existing Millennium Pipeline connected to the plant by a new seven mile long gas transmission line, which would require approval from the Federal Energy Regulatory Commission (FERC). The second would utilize natural gas supplied from Orange and Rockland Utilities, Inc. (O&R) through a new two to three mile natural gas transmission line, which would require approval from the PSC under PSL Article VII. According to Table 17-2 of the DEIS Cumulative Analysis, Potential Routing Options #1 and #3 appear to be the routes that should be given the most consideration. While the cumulative analysis section contains a desktop-type review of the two possible options of natural gas delivery, determination of the method should ideally be completed before the FEIS is issued. Otherwise, additional information on each method should be provided to complete the environmental analysis of the proposed project.	
		The same situation appears to exist with the water supply options for the proposed generation facility. The applicant's intention (ES page 1-6) is to use tertiary treated effluent from the City of Middletown Sewage Treatment Plant (STP) to be delivered to the proposed generation facility via an underground water line along NY Route 17-M and Route 6. In the event an agreement is not reached with the City for the use of treated effluent, consideration would be given to the	

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		use of water from a well on the generation facility property. In either scenario, process waste water requiring off-site disposal would be returned via another underground water line to the STP or to the STP outfall. Determination of the method of water supply should ideally be completed before the FEIS is issued. Otherwise, additional information on each method should be provided to complete the environmental analysis of the proposed project.	
		Response:	
		See Section 2.6 of the FEIS for a discussion of the natural gas supply. The pipeline for the natural gas supply will be provided by either Millennium Pipeline or Orange and Rockland. As discussed in Section 2.6 of this FEIS, CPV Valley has executed an agreement with Millennium Pipeline, and, therefore, intends to pursue that option. The permitting of the pipeline will be done through the FERC 7c process. The FERC 7(c) filing will fully evaluate the environmental impacts of the supply option.	
		Selection of the Orange and Rockland Utilities option would require submittal of an Article VII filing pursuant to NYS Public Service Commission regulations. The Article VII filing would include evaluation of the environmental impacts of the gas lateral from the Orange and Rockland Utilities local gas distribution service. Since either option will be evaluated under its own environmental impact review and approval process, it is not necessary to perform additional detailed analysis for this FEIS.	
		CPV Valley intends to procure grey water from the Middletown Sewage Treatment Plant as its process water supply source. See Section 2.5 of the FEIS. To this end, the Project funded a technical study for the City of Middletown to confirm the City's ability to supply the quantity and quality of water required. The Project and the City have exchanged legal agreements with regard to the supply of grey water and the discharge of the Project's process water effluent.	
1.0 Executive Summary 1.5 Discretionary Approvals	L-2-9	DPS Staff recommends that upon completion of the site review, the Town give its approval for construction commencement conditioned upon the applicant producing and the Town reviewing and approving the applicant's plans for traffic management, oversight of the site clearing, construction, site restoration and initial startup.	
		Response:	
		The Planning Board's site plan review process is addressing the referenced topical considerations. The Town of Wawayanda Planning Board is responsible for the review and approval of the site plan. CPV Valley will address the conditions to be included in any required Town approvals with the appropriate Town authority.	

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1.0 Executive Summary 1.5 Discretionary Approvals	L-2-10	The Findings Statement should be specific to address the issues identified in the DEIS and subsequent FEIS and in this correspondence, to enable the PSC to adopt that environmental review and make requisite findings regarding the public interest, public convenience and necessity in its consideration of the developer's forthcoming request pursuant to PSL §68.	
		Response:	
		The SEQRA Findings Statement will be detailed in its content given the nature of the CPV Valley Energy Center and associated environmental impacts. This will facilitate incorporation into the PSC's Section 68 determinations.	
1.0 Executive Summary 1.5 Discretionary	L-3-1	The New York State Department of Transportation has a specific fee schedule and procedures for the processing of Highway Work Permits for Major Developments.	
Approvals		Due to the size of the subject project the following information/documentation must be submitted prior to the Department undertaking any additional or new review:	
		1. The attached HIGHWAY WORK PERMIT APPLICATION FOR NON-UTILITY WORK (PERM 33) must be signed by the applicant and the name/address provided in the upper left hand corner. The remaining information will be completed at a later date.	
		2. The attached PERMIT AGREEMENT FOR HIGHWAY WORK PERMITS DESIGN REVIEW (PERM 51) must be completed by the applicant. The Application No. and PIN will be filled in by the Regional Traffic Engineering & Safety Group. The applicant should be aware that the \$2,000 fee referenced thereon shall be the minimum cost for the Department's review time and is non-refundable. Hereafter, all Department employees assigned the responsibility of reviewing any documents, plans, maps, etc. which are directly related to the subject proposal, shall charge their review time to this project. The applicant will then be billed periodically by the Department for the actual cost of our review and processing of the respective project. Such billings which exceed the minimum \$2,000 initial fee, must be paid immediately upon receipt or the Highway Work Permit shall not be issued, or shall be revoked.	
		3. A check for \$2,000 made out to the New York State Department of Transportation.	

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		4. 7 sets of plans, 1 copy of the SWPPP/drainage study on disc, 1 copy of Synchro analysis of affected intersections on disc, 1 copy of the Traffic Impact Study (TIS) on disc.	
		A Priority Investigation Location (PIL) has been identified on Rt. 6 between reference marker 6 8301 2152 and 6 8301 2154. A Highway Safety Investigation (HSI) study and proposed mitigation is required at this location. Please contact Michael Sassi (R8-Safety Program) for guidance.	
		Response:	
		Three meetings have been held with the New York State Department of Transportation (NYSDOT) Poughkeepsie District to discuss access to the Project site and use of available state rights-of-way along Route 17M for grey water supply and discharge lines.	
		A permit application which includes the identified information along with payment for associated fees will be submitted to the NYSDOT at the appropriate time. Conditions established by NYSDOT for approval will be incorporated in the final site plans for the Project, and any approvals issued by the Planning Board.	
1.0 Executive Summary 1.5 Discretionary Approvals	L-4-1	The Thruway Authority has reviewed the Draft Environmental Impact Statement for the subject project, and offers one comment. Should the chosen alternative results in any work on the I-84 Right of Way, a NYS Department of Transportation Work Permit may be required.	
		Response:	
		No work within the I-84 right-of-way is anticipated. Therefore, a work permit with the NYSDOT should not be needed.	
1.0 Executive Summary General	L-5-1	The Department has received the Draft Environment Impact Statement (DEIS) for the above referenced site plan. While we were often impressed with the level of detail and specificity included within the materials submitted, we feel that there are additional questions to be answered and additional topics to be explored; we outline these issues below.	
		There are also several surveys and additional studies that are referenced in the DEIS as being planned in the near future (some of these surveys are listed under the "Biological Resources" section of this letter). We would simply like to remind the Town that all information that is submitted to the Town as part of the SEQRA process is required by NYS	

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		General Municipal Law §239-m to be referred to this Planning Department as part of the "full statement" outlined in said law. We therefore look forward to receiving all such information when it becomes available.	
		Response:	
		As recommended by the Planning Board's consultant, additional ecological field studies were to be conducted in the Spring of 2009 when field conditions were appropriate for conducting such studies. These studies included:	
		 Potential vernal pool characteristics and species present; Stream habitat assessment based on the EPA stream biomonitoring protocols; Potential summer roosting habitat for Indiana bat and other bats; Plant species surveys for plant species of conservation concern; Additional discussion of potential turtle habitat complexes, if present; and Additional site observations regarding wetland hydroperiod. 	
		As stated in the DEIS, the surveys were to be included in the FEIS. The results of the studies conducted are included in Appendix 2A of the FEIS in the report entitled Spring and Summer 2009 Ecological Field Survey Report. This report was also made available for public review prior to the FEIS being accepted by the Planning Board. The report was distributed to the involved agencies. A summary of the results and conclusions is provided in Section 3.2 of the FEIS.	
1.0 Executive	L-6-64	How are these hard economic times impacting the use and burning of fuel oil and natural gas?	
Summary 1.1 Introduction (Fuel)		Response:	
		Natural gas remains a very economical and environmentally responsible way to generate electricity to support and grow the economy. Proved reserves of dry natural gas in the United States have continued to increase in recent years despite the downturn in the economy. For example, based on information from the Energy Information Agency (EIA) of the U.S. Department of Energy (see http://tonto.eia.doe.gov/dnav/ng/ng_enr_sum_dcu_NUS_a.htm), proved reserves of dry natural gas in the United States in units of billion cubic feet at the end of each of the last three years were as follows: • 211,085 (2006)	

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		• 237,726 (2007)
		• 244,656 (2008)
		The proved reserves increased by 12.6% from the end of 2006 to the end of 2007 and by another 2.9% from end of 2007 to the end of 2008. Therefore, the proved reserves of dry natural gas in the United States have been adversely affected by the state of the economy.
		Natural gas prices spiked in the summer of 2008 and subsequently fell in the winter of 2008 in a pattern that contrasts with the usual seasonal pattern of natural gas prices rising in winter and falling in summer. Most natural gas prices peaked during the summer of 2008 after climbing for about a year. Prices subsequently fel the economy weakened. During the first half of 2009, the U.S. natural gas electric power price stabilized in a very cost competitive range as illustrated in the following figure obtained from EIA.
		Monthly U.S. Natural Gas Electric Power Price
		14
		D 10
		2 2002 2003 2004 2005 2006 2007 2008 2009 2010 Source: U.S. Energy Information Administration
		Annual natural gas usage for electric power generation in the U.S. increased steadily from 2003 through 2007 and then decreased slightly and then decreased slightly (by about 2.6%) in 2008 as shown in the following
		figure.

Response to Comments on Section 1.0 – Executive Summary DEIS Section Comment Comment/Response Number Annual U.S. Natural Gas Deliveries to Electric Power Consumers 7.000.000 -6,500,000 6,000,000 5,500,000 5,000,000 4,500,000 4,000,000 2004 2006 2008 Source: U.S. Energy Information Administration The most recent data available for 2009 show that usage levels for electric generation have been increasing to levels somewhat above those in 2008 as shown in the following figure. Monthly U.S. Natural Gas Deliveries to Electric Power Consumers 1,000,000-800,000 Million Cubic Feet 600,000 400,000 200,000 2003 2004 2005 2006 2007 2008 2009 2010 Source: U.S. Energy Information Administration Ultra-low sulfur distillate oil use is limited to no more than the equivalent of 720 hours per year per combustion turbine in a backup fuel capacity.

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1.0 Executive Summary 1.7.7 Air Quality	L-6-85	Why were only certain schools included and others excluded in the Executive Summary for the impacts of air quality? **Response:*	
		Schools are not mentioned in the Air Quality subsection (Section 1.7.7) of the Executive Summary in the DEIS. Section 9.3.3 of the DEIS evaluates air quality impacts from the Project to sensitive receptors, including schools, within a 5-mile radius of the Project site. Therefore, any school located within that 5 mile radius was included as part of the air quality review. Summary results showing maximum predicted Project impacts at each receptor were provided in Table 9-31 of the DEIS. All predicted air quality impacts are well below all applicable health based standards and thresholds. This includes the most stringent standards established by EPA to protect public	
1.0 Executive Summary 1.3 Purpose and Need	L-6-90	health, including the health of sensitive populations such as asthmatics, children, and the elderly. Why is the Applicant building this plant here in Orange County, when this County is not in need of additional electricity? Why is this plant not being built closer to where the electricity is being used? Why is this electricity not being used to benefit this community? What are the costs of transmitting the electricity to wherever it is being used, and what are the additional impacts of doing so?	
		Response: As stated in Section 1.3 of the DEIS, Purpose and Need, the NYISO has indicated the need for additional power generation in the lower Hudson Valley. Currently, the NYISO is evaluating a proposal to create a new-stand alone capacity zone for the Lower Hudson Valley. In addition, through the NYISO's CARIS process, the NYISO has determined that a generation resource located in the Lower Hudson Valley will provide congestion benefits for the system. The generation solution proved to be superior to other potential solutions, such as transmission upgrades, etc. The electricity to be provided by the Project will increase overall system reliability, which is a stated objective in the New State Energy Plan. The Project and the electricity that it generates will also be part of New York's wholesale electric market which, since its inception in late 1999, has yielded numerous benefits. These benefits include significant reductions in power plant emissions even as over 7,000 MW of new, cleaner, and more efficient electrical generation has come on line, significant reductions in system average power plant heat rates, and savings in the cost of electricity to users based on reductions in wholesale electricity prices when adjusted for fuel costs. For example, according to testimony provided by NYISO President and CEO Stephen G. Whitley to the New York State Assembly on March 5, 2009 as summarized in a March 5, 2009 NYISO press release, "2008	

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		wholesale electricity prices, adjusted for fuel costs, were 18% lower than prices in 2000 when the markets began operating in New York, a \$2.23 Billion reduction in wholesale electricity costs on a current annual basis." The ratepayers, including ratepayers in the community of Wawayanda and Goshen, have benefited from these statewide cost savings that exceeded \$2.2 billion in 2008 alone and would realize additional benefits if the Project were to come on line and increase competition in the wholesale market.	
1.0 Executive Summary 1.6 Public Participation	L-7-16 L-10-4	Discussion in the DEIS of public participation largely focuses on public involvement at this stage of the project. Page 7-27. Absent is any real examination of how the public would be involved should the project be approved and once it is up and running. Given what has been discussed above about safety issues and the project's impact on air quality, public oversight seems warranted. This could help to insure that emissions are controlled as planned, water resources are not defiled, and public safety is not compromised by the storage and/or use of hazardous substances. The Public would be "in the loop" and thus be in a position to advise of and help implement the use of new technologies and methods as they come along to further enhance public safety and reduce environmental impacts. This should benefit both the plant operators and the community. Therefore, a Citizens Advisory Committee should be established. It should be provided with the legal means to address before government authorities matters needing to be remedied, implemented and/or investigated.	
		Response: CPV Valley has implemented and will continue to implement a pro-active and comprehensive public outreach program throughout the SEQRA and permitting process for the Project. CPV Valley will continue to provide a variety of meaningful public participation opportunities. Such opportunities have included, for example, open houses hosted by CPV Valley, creation of the Project website, Project email and telephone hotline; numerous presentations to, and meetings with, community, business, and environmental organizations, and distribution of informational handouts. A description of the program is provided in Appendix 1-B of the DEIS – Expanded Public Participation Plan. The Project will be constructed and operated in compliance with all applicable permits and requirements issued	
		by the permitting authorities, including the Town of Wawayanda, New York State Department of Conservation, the New York State Public Service Commission, and the U.S. Environmental Protection Agency. Unlike the Article X process, the lead agency reviewing this application is the Town of Wawayanda Planning Board, which represents the community. The Town of Wawayanda Planning Board has retained a team of consultants and experts to assist the board in its review of the DEIS and FEIS and any impacts to the community. These consultants are experts in the environmental fields ranging from air quality to visual	

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		resources, community facilities, socioeconomics, traffic, and ecology. These consultants are providing comprehensive and thorough review of the DEIS and FEIS on behalf of the Town. The air and water related permits issued for the Project will require reporting of plant performance at specified frequencies to demonstrate that permit conditions are being fully met. Ongoing compliance with the Town permits will be overseen by the Town.	
		The purpose of the intense review, permitting, and licensing process for a facility, such as the CPV Valley Project, is to ensure that it meets and complies with all applicable rules, laws, and regulations. Throughout this process, the Planning Board, as lead agency, has provided oversight and direction of the process. The Citizens Advisory Committee mentioned in the comment was a function of the former Public Service Commission Article X siting law. This was done as a mechanism for the host community to participate in the siting process. Unlike an Article X proceeding, the host community has been intimately involved in the review and approval of this project. The Town of Wawayanda Planning Board is acting as lead agency under SEQRA and is reviewing all aspects of the project. This review by the Town of Wawayanda, in addition to the various other state and federal agencies reviewing this project, provides for a thorough review process. Once operational, the Project will have to comply with all the applicable laws and regulations. Therefore, the combination of the thorough licensing process, the compliance with the respective regulations and laws, and local oversight of the Town permits issued for the Project will make it unnecessary to create an additional oversight board dedicated to this Project.	
1.0 Executive Summary Other	L-7-17	Sustainability and greening up our communities have become important words for many communities and businesses worldwide over the past decade. You mention in the DEIS that this facility could take off-line other higher contaminating/bigger green house gas guzzlers who have been operating in our area and generating energy for some time. There of course is no regional or statewide effort to take older facilities off-line at the moment. So when this applicant talks of burning greener than others in the area by using natural gas, Orange Environment, would like to see this facility take its "green talk" further because burning natural gas and diesel is not a carbon neutral activity. There will be many environmental impacts from this facility, as stated above. The applicant should be mandated to do a study examining other green technologies it could incorporate into its day to day functions at the facility (solar, gray water, green building supplies, wind power, hybrid vehicles, planting trees etc.). It should also propose and purchase other green technologies for the town, its schools and community centers and emergency responders (police, fire and ambulance) facilities in the event the Pilot agreement is approved. The applicant, CPV, through mandated technical and engineering studies needs to identify programs to reduce particulate matter emissions near the Project and implement those program(s) identified in any technical/engineering studies to reduce particulate matter emissions near the Project. See our Air Quality comments above. Additionally, CPV and OEI could develop and maintain a joint educational program to teach Orange County residents and students about electricity, including but not limited to, current and future	

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		generation technologies, transmission, distribution and conservation to help move Orange County toward a more sustainable and more climate neutral direction.	
		<u>Response:</u>	
		The scope of the DEIS was developed to address all of the potential impacts, both positive and negative, that may be attributable to the Project. Over the course of several months, the Planning Board's consultants, who are experienced in performing environmental impact assessments, were consulted to ensure the scope was thorough and complete.	
		The impacts related to the combustion of natural gas and the backup combustion of ultra-low sulfur distillate oil have been extensively evaluated in the DEIS. The air quality impact modeling analyses demonstrate that the Project will comply with all National Ambient Air Quality Standards (NAAQS) that have been established by the U.S. EPA. The primary NAAQS were established to protect human health, including the most sensitive populations, such as the elderly, asthmatics, and children. The secondary NAAQS were established to protect human welfare, including protection against decreased visibility and damage to animals, crops, and buildings. The modeling analyses also show that the Project will comply with all New York State Ambient Air Quality Standards, with Federal Prevention of Significant Deterioration (PSD) increments that limit the extent to which existing air quality can be degraded, and with short-term and annual guideline concentrations established by NYSDEC for toxic air contaminants.	
		The air quality impact modeling analyses also show that maximum predicted Project impacts of all criteria pollutants except for PM ₁₀ are below Significant Impact Levels (SILs) established by U.S. EPA. Impacts below the SILs are so small that they are considered negligible or "de minimis" by U.S. EPA. In fact, sources with maximum predicted impacts below the SILs for a particular pollutant are not required to conduct more extensive modeling analyses that might otherwise be required.	
		With respect to particulate emissions, the Project will accept federally enforceable emission limits to ensure that the Project will be a minor source of PM_{10} and $PM_{2.5}$. As mentioned above, air quality modeling analyses conducted as part of the DEIS demonstrated that the Project would meet NAAQS for PM_{10} and $PM_{2.5}$. In addition, the use of natural gas and ultra-low sulfur distillate oil as fuels by the Project will satisfy Best Available Control Technology (BACT) requirements for these pollutants. The Project is not subject to any other requirements to further reduce or offset their emissions of PM_{10} and $PM_{2.5}$.	
		Air permitting regulations for major sources of ozone precursor pollutants (NO $_{\rm x}$ and VOC) in designated ozone nonattainment areas require emission offsets. In order to satisfy these requirements, the Project will purchase	

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		certified emission offsets (actual emission reductions) of NO_x and VOC from other sources in quantities that exceed by 15% the maximum potential emissions from the Project. The purchase of these emission offsets ensures that there will be a net decrease in emissions of NO_x and VOC in the region.	
		The assertion that the use of newer, cleaner, and more efficient electric generation facilities like the Project will tend to displace emissions from older, less efficient, and higher emitting facilities and thus reduce regional emissions from power plants is supported by analyses conducted by New York Independent System Operator (NYISO). According to information cited in an April 21, 2009 news release from the NYISO and available in an associated briefing paper (New York State Power Plant Emissions: 1999 – 2008), significant reductions in emissions from power plants in New York State have occurred. Over the last decade, power plant emissions in New York State have decreased by 77% for SO_2 , by 28% for CO_2 , and by 61% for NO_x . These emissions decreases have occurred as more than 7,000 MW of new, more efficient, and less polluting sources of electrical generation have come on line.	
		Due to the relatively high efficiency and low heat rate associated with modern, combined cycle power plants, it is expected that facilities of this type (including the Project) will be dispatched in preference to older, less efficient, and more polluting generating sources and continue the trend in reducing overall emissions from power plants.	
		The Project has already taken into consideration various green elements. In addition to the use of natural gas, which is the cleanest fossil fuel and one that is identified in the State Energy Plan as a fuel we should utilize more, the Project is using reclaimed or "grey" water to protect our water resources. The air cooled design of the facility reduces the consumption of water as well. There will also be a landscaping plan associated with the construction of the facility. This plan will call for various trees and shrubs to be planted as part of the site plan approval. Analyses associated with utilizing these green technologies are not necessary as these green elements are already incorporated into the Project design.	
		The purpose of the DEIS is to analyze the full range of potential significant environmental impacts of the proposed Project. While CPV Valley has indicated that it is in the process of negotiating a PILOT arrangement, the DEIS is not intended to be the forum in which terms of an arrangement are negotiated or specified. The Town may wish to utilize some of the revenues received from the PILOT or Host Community Benefits Agreement for some of the suggestions above. However, such commitment is not appropriate for the EIS.	

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1.0 Executive Summary 1.1 Introduction (Project Benefits)	L-8-1 L-11-9	I have read and listened to much of what the representatives from Competitive Power Ventures (CPV) and our Town Board Members have had to say about the natural gas powered, diesel fuel back-up electric generating power plant planned to be built in our town, and, when I was able to access the DEIS on the Town website, I looked it over as well. CPV and town board members I have spoken to claim this project will benefit our town. While I did not see elaboration on the subject in the DEIS, I suspect CPV expects this to be a lucrative venture as well. Nevertheless, it remains elusive just who will benefit and how.	
		Response:	
		The Project will provide significant financial benefit to the Town of Wawayanda through the Host Community Benefits Agreement and PILOT arrangements under negotiation.	
		Under a PILOT arrangement, the Project will provide payments to the county IDA of which the Town will receive a distribution. In addition, the Minisink Valley School District will receive a distribution of the annual PILOT payments. In addition to these payments, CPV Valley has committed to negotiating a Host Community Benefits Agreement, which would provide further financial benefits to the Town. While these are discussed in the DEIS, it is important to note that one of the purposes of the DEIS was to determine the fiscal impacts to the community. These three items discussed above qualitatively summarize the financial benefits to the Town. Since there are no offsetting costs to the Town, the fiscal impacts to the Town are positive. The financial benefits that will be realized through the Host Community Benefits Agreement, along with the Town and school district portion of the annual PILOT payment will more than exceed the limited tax revenue from the property today. As described in the DEIS, the Project will pay for all of the infrastructure to bring the potable and sanitary water services to the Project, and then will pay for the services. Based on meetings with the fire and police service providers, there are no fiscal impacts associated with servicing the Project. It should be noted that, in addition to the benefits described above, the Project will be making annual payments to the New Hampton Fire Company.	
		Additional benefits from the Project may be realized through reduced or stabilized taxes due to revenue from the Project, reduced or stabilized School District charges to the community due to the school district payments from the Project, and improved Fire District services due to the significant annual payments to the New Hampton Fire District.	
		The Project will provide increased economic stimulus to the region (town, county, and state) through the construction and operation of the Project. This Project will result in an estimated capital investment of \$800 million for the development and construction of the Facility. Based on the existing marketplace factors, the Project will significantly boost the local economy by generating new jobs regionally, increasing income, and increasing local revenues. The Project will also provide a significant boost for the local economy with the	

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		creation of well-paying jobs both in the short-term during construction and in the long-term due to employment opportunities for people in the area once the Project is completed. It is expected that approximately 664 construction jobs (union) will be created during peak on-site construction, and about 25 well-paying permanent jobs will be created once the Facility is completed.
		As stated is Section 1.3 of the DEIS, Purpose and Need, the NYISO has indicated the need for power generation in the lower Hudson Valley. Currently the NYISO is evaluating a proposal to create a new-stand alone capacity zone for the Lower Hudson Valley. This electricity can potentially benefit the community through increased system reliability and by its participation in New York's wholesale electric market. The wholesale electricity market began operating in 2000 and the competition inherent in the system has lead to substantial reductions in wholesale electricity prices compared to what they would have been otherwise. After adjusting for increases in fuel costs, NYISO stated that in 2008 alone, the effective annual reductions in electricity costs statewide due to the markets amounted to over \$2.2 billion. The ratepayers, including ratepayers in the community of Wawayanda, will realize these benefits.
		See link to NYISO March 5, 2009 press release:
		http://www.nyiso.com/public/webdocs/newsroom/press_releases/2009/NYISO- Markets_Cut_Power_Costs_2_23B_03052009.pdf

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1.0 Executive Summary General	L-8-2	At the Open House on the project, I did not read or hear much discussion about the adverse environmental, or other negative impacts and drawbacks of the proposed project. I am left with more questions than information I feel I can comment on. I understand it is the job of CPV representatives to tell us that there is a need to build more fossil fuel electric generation plants and that building their power plant in our community will be a "good thing". But is the picture they paint accurate or complete? Can the taxpayers and residents affected by this project expect our town officials and planning board to possess the resources or, indeed, the will to fairly and earnestly represent the interests of the residents of the Town of Wawayanda, and serve as better stewards of our future well-being than what we have seen in the news of so many corporate CEO's, politicians, and others in whom we placed our trust only to later learn we were betrayed by their greed for money and power; not the electrical kind?	
		Response:	
		The DEIS fully analyzes the potential environmental impacts of the Project and mitigation measures for them. Further, the Planning Board has retained experienced engineering, economic, environmental, and visual impact consultants to assist it in its review of the Project.	
		Please refer to Section 1.7 of the DEIS (Summary of Potential Environmental Impacts and Mitigation) for a summary and also to Table 1-2. The Project's environmental impacts are being reviewed by the appropriate Town boards, State and Federal agencies, and the consultants retained by the Planning Board as part of the SEQRA process.	
1,0 Executive Summary 1.3 Purpose and Need	L-8-3	CPV literature tells us there is a need to generate more electricity for the Lower Hudson Valley, which is a really vague and nebulous assertion. It claims this new power plant will produce electricity for more than 600,000 homes. Does it logically follow that their project is the only solution to satisfying this reported need? And, why the Town of Wawayanda is the best or most suitable location for the construction of this facility is not clearly established either. Will this plant replace a less efficient facility that is currently serving this area and contributing more pollution to our regional atmosphere? My understanding is that it will not. Will it serve existing homes, or are all of these 600,000 homes to be considered new customers? And, if so, where will these new homes be located exactly? No one is saying where. Is it Wawayanda's responsibility to shoulder the burden of providing electricity for a generic power grid, which will only marginally serve homes in our municipality, if it does so at all? Will any of us see a reduction in our electric bills? I found no assurance or indication that we will. Will it reduce our tax burden? Again, there is no one saying, much less committing that it will.	

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		Response: Please see responses to Comment Numbers L-6-90 and L-8-1.	
1.0 Executive Summary 1.4 Project Overview (Fuel)	L-8-4	Also relative to the question of need, is the diesel fuel back-up generating component to the proposal absolutely necessary or are there alternative, less toxic, considerations that could be substituted in its place? Since this plant, as the others in our region that provide electricity to the main power grid, will go off line from time to time, can other plants on the grid manage the power needs during those periods as I understand is the case with Indian Point, which is a much larger facility? This would considerably reduce CPV's carbon footprint, project cost, eliminate the need for diesel fuel storage and consequent effects and hazards, ensure greater compliance with EPA regulatory standards; reduce the probability of fines and the greater atmospheric toxicity caused by diesel fuel emissions. But most importantly, it would mean a much cleaner facility. It might even expedite favorable EPA consideration of the project. **Response:** The capability of the Project to fire ultra-low sulfur distillate oil as a backup fuel is designed to ensure that the electric system has a reliable generating source. In the past, there have been periods when the electric system operators did not have generators available because of a natural gas interruption. This created scarcity of supply in the market which in turn created high prices. The need for a backup fuel is for enhanced system reliability. Also, certain natural gas utilities require that power facilities they serve have a back up fuel source. Orange and Rockland, the local gas distribution company, has this requirement in their service rate for power generating facilities. It is important to note that the use of fuel oil will be restricted by EPA and NYSDEC through permit conditions to no more than the equivalent of 720 hours per year per combustion turbine. The ultra-low sulfur distillate oil is the cleanest fuel oil available. CPV Valley has thoroughly evaluated the impacts of receiving, storing, and combusting the distillate oil.	
1.0 Executive Summary General	L-8-5	This leads to another important consideration, which is; can the Wawayanda Planning Board adequately and fairly fulfill the role of Lead Agency for the review and analysis of CPV's Draft Environmental Impact Statement? Why was an outside, more independent entity not chosen for this purpose considering the importance and magnitude of this project? Is it possible to include an independent entity with a larger or more regional perspective to provide some semblance of checks and balances with the Planning Board? Will the Planning Board solicit and respect Orange County Planning Department review and comment? What role will the Federal EPA play in the review of this project and how significant	

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		is their opinion. Is their approval required for development? If so, will the EPA hold a public hearing to solicit input?	
		Response:	
		The Lead Agency, Town of Wawayanda Planning Board, hired several independent consultants/professionals to review and analyze the DEIS. The consultants have reviewed and provided written comments on the DEIS, and responses to their comments are provided in the FEIS.	
		In addition, the consultants exercised extensive oversight over CPV Valley and its environmental consultants and engineers throughout the development of the DEIS before it was issued to the public. The Planning Board's consultants reviewed and provided extensive comments on at least three revisions of the document.	
		Also, the consultants were significantly involved in the content of the Scoping Document. In fact, the consultants required additional and very extensive studies for several topics, including visual, ecology, and socioeconomics, which were far more extensive than what are normally required by other lead agencies (e.g., NYSDEC, Long Island Power Authority (LIPA)) on similar projects.	
		Further, there already have been, and there will continue to be, extensive opportunities for public participation and comment with respect to the CPV Valley Project. The Board conducted public scoping of the DEIS. The Board's consultants and sub-consultants performed extensive review of the DEIS and deemed it complete for public review and comment. The Board then initially set a public comment period on the DEIS that was roughly twice the minimum required by the SEQRA regulations. The Board further extended the comment period by another three weeks. The balance of the SEQRA process will include a further public review period after acceptance of the FEIS and before issuance of SEQRA Findings by the Board.	
		The FEIS fully responds to the Orange County Planning Department's comments on the DEIS.	
		Both the NYSDEC and EPA are responsible for reviewing the Air Quality Permit Application. The Air Permit process will involve a public comment period. Similarly, NYSDEC and the U.S. Army Corps of Engineers are reviewing the Wetland Permit Application. There will be a public comment period for that process as well. There will also be a public comment period as part of the SPDES Permit process through NYSDEC.	
		The NYSDEC SEQRA regulations allow agencies to serve as lead agencies not only for review of proposed projects over which they have approval jurisdiction, but also for projects which they are undertaking directly. Further, the regulations also provide that the most important criterion for determining which agency should serve as lead agency for a proposed project is whether the potential impacts of the project are primarily of local,	

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		regional or statewide significance. 6 NYCRR section 617.6 (b)(5)(v)(a). Where the impacts are primarily of local significance, the regulations provide that "all other considerations being equal, the local agency involved will be the lead agency." Id. Thus, the Planning Board's role as lead agency is both authorized and encouraged by the applicable regulations. In this regard, the regulations are consistent with the home rule principles embodied in the State Constitution and State law.		
		The Planning Board is independent of the applicant, and has engaged qualified independent consultants to review the proposed project. All involved and interested agencies, including NYSDEC, the NYS Public Service Commission, EPA, and the Orange County Planning Board, have been provided with opportunities to review and comment on the DEIS for the project. The Planning Board has thoroughly considered all comments received from all agencies. In addition, several of the agencies, including NYSDEC, EPA, the U.S. Army Corps of Engineers, and the PSC, have direct permitting jurisdiction which they will exercise.		
1.0 Executive Summary General	L-9-4 H-16-6	I know that there are neighboring communities here this evening who have as much of a stake in this decision as do our town residents. Their health and well being must also be considered.		
		Response:		
		The neighboring communities were provided the opportunity to review and comment on the DEIS. Notices were published in the local papers, and copies of the DEIS and Public Hearing Notification were provided to the responsible municipal official in each of the following Towns: Wallkill, Goshen, Mount Hope, Minisink, and Middletown as interested agencies.		
		There has been, and there will continue to be, extensive opportunities for public participation and comment with respect to the CPV Valley Project. A Draft Scoping Document was distributed by the Planning Board, as SEQRA lead agency, to the public and to all interested and involved agencies for review and comment in August 2008. A public meeting to receive oral and written comments on the Draft Scoping Document was held on August 27, 2008. The Scoping Document was then finalized based on the public comments received.		
		The DEIS was prepared based on the requirements of the Scoping Document. The Planning Board's consultants performed extensive review of the DEIS and deemed it complete for public review and comment on February 23, 2009. The Planning Board then initially set a public comment period on the DEIS that was roughly double the minimum required by the SEQRA regulations. A public hearing on the DEIS was held by the Planning Board on April 8, 2009. The Planning Board then extended that comment period by another three weeks. The Public Comment period for the DEIS was from February 23, 2009 through May 14, 2009.		

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		The FEIS was prepared in response to all the public comments received on the DEIS. The balance of the SEQRA process will include a further public review period after acceptance of the FEIS and before issuance of SEQRA Findings by the Planning Board.		
		The studies conducted for the DEIS encompassed review and assessment of the neighboring communities as required by the Scoping Document. For example, the air quality modeling analyses assessed potential Project air quality impacts at over 3,600 locations (receptor points) covering an area extending out 30 kilometers (km) (approximately 18.6 miles) from the Project. Most of the receptors (over 2,500) were located within 5 miles of the Project, so that Project impacts in the local area were examined extensively.		
		The visual impact assessment, cultural resources, and land use assessments evaluated a 5 mile radius study area surrounding the site.		
1.0 Executive Summary 1.3 Purpose and Need	L-9-6	Finally, the State of NY just determined that there is no legitimate need for NYRI. What does that say about this power plant?		
		Response: As stated is Section 1.3 of the DEIS, Purpose and Need, the NYISO has indicated the need for power generation in the lower Hudson Valley. Currently the NYISO is evaluating a proposal to create a new-stand alone capacity zone for the Lower Hudson Valley. This electricity can potentially benefit the community through increased system reliability and by its participation in New York's wholesale electric market. The wholesale electricity market began operating in 2000 and the competition inherent in the system has lead to substantial reductions in wholesale electricity prices compared to what they would have been otherwise. After adjusting for increases in fuel costs, NYISO stated that in 2008 alone, the effective annual reductions in electricity costs statewide due to the markets amounted to over \$2.2 billion. The ratepayers, including ratepayers in the community of Wawayanda would realize these benefits. See response to Comment Number PB1-8 for a discussion of the State's New Energy Plan.		

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1.0 Executive Summary 1.4 Project Overview (Natural Gas)	L-11-5	The project will require a hook-up to the Millennium Pipeline, which will impinge on the property of some of the residents. **Response:** Pipeline route options are anticipated to have relatively minimal land use and environmental impacts. Pipeline routing options will use existing roadway rights-of-way and existing utility rights-of-way to the extent practicable, avoiding impacts to residents' property.	
1.0 Executive Summary 1.3 Purpose and Need	L-11-8	The energy supplied by this plant will go to the general power grid to benefit downstate users and will not benefit Wawayanda. If the Town is to benefit, a very small local plant is necessary for our electrical needs. *Response:* The Facility will benefit the system regionally, and will help to improve the overall system reliability. The transmission system has various points that have congestion, which can create reliability issues. The CPV Valley Energy Center will produce and inject electricity into the New York State bulk transmission system to help alleviate some of the congestion and improve overall reliability. All users of the power system, including residents of Wawayanda, will benefit from these improvements.	

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1.0 Executive Summary 1.1 Introduction (Benefits)	L-11-9	There are no benefits to the Town of Wawayanda from this project, only very long-term negatives. (Providing temporary jobs to out-of-town construction workers at the cost of our health and property values is not the responsibility of the people of Wawayanda. I prefer to choose my charitable donations.) What we need is a nice, clean project such as Crystal Run Health Care or a multi-office building that will provide hundreds of varied jobs for the citizens of Wawayanda, will provide hundreds of temporary construction jobs and will not have stacks, oil tanks, ammonium tanks, power lines, pollution, gas lines, waste water, noise, and depression of property values. This massive, intrusive project does not belong in our small town.		
		<u>Response:</u>		
		This comment expresses a personal preference, which is noted. The Project is, however, well suited for the Town, in the proposed location. Both the 2000 and 2006 Town Comprehensive Plans call for this type of land use in the Route 6 corridor, demonstrating an established, long term desire on the part of the Town to locate industrial facilities here. Furthermore, the Town Zoning, adopted in 2009, provides for "Utilities" and "Essential Services" in the MC District. Medical facilities would also be permissible in the District; however, SEQRA specifically requires a "description and evaluation of the range of reasonable alternatives to the action which are feasible, considering the objectives and capabilities of the Project Sponsor". The project Sponsor is in the energy business, not the medical field. Provision of medical services is not reasonably related to its objectives, and, therefore evaluation of a medical facility alternative is not required under the SEQRA regulations.		
		The Project will provide significant financial benefit to the Town of Wawayanda while requiring minimal supporting Town services. The Project will result in an estimated capital investment of \$800 million for the development and construction of the Facility. Based on the existing marketplace factors, the Project will significantly boost the local economy by generating new jobs regionally, increasing income, and increasing local revenues. When completed, the CPV Valley Energy Center will represent a long-term source of additional revenue for the Town of Wawayanda, Orange County, and local school district through the PILOT (Payment in Lieu of Taxes) and Host Community Benefits agreements.		
		The Project will also provide a significant boost for the local economy with the creation of well-paying jobs both in the short-term during construction and in the long-term due to employment opportunities for people in the area once the Project is completed. It is expected that approximately 664 construction jobs (union) will be created during peak on-site construction, and about 25 well-paying permanent jobs will be created once the Facility is completed.		
		See response to <u>Comment Number L-8-1</u> .		

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1.0 Executive Summary 1.4 Project Overview (Natural Gas)	L-12-8	Will the high demand of gas have any effect on the price of gas to the surrounding homeowner? **Response:* The CPV Valley Energy Center use of natural gas will not impact the supply of natural gas to homeowners. Adequate long-term supplies of natural gas are available to support operation of the CPV Valley Energy Center. Estimates of natural gas reserves in the United States prepared by the Federal Energy Information Administration (EIA) indicate a supply adequate for between 85 and 90 years. Please see response to **Comment Number L-6-64.**	
1.0 Executive Summary 1.4 Project Overview (Interconnections)	L-12-10	Where are the electric and fuel lines going to be run, or laid down? What impact on green space/property will it have? *Response:* The electric transmission line route is shown on Figure 1 of the FEIS. See Section 2.3 of the FEIS for a description of electric transmission line. A total of approximately 1,450 feet of underground electrical interconnect would be installed offsite. 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. There would be no impacts on green space. Pipeline route options are anticipated to have relatively minimal land use and environmental impacts. Pipeline routing options will use existing roadway rights-of-way and existing utility rights-of-way to the extent practicable. The exact location of the gas line has not been determined. An evaluation of potential routing options was included in Section 17.5 (Gas Line Cumulative Impact Analysis) of the DEIS. Figure 17-1 of the DEIS shows potential gas line routing options. CPV has entered into an agreement with Millennium Pipeline LLC for the permitting and construction of the pipeline. The potential impacts associated with the gas line will be evaluated in additional detail in the FERC or Article VII application, depending upon which supply alternative is selected.	

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1.0 Executive Summary 1.3 Purpose and Need	L-14-2	Another aspect of this project is that I have been told that there is no current need for more electricity in the grid, Marcy South has more capacity available due to that fact it isn't needed. If more electric is needed then Marcy South can provide through their facilities. Canada and Niagara Falls can provide the cheapest power needed through the lines that already So if there is no need for additional power and if there was it can already be provided, why are we putting this type of facility in our rural town of Wawayanda.	
		Another question for CPV is do they have certification from the Millennium Pipeline owners that they have the capacity to supply them with the amount of natural gas needed to run such a facility?	
		Response:	
		Regarding the question of need, please see response to Comment Number L-6-90 .	
		See Section 2.6 of the FEIS for a discussion of natural gas supply for the Project. Adequate long-term supplies of natural gas are available to support operation of the CPV Valley Energy Center. Estimates of natural gas reserves in the United States prepared by the Federal Energy Information Administration (EIA) indicate a supply adequate for between 85 and 90 years. Initial discussions held with Millennium Pipeline indicate adequate natural gas supply is available to support the Facility operation.	
1.0 Executive Summary General	L-15-1	I'm upset because it looks like this plant may literally be put in my backyard, but I can't view the environmental statement because they didn't purchase good enough website hosting.	
		The problem is at the address http://cpvvalley.com/impact-study.shtml	
		The message from the website hosting company is	
		Bandwidth Limit Exceeded The server is temporarily unable to service your request due to the site owner reaching his/her bandwidth limit. Please try again later.	
		Apache/2.2.11 (Unix) mod_ssl/2. 2.11 OpenSSL/0.9.8b mod_auth_passthrough/2.1 mod_bwlimited/1.4 FrontPage/5.0.2.2635 Server at cpvvalley.com Port 80	

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		Response: The referenced problem in accessing the CPV Valley website occurred during a one day period, and was immediately fixed upon learning of the issue. The Public Comment period for the DEIS was extended by the Planning Board in its capacity as Lead Agency an additional three weeks to May 14, beyond the original deadline of April 24, 2009, partially to allow extra time for those affected by the inconvenience.	
1.0 Executive Summary 1.1 Introduction (Project Benefits)	L-16-1	As a local union tradesman, I cannot stress enough the importance of good paying union construction jobs which projects like this create. Although I am not a Sullivan County resident, this project would afford me employment opportunity. Like any construction worker, I would spend the monies I earn on this project in the county at local restaurants, delis, gas stations, and hardware stores. I can also tell you that when employment is good and we have some extra funds, my family and I enjoy visiting Bethel Woods Performing Arts Center to attend concerts. As you aware, an event at Bethel can be very expensive to attend. Nevertheless, I want to stress that the construction jobs that some say are temporary have a ripple effect and would be the catalyst for income throughout the county.	
		I would also like to stress the importance on income gained through the PILOT program. This revenue will enable the town to build and maintain sewer and water infrastructure which would eliminate the need for wells and septic systems on future residential projects. This alone would ensure better quality & quantity drinking water as the demand on the underground aquifers would substantially decrease. Additionally, the waste water that is now being placed into the ground via septic systems would be able to be harnessed, treated and placed back into the reservoirs, streams, or rivers. Again, I ask that the planning board seriously consider approving this project and take advantage of the many benefits that your community would enjoy as a result of it. I would also ask that you take a look at the financial benefits our community may have enjoyed as a result of the Millennium Pipeline Project.	
		I only wish that my town in Ulster County had the chance for project like this. No impact on the schools, payments in lieu of taxes, jobs, funds to provide new infrastructure, not t mention the fact that this project would significantly decrease the Global Carbon Emissions. Sounds like a win, win to me guys.	

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		Response: The benefits from the Project are acknowledged. See response to Comment Number L-8-1.	
1.0 Executive Summary 1.1 Introduction (Project Benefits)	L-17-1	I am writing you today to ask that you support the CPV Valley Center Energy Project. I am Laborer with Local 17 in Newburgh, NY and projects like these are essential. It is my understanding that this project will create upwards of 600 union construction jobs and as many 30 permanent jobs. I also understand that there will be no impact on the school as Sullivan County has plenty of people out of work and their will not be any new people moving here with their families to fill the newly created jobs.	
		Wawayanda could use the money it gets from the taxes for all types of projects from infrastructure to highway trucks & equipment, fire trucks, police cars, and maybe even new town hall.	
		We all know that the cost of living here in NY is going up and that our paychecks are not keeping up with inflation. I How are you going to continue to keep the town jobs that currently exist if you don't look for alternates sources of income for the town. You can't keep hitting the residential tax payer. They don't have the money. Sooner or later they will have to relocate to area where the taxes are less.	
		Please consider all of the positive things that a project like this can bring to your community. As member of the planning board, you are charged with the responsibility of looking at every project objectively and without prejudice. I ask that you approve this project and implement the necessary measures to ensure that the residents around the proposed project location are affected in a positive way.	
		Remember, this project is not just important to Wawayanda, it's important to the county and the state as well.	
		Response:	
		The benefits from the Project are acknowledged. See response to Comment Number L-8-1 .	

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1.0 Executive Summary 1.1 Introduction (Project Benefits)	L-18-1	As a member of the Laborers International Union Local 17 located in Newburgh, New York and also a resident of Orange County, I feel that I must voice my opinion regarding the power plant proposal in the Town of Wawayanda, CPV Valley Energy Center. I believe that at a time when the nation's economy is in such upheaval a project of this magnitude would only be advantageous to the community and the surrounding area.		
		It is my understanding that the project would create more than 600 union construction jobs lasting for a period of at least two years. In addition, the facility would create internal employment for the operation of the facility and external employment to support the facility. Once operational, the power plant would generate increased revenue relieving the taxpayers' burden; as well as, stabilizing local businesses and benefiting community services; thereby, boosting the local economy.		
		Since Orange County is the fastest growing county in New York State, we need the energy that would be generated by such a facility and we need clean energy to improve air quality within the region. In as much as I understand the environmental concerns of the residents within the immediate area, I believe that we can only trust the professionals who will determine the environmental impact that the construction of this facility would have on the area.		
		Being born and raised in a small town, I have seen what happens to a town when the fear of its' residents deny businesses access to build in their town. The town literally dies and the residents are left traveling hours for their livelihood. Hence, I urge the planning board to look positively on the construction of this project as I believe that this would be economically beneficial to the region while also enhancing the quality of life for its' residents.		
		Response:		
		The benefits from the Project are acknowledged. See response to Comment Number L-8-1 .		
1.0 Executive Summary 1.1 Introduction (Project Benefits)	L-19-1	I would like to see this project move ahead for many reasons; 1). it will create two years of construction for the trades, 2). It will create several needed permanent jobs for my members, relatives and others that live in the surrounding areas, 3). The local merchants and suppliers will benefit from the construction, and 4). This facility will be one of the cleanest running centers in the country.		
		Please do not let this energy center be pushed out of our area and then be built and benefit another. Thank you for your time and concerns on this much needed project for all of us and the community.		

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		<u>Response:</u>		
		The benefits from the Project are acknowledged. See response to Comment Number L-8-1 .		
1.0 Executive Summary 1.1 Introduction	L-20-1	As a Local 17 laborer for 38 yrs. I would like to show my support for the CPV Valley Energy Center in Wawayanda, New York.		
(Project Benefits)		This project will provide jobs necessary for the local membership as well as a clean energy system for our area.		
		Response:		
		The benefits from the Project are acknowledged. See response to Comment Number L-8-1 .		
1.0 Executive Summary 1.1 Introduction (Project Benefits)	L-21-1	I'm writing to you to show my support for the Competitive Power Ventures (CPV) proposed power plant in Wawayanda. My name is Richard Messina and I am a field representative for Laborers' Local 17 in Newburgh, NY. Local 17 represents over 1100 members in the construction and public sectors, many of whom live in the vicinity of this project. For myself, I reside in Gardiner, NY and I'm fully aware of the environmental concerns associated with a project of this magnitude. I grew up in Marlboro, NY in full view of the Roseton and Danskammer power generating plants while benefiting from construction projects there. Working on the one of the many projects at the power plants helped pay my way through college. I remember my father working on the construction of the Roseton generating plant when I was young. That work put food on our table while being able to put money away to start a business.		
		The first reason for support of this project is the benefits of natural gas as a power source. With the dependence of this country on importation of foreign oil, we can wean ourselves and use a home grown power source such as natural gas. The reserves of natural gas in this country are massive. As you are probably well aware, natural gas is also the cleanest of the fossil fuels. The building of natural gas to electric generating plants could help reduce global carbon emissions by at least 1 billion tons per year. When constructed, this project will be one the cleanest conventional generating facilities in the country.		
		Construction is how we earn a living in the trades. This is how we feed our families and send our children to college. Earning a good wage, with good benefits and a pension, is what this area needs in the trying times we are faced with.		

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		This project will give a much needed boost to the local economy when we really need it. Six hundred construction jobs, working over a two year period, is how I say STIMULUS PACKAGE.	
		Thank you for your time in hearing my opinion.	
		Response:	
		The benefits from the Project are acknowledged. See response to Comment Number L-8-1 .	
1.0 Executive Summary 1.1 Introduction (Project Benefits)	L-22-1	I'm writing this letter today to urge you to approve the Competitive Power Ventures (CPV) Project. I'm an Orange County resident and a member of Laborers Local 17. • CPV will be paying a PILOT that will help reduce the tax burden for all tax-payers. • CPV will be providing good paying jobs in the construction phase and after in the Plant Operations once built. • CPV is investing private money for this project, which is rare in today's economic climate. • CPV is establishing clean energy source that we have been striving for, for years. • CPV will increase ancillary business activity locally. I ask the planning board to approve this project don't let another company leave the area for another site. **Response:* The benefits from the Project are acknowledged. See response to **Comment Number L-8-1*.	

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1.0 Executive Summary 1.1 Introduction (Project Benefits)	L-23-1	Road Sprinkler Fitter Local Union 669, U.A. is writing you in support of the CPV Valley Energy Center in Wawayanda, NY. While our National Office is located in Maryland, we have members who reside and work in that area of New York. The construction of this Center will not only benefit them by providing employment in the area, but also this construction will give them one of the cleanest conventional generating facilities in the country. **Response:**		
		The benefits from the Project are acknowledged. See response to Comment Number L-8-1 .		
1.0 Executive Summary 1.1 Introduction (Project Benefits)	L-24-1	I am a long-time resident of the area, and I am writing to express my thoughts about the CPV Valley Energy Center Project. As an unemployed, tax-paying citizen, I am in favor of this project for several reasons; the most important for myself at the moment being the work opportunity that would come with the construction of this project. Not only would this project create numerous jobs during its initial construction, but the long term effect of having permanent jobs at the facility is exactly what the area needs. During these hard economic times, steady employment and the ability to pay our bills and taxes is the foremost thought in everyone's mind. Thank you for your time, and please consider this to be a viable project for the area. **Response:* The benefits from the Project are acknowledged. See response to **Comment Number L-8-1**.		
1.0 Executive Summary 1.1 Introduction (Project Benefits)	H-2-1	The Orange County Chamber of Commerce represents over 2,000 businesses here in Orange County and its surrounding areas. Our chamber supports clean, affordable and sustainable power, whose generation produces none of the greenhouse gases and other pollutants that contaminate our environment and contribute to global warming. In order to maintain the quality of the life Orange County now enjoys and to support our growth, we are going to need more electric power. It's my understanding that when constructed, this project will be one of the cleanest conventional generating facilities in the country. The project will provide a needed boost to the local economy at a time when we most need it. I am told that the Valley		

		Response to Comments on Section 1.0 – Executive Summary
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		Energy Center will create more than 600 construction jobs at its peak construction.
		Local merchants, suppliers, hospitality purveyors, and many other businesses will benefit from the increased economic activity created by the construction and operation of this project.
		Once in operation, and I understand the construction will take two years, this project will offer 25 to 30 direct sustainable wage jobs and another 60 to 70 outside jobs to support facility operations.
		Valley Energy Center has estimated that the increase in common sales tax as a result from this project to be approximately \$22 million. These new income streams can be used for reducing or stabilizing local taxpayer burden, supporting local school districts, and local fire departments and provide funding for maintenance of local infrastructure, and at the same time having little or no impact on the services provided by the town and its school district.
		<u>Response:</u>
		The benefits from the Project are acknowledged. See response to <u>Comment Number L-8-1</u> .
1.0 Executive	H-3-1	When constructed, this project will be one of the cleanest environmental generating facilities in the country.
Summary 1.1 Introduction (Project Benefits)		The project will provide a much needed boost to the local economy. The Valley Energy Center will create more than 600 union construction jobs. Construction will occur over a minimum of two years. Local merchants, suppliers and other visitors will benefit from the increased economic activity created by the construction of this project.
		Once in operation, this project will create 25 to 30 direct sustainable wage jobs and another 60 to 70 outside jobs to support local operations.
		This project is estimated to bring in over \$30 million in tax revenues over the next 20 years.
		This project will provide a new source of revenue for the local fire department. It will also have little to no impact on the services provided by the town and the school district.
		The Town of Wawayanda has the second lowest percentage of commercial and industrial tax rateables of all the towns in the county. This project will directly decrease this deficiency. Many towns around New York State are actively seeking

	Response to Comments on Section 1.0 – Executive Summary			
DEIS Section	Comment Number	Comment/Response		
		projects like this one in order to help meeting and growing local tax burden.		
		Based on the new emissions laws, this project will improve the air quality in the region.		
		Response:		
		The benefits from the Project are acknowledged. See response to Comment Number L-8-1 .		
1.0 Executive Summary 1.1 Introduction	H-4-1	If we can replace the 1400 coal electric plants with natural powered facilities, it will reduce global carbon emissions by at least one billion tons per year by the year 2054. It's clean and it's green.		
(Project Benefits)		A little more important, a little closer to my heart, it's going to create jobs. Twenty (20) to 30 people will be working in this plant receiving health care, pension, and training, again, working safely and with the environment in the back of their mind.		
		More importantly, there was another statistic out there, there will also be support 60 to 70 jobs that will support those people inside the plant as it goes on.		
		I would just like to take the time for thanking CPV to have the vision to come down here, invest their money in the Hudson Valley, and we support the project 100%.		
		Response:		
		The benefits from the Project are acknowledged. See response to Comment Number L-8-1 .		

	Response to Comments on Section 1.0 – Executive Summary		
DEIS Section	Comment Number	Comment/Response	
1.0 Executive Summary 1.1 Introduction (Project Benefits)	H-5-1	It really should go forward because, let's face it, we are going to need the energy and it's coming to Orange County because Orange County is the fastest growing county in the state. And also it's going to create 600 jobs, like everybody said. And I know I would just be saying what they already said, but 600 jobs today is a big deal. I mean one job today is a big deal. If this is going to be a good boost to the economy and environmentally sound, we are for it and I hope you are too. **Response:** The benefits from the Project are acknowledged. See response to **Comment Number L-8-1**.	
1.0 Executive Summary 1.1 Introduction (Project Benefits)	H-6-1	One of the things is that the local people here, they have to travel an hour, hour and a half to get to work. This will create a lot of jobs for these guys could stay home; they can do the Little League; become part of the fire department, the ambulance corps. They won't have to travel far so they can stay in their own community, who knows, the better community is one that stays at home. With all of the jobs that are going overseas and everything, for this to open up 600 jobs in this area, I think is a great thing for us. **Response:* The benefits from the Project are acknowledged. See response to **Comment Number L-8-1**.	
1.0 Executive Summary 1.1 Introduction (Project Benefits)	H-8-1	This is going to give us two years of construction jobs, 600 of them, which is very important to us. I understand what the lady just said, but I understand it's not 200 jobs, but to me 25 to 30 jobs is still a lot of jobs. In this economy it's much needed. **Response:* The benefits from the Project are acknowledged. See response to **Comment Number L-8-1*.	

	Response to Comments on Section 1.0 – Executive Summary		
DEIS Section	Comment Number	Comment/Response	
1.0 Executive Summary 1.1 Introduction (Project Benefits)	H-9-1	Right now everybody knows that Orange County, the Hudson Valley, the United States, everybody is in a real jam economically, it's no doubt. Every family in the Hudson Valley, I guarantee you, does not have it as easy as they have had it in the past. And I think when these guys go through what they need to go through, I would hope that this project does get approved. I would hope that it does create the jobs that they said.	
		We need clean energy. We need more electric power. We are not going to survive with what we have going on now. If this turns out that it's not environmentally sound, then the construction workers will be right up here saying that they can't build it.	
		One, it's going to help with the local unemployment. Two, it's going to help create some clean energy. And three, it's going to bring some benefit to the Town of Wawayanda.	
		<u>Response:</u>	
		The benefits from the Project are acknowledged. See response to Comment Number L-8-1 .	
1.0 Executive Summary 1.1 Introduction (Project Benefits)	H-11-1	I am in support of this project for a number of reasons. One of the reasons specifically is the jobs that it's going to create. Everybody talks about the 600 construction jobs, I also want to mention, when we are busy, our unions are busy we can bring more apprentices into the programs. We draw people from the community where they come from. The other reason is that I am involved in about 4 or 5 other projects like this. We are currently completing one out in Yaphank, Long Island and just starting one in Albany, New York, Rennselear. The projects built are very successful. The ones that are completed in the area are very successful. The communities have been happy with it. So I don't think it should be a problem. So the Boilermakers are in favor of it.	
		Response: The benefits from the Project are acknowledged. See response to Comment Number L-8-1.	

		Response to Comments on Section 1.0 – Executive Summary
DEIS Section	Comment Number	Comment/Response
1.0 Executive Summary 1.1 Introduction (Project Benefits)	H-12-1	Among the members that we represent, a couple of years ago we signed up right next door the Town of Wawayanda Highway Department. One of the things that not only our members in the Highway Department but throughout Wawayanda are concerned about, that there are not enough tax rateables in this town. That's having a very bad effect, for example, when we go into negotiations, we need to get more money out of the town simply because are so taxes for land. We believe this project will have a very good impact for the Town of Wawayanda homeowners who have to pay that land tax.
		And as my colleagues in the labor unions, Sam Fratto, and the rest of the guys here are saying, it's going to create a lot of good jobs for two years, it's going to bring a lot of money into this area. Money leads to money. So hopefully there will be more work involved than justmore jobs involved than just the 25 jobs that will be left at the end of it.
		Response:
		The Project will represent a significant new source of revenue for the Town via its PILOT agreement which is currently being negotiated among the Orange County IDA, Town of Wawayanda officials, and CPV Valley.
1.0 Executive Summary 1.1 Introduction (Project Benefits)	Н-13-1	It's going to be a clean system. And we need the work in the area, and I think it's going to benefit everybody. **Response:*
		The benefits from the Project are acknowledged. See response to Comment Number L-8-1 .
1.0 Executive Summary 1.1 Introduction	H-18-1	Will this plant replace a less efficient facility that is currently serving this area and contributing more pollution to our regional atmosphere? My understanding is that it will not. *Response:*
		The Project will not literally replace another existing facility. However, the Project will cause higher air emitting electric generating facilities to run less often, and, therefore, have fewer air emissions.
		See the response to Comment Number PB1-7 for a full discussion of this topic.

	Response to Comments on Section 1.0 – Executive Summary		
DEIS Section	Comment Number	Comment/Response	
1.0 Executive Summary 1.4 Project Overview (Fuel)	Н-18-2	Is the diesel fuel back-up generating component to this project absolutely necessary, or are there alternative less toxic considerations that could be substituted in its place? Since this power plant, as the others in our region, that provide electricity to the main power grid will go off-line from time to time, can the other plants on the grid manage the power needs of this community or this area during those periods as I understand is the case with Indian Point, which is a much larger facility. This would considerably reduce CPV's project cost; eliminate the need for diesel fuel storage; and consequent effects and hazards; ensure greater compliance with EPA regulatory standards; reduce the probability of fines and the greater atmospheric toxicity caused by diesel fuel emissions. But most importantly it would mean a cleaner facility. It might even expedite favorable EPA consideration of this project.	
		<u>Response:</u>	
		Natural gas will be used as the primary fuel with ultra-low sulfur distillate oil limited to serving as a back-up fuel for reliability purposes. Use of the back-up fuel will be limited to the no more than the equivalent of 720 hours per year per combustion turbine. This back-up fuel is needed 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. In the past, there have been periods when the electric system operators did not have generators available because of a natural gas interruption. This created scarcity of supply in the market which in turn created high prices. Also, certain natural gas utilities require that power facilities they serve have a back up fuel source. Orange and Rockland, the local gas distribution company, has this requirement in their service rate for power generating facilities.	
		The ultra-low sulfur distillate oil to be used as a backup fuel is much cleaner than the fuel oil that is used for home heating. The ultra-low sulfur distillate oil will have a sulfur content no greater than 15 parts per million (ppm), equivalent to 0.0015% sulfur by weight. In contrast, home heating oil in the northeast has typically had a sulfur content on the order of 2,000 ppm, equivalent to 0.2% by weight.	
		The ultra-low sulfur distillate oil will be stored in a 965,000-gallon storage tank, which will have secondary containment capable of retaining the entire contents of the oil tank plus an additional 10% (110% containment). In addition, all the fuel piping outside of the containment area will be double walled. The tank system will be designed in conformance with the requirements of the State's Petroleum Storage Facility Regulations (6 New York Code, Rules and Regulations (NYCRR) 614), State and Town Building Codes, and the Town's Building Inspector. The tank will be tightness-tested before use and inspected on a regular schedule. Automated level monitoring and leak detection equipment will also be installed. This system will include an audible alarm in the Facility control room as well as overfill detection and prevention devices.	
		Please also see the response to Comment Number L-8-4 .	

	Response to Comments on Section 1.0 – Executive Summary			
DEIS Section	Comment Number	Comment/Response		
1.0 Executive Summary 1.3 Purpose and Need	H-19-2	But first of all, why do we need an electric generating plant in the Town of Wawayanda? There is no immediate need for that right now. **Response:* See response to *Comment Number L-6-90*.		
1.0 Executive Summary 1.1 Introduction (Project Benefits)	H-20-1	I am from the community. Everyone basically I think agrees on the fact that we need clean energy; we need jobs. I am all for this if it's going to provide clean energy and jobs to the community, which there is no question we need. So, it's a win/win situation as far as I can see. **Response:* The benefits from the Project are acknowledged. See response to *Comment Number L-8-1*.		
1.0 Executive Summary 1.1 Introduction (Project Benefits)	H-21-1	I grew up in this town. Went into the Marines. Just got out about a year and a half ago. We need this thing to happen for us because it's the most important thing. If we don't change, don't adapt, we are going to lose. So I think we should all think about that. If we get stuck in trying to keep our place safe and clean and away from traffic and away from I don't know, whatever you would call the city element, to keep it the way it always was, we are going to get overrun and we are going to pay for power from somewhere elsewhere when we could have got it much cheaper here. Response: The benefits from the Project are acknowledged. See response to Comment Number L-8-1.		

Response to Comments on Section 1.0 – Executive Summary			
DEIS Section	Comment Number	Comment/Response	
1.0 Executive Summary 1.5 Discretionary Approvals	Н-25-3	I just hope everything is looked at very intensely and how this will impact everybody in the community and the children of the community as well. Response: Under SEQRA, the environmental impacts of the Project must be thoroughly examined. To approve the Project, the Planning Board must find that all significant adverse environmental impacts have been avoided, minimized, or mitigated to the extent practicable. Together, the FEIS and the permit applications demonstrate that the health and safety of residents, and the environmental resources in the site area will be protected.	

Response to Comments on Section 2.0 – Project Description		
DEIS Section	Comment Number	Comment/Response
2.0 Project Description	PB1-13	Page 2-15. The text notes that wastewater will be returned to the Middletown Sewage Treatment Plant or to the treatment plant outfall pipe. The applicant should indicate if an option has been finalized and we defer to Allegiance Resources or Pat Hines to determine if the option selected has been analyzed sufficiently. **Response:* See Section 2.5 of the FEIS for a summary of the wastewater discharge options and status.
2.0 Project Description	PB1-14	Figure 2-6. This is inconsistent with the text which describes 130 feet of clearing and transmission line poles in excess of 100 feet. We note this figures provides a very good perspective on the scale of this project and how it relates with the surrounding area including the DOT facility. **Response:*
		CPV Valley has now selected an underground option for the electric transmission interconnection. Figure 2-7A (Site Plan – 50 scale) and Figure 2-7B (Site Plan -100 scale) of the DEIS have been revised to show the electric transmission right-of-way on the Project site. The revised figures are included in the figure section of the FEIS. The full set of the site plans is provided in Appendix 5B of the FEIS. Figure 2-6 of the DEIS is a rendering of the primary Energy Facility structures.

		Response to Comments on Section 3.0 – Land Use
DEIS Section	Comment Number	Comment/Response
3.0 Land Use General	PB1-4	Consistency with the Town's adopted Comprehensive Plan has not been adequately addressed.
		Response:
		The DEIS adequately addresses the Town's Comprehensive Plan, specifically in Section 3.4.1.
		Section 12.1 of the Town's Comprehensive Plan (dated August 2006) describes and presents a Plan Recommendations Map which, according to the Comprehensive Plan, "was created based on a set of environmentally-based criteria, existing land use and zoning, current land use planning principles, and residents' preferences. The entire Town was evaluated with respect to conservation characteristics and development characteristics. Then, the land use and zoning maps were overlaid, and the resulting map depicts the areas where specific uses, zoning designations or open space are proposed." As shown on the Plan Recommendations Map, the Project site clearly falls within the area of the Town specifically designated for Mixed Commercial land use.
		The Comprehensive Plan further states that "The purpose of the map is to graphically depict where the various relationships through natural and built processes should occur. Although the Plan Recommendations map is generalized and is not meant to convey the specific boundaries of future zoning districts, the spirit of this map should be reflected in the revised Zoning Map. Exact zoning district boundaries and definitions will be determined when the Zoning Code is revised."
		Consistent with this recommendation, the Town of Wawayanda adopted a revised Zoning Map on May 7, 2009 that reflects the Plan Recommendations Map. It should be noted that the revised Zoning Map is nearly identical to the Plan Recommendations Map included in the Town's Comprehensive Plan.
		Figure 3-2 of the FEIS shows the new zoning within a 1-mile radius of the Project site. The Project site is located within the area of Town re-zoned as Mixed Commercial (and previously zoned as Manufacturing Industrial (MI)). According to the Town of Wawayanda Zoning Law, Adopted on May 7, 2009 (as amended in November 2010), the MC district is "to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses, and manufacturing." The Schedule of Zoning District Regulations for the MC District lists "Essential Services/Utilities" and "Industrial Uses" as permissible with a Site Plan Approval. The proposed Facility is consistent with the uses associated with the new MC district.
		The only exceptions required for the Project are due to the height of certain elements of the Facility. The revised Zoning Law allows height exceptions as special uses where fire fighting capacity will not be threatened and buffers and setbacks are also proportionally greater. The variance required is related to dimensional considerations and not basic facility use.

		Response to Comments on Section 3.0 – Land Use
DEIS Section	Comment Number	Comment/Response
3.0 Land Use	PB1-15	Page 3-4. In the description of land use in the northeastern quadrant, there is mention of the former Calpine project. This not a current land use and it is not clear why this project is mentioned or why it is relevant to this SEQRA review.
		Response:
		The statement was included to provide a reference point for the public. The Calpine Wawayanda Energy Center was fully approved by the PSC and its site was in proximity to the CPV Valley Energy Center – Both projects are of similar size and scale.
3.0 Land Use	PB1-17	Page 3-15. In the subsection on <i>Operation</i> , the text accurately describes how the site it bounded by 1-84 and Route 6. However, it fails to mention that this places the facility in a highly visible area for people traveling along these roadways. Additionally, Exit 3 from I-84 essentially serves as a gateway to three communities: Wawayanda, Middletown and Goshen. There is no evaluation of how this land use will impact this gateway area for these three towns.
		Response:
		This response appropriately focuses on potential visual and traffic impacts, since these are the impacts that could affect travelers using Exit 3. Other than traffic and visual impacts, there are no other impacts that the Project could pose to motorists using Exit 3. Due to the distance of Exit 3 from the proposed Facility, there are no concerns or impacts related to other human or environmental resources, including noise, safety, storm water, water quality, wetlands, etc.
		Visual impacts along I-84 are addressed in Section 5.4.2.4 (Potential Visual Impacts Along I-84) of the DEIS.
		The discussion of visual impacts along I-84 is concentrated on the approaches between Exit 3 and approximately 600 feet west of the Route 6 overpass. In the vicinity of Exit 3 and as one drives westbound past the site towards the Route 6 overpass, there will be views of the Facility. Most of the site is open on the I-84 side, with a few intermittent mature trees, and very few trees along the edge of the highway to impede views. Along this section, the highway is at approximately the same elevation as the Project site. The right lane of westbound I-84 is located about 200 feet from the Steam Turbine Generator (STG) Building. As one approaches the site driving in the I-84 eastbound direction advancing towards the Route 6 overpass, views of the Facility will likely be very minimal. Most of the Facility would likely be obscured by a forested area that exists along the highway in this area. Those who would see this view would be motorists traveling at high speeds along I-84 immediately

Response to Comments on Section 3.0 – Land Use		
	nment mber	Comment/Response
		adjacent to the site, and thus such viewers would see the Facility for only a short period of time. Figure 5-14B of the DEIS provides a photosimulation of the Facility from I-84 in close proximity to the site. Drivers on I-84 will have a full view of the building structures, exhausts stacks, and switchyard from this viewpoint. However, the view will be for a short period of time as they drive past the Facility location. In response to comments received on the DEIS, additional photosimulations were prepared to assess the visual impacts of the Facility and the above ground electric transmission line from I-84. Two different locations along I-84 were evaluated, one from the westbound entrance ramp to I-84 at Route 17M and the other on I-84 eastbound west of the site. Appendix 4 of the FEIS includes the panoramic photosimulations for each location. CPV Valley is pursuing the option of installing the electric transmission lines underground within the Project site as discussed in Section 2.3 of the FEIS. With the underground option, the poles and wires associated with an above ground installation would not be visible. As a result, the transmission wires would have no impact on the perception of this area as a gateway to these towns. The Facility will not impact the use of Exit 3 as a gateway to the three communities listed in the comment. The traffic impacts associated with the construction and operation of the Project were thoroughly studied, and the results are presented in Section 8.0 (Traffic and Transportation) of the DEIS. The intersections of I-84 ramps and Route 17M were studied as part of the traffic analysis conducted for the DEIS (see Section 8.4.2 Study Locations, page 8-4 of the DEIS). The Level of Service at the represented study intersection will not be affected by construction related traffic or traffic associated with operating the Facility. The off site construction activity involving crossing of Route 17M will use directional drilling to minimize the potential for traffic disruption. Construct

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
3.0 Land Use	PB1-18	Page 3-16. There is discussion of the physical separation of the facility to the workforce housing site Horizons at Wawayanda. Here the text notes there is "separation consisting of primarily tree cover". The DEIS states that there will be clearing of 130 feet of trees and vegetation for the above ground transmission lines. It would seem that this "tree cover separation" does not accurately reflect the post construction condition of the site or any associated impacts. This statement appears to be inconsistent with the discussion of construction impacts on page 3-17.	
		Response:	
		There will still be a physical separation (approximately 0.5 mile) consisting primarily of tree cover between the main facility and Horizons at Wawayanda. Figure 2-7A (Site Plan -100 Scale) of the FEIS shows the location of the right-of-way on the Project site. The text cited above is in reference to the energy facility itself.	
		CPV Valley is pursuing the option of installing the electric transmission lines underground within the Project site as discussed in Section 2.3 of the FEIS. With the underground option, the poles and wires associated with the above ground option described above would not be visible and therefore will not impact Horizons at Wawayanda.	
3.0 Land Use	PB1-19	Discussion of impacts. Industrial uses are generally considered "incompatible" with adjacent or nearby residential uses. In fact, this is one of the reasons zoning became a common practice in land use planning. The Town's Zoning recognizes issues of incompatibility in the description of the intent of the MI zone. This district is intended to provide areas for various industrial and manufacturing enterprises within well-planned complexes on parcels with good access to the regional transportation system, "where they can be free of potentially incompatible land uses" [emphasis added]. This facility is proposed for an area in which development has already occurred. This development include residences adjacent to and nearby to the project site, including the workforce housing complex, and the Pine Hill cemetery. There is no discussion of how this industrial project will impact the experience of those burying their loved ones or those who visit the cemetery. This project will alter the existing agriculture/open space land use to one with large industrial buildings which will produce noise, air pollutants and visible vapors. In our opinion, this project creates incompatible land uses and this impact needs to be disclosed in this section.	
		Response:	
		Comment PB1-19 is out of date given the Town's enactment of a new Zoning Ordinance in 2009, and states an unsubstantiated opinion which is not supported by either the Town's Comprehensive Plan or Zoning Ordinance.	
		Land use impacts are discussed in Section 3.3.2 of the DEIS (see pages 3-15 through 3-22). The DEIS	

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
		acknowledges the residences adjacent to and nearby the Project site and discusses the proposed landscaping to help mitigate/buffer the impacts of the facility (see page 3-16).	
		The Project will not impact the use of the Pine Hill Cemetery as a cemetery. The potential noise and visual impacts to the Pine Hill Cemetery are addressed in Section 4.7.1 of the DEIS as follows:	
		Pine Hill Cemetery	
		The Pine Hill Cemetery is located directly adjacent to the Project site to northeast. The Pine Hill Cemetery will not be disturbed by the construction of the proposed CPV Valley Energy Center. Construction activities may result in some noticeable noise due to proximity to the Project site; however, these impacts will be relatively short in duration and would not be expected to result in significant adverse impacts due to their temporary nature. No change in access to the cemetery is anticipated due to construction activities.	
		There will be views of the Facility stack and structures from the cemetery. A good portion of the cemetery is located within the theoretical viewshed as shown on Figure 2-2 in Appendix 4 of the FEIS (and Figure 5-1B of the DEIS). The existing vegetation between the cemetery and Facility will help to buffer the views to some extent. Based on the noise assessment described in Section 10.0 (Noise) of the DEIS, once the Facility is operational there will be no increases in noise levels at the Pine Hill Cemetery. Table 10-5 shows the noise impact results. The noise analysis was based on late night ambient noise monitoring, when ambient noise levels are the lowest.	
		The Project is appropriately sited in a location recently re-zoned as Mixed Commercial (MC) (and previously zoned as Manufacturing Industrial (MI)). According to the Town of Wawayanda Zoning Law, Adopted on May 7, 2009, the MC district is "to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses, and manufacturing." The proposed Facility is consistent with the uses associated with the new MC district.	
		The recently adopted Zoning Map was developed based on the recommendations of the most recent Comprehensive Plan. The Comprehensive Plan targeted the area of the Project site for Mixed Commercial use. See Section 12.1 of the Comprehensive Plan, which states: "Figure 12-1, Plan Recommendations Map, was created based on a set of environmentally-based criteria, existing land use and zoning, current land use planning principals and residents' preferences. The entire Town was evaluated with respect to conservation characteristics and development characteristics. Then, the land use and zoning maps were overlaid, and the resulting map depicts the areas where specific uses, zoning designations or open space are proposed."	

	Response to Comments on Section 3.0 – Land Use			
DEIS Section	Comment Number	Comment/Response		
3.0 Land Use	PB1-20	Mitigation. Related to the item above, this section needs to acknowledge that the incompatible land use issue is unmitigatable. **Response:*		
		The proposed use of the Project site is compatible with its current and previous zoning, and therefore additional mitigation is not required. The Facility has been sited to maximize to the extent possible the physical separation from offsite residences on Route 6 and Kirbytown Road. The landscaping incorporated into the Facility's site plan would further buffer the physical plant from offsite land uses.		
3.0 Land Use	PB1-21	Page 3-17. This section of the DEIS treats the electrical interconnect almost as a separate part of the action. This is not appropriate as the entire action, in totality, needs to be evaluated. Further, the section on impacts indicates these will be compatible with the existing transmission lines in the area. Again, this is not disclosing the potential incompatible land uses, particular for the workforce housing project and the cemetery. The mitigation sections needs to acknowledge there will be un-mitigatable impacts. **Response:*		
		The general outline of the DEIS sections, dividing the discussions among major project components (e.g., Energy Facility, Electrical Interconnect, Laydown Areas, etc.), is consistent with typical practices under SEQRA. The interconnections including the water lines are individually discussed in this section and in all the other media specific sections of the DEIS to clearly demonstrate these components of the project have been addressed. The Scoping document calls out the interconnections separately as well. See Section 4.1.1 (e) of the Scoping Document.		
		The proposed use of the Project site, including the electric transmission lines, is compatible with its current and previous zoning. When CPV Valley was proposing that the electric transmission line be overhead on the Project sire, the primary impact of the electric transmission line on the Facility site was visual. A visual impact assessment of the above ground electric transmission lines was conducted, and is included in Appendix 4 of this FEIS.		
		CPV Valley is pursuing the option of installing the electric transmission lines underground within the Project site as discussed in Section 2.3 of the FEIS. With the underground option, the poles and wires associated with the above ground option would not be visible.		

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
3.0 Land Use	PB1-22	Page 3-19. There is additional discussion of the workforce housing project along with the Bradley Corners hotel project and it states these sites would be buffered from the project through landscaping and wooded open space on both properties. This needs to be clarified and quantified. Is the applicant proposing to landscape the workforce housing and hotel site? How much buffering exists on these parcels? The text uses the phrase "soften the views from this location". Describe in more detail how the view is "softened" as this is a large industrial complex with very tall box type buildings. We are unable to tell from the site plans where the clearing of trees and other vegetation will occur for the transmission lines. We note the Visual Assessment does not provide any photosimulations of the electric transmission lines.	
		Response: The sentence discussed above is in reference to the landscaping and existing vegetation on the Project site, as well as the distance from the Project site to the Bradley Hotel and Horizons at Wawayanda. The Project is not proposing to landscape the hotel or Horizons sites. Appendix 4 of the FEIS includes photosimulations that show the above ground electric transmission line option	
		and Section 3.0 of the FEIS provides a summary of the results. Nevertheless, CPV Valley is no longer pursuing the above ground transmission line option.	
3.0 Land Use	PB1-23	This project has the potential to affect the future development potential of vacant land due to visual, water quality, air quality and community character impacts. There needs to be additional qualitative and quantitative analysis of these lands including a map showing the parcels, the zoning district they are located in overlaid on the theoretical viewshed map.	
		Response:	
		Figure 3-7 of the DEIS shows the vacant parcels within a 1.5 mile radius of the Project site on an aerial photograph. Section 3.3.2.7 of the DEIS provides the impact assessment for the undeveloped parcels. The discussion was based on the zoning map and viewshed maps overlaid onto the vacant parcel figure.	
		Approximately one-hundred fifty four parcels appear to be undeveloped (vacant) within a 1.5 mile radius of the Project site. The undeveloped parcels are those listed as vacant in the Orange County Office of Real Property parcel data (ESRI, 2008; Orange County GIS, 2008). There are 107 parcels in the Town of Wawayanda (1215.55 acres), 14 parcels in Wallkill (101.94 acres), and 33 parcels in the City of Middletown (137.48 acres).	

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		The total area of the undeveloped parcels is 1454.97 acres.		
		Figure 3-7A of the FEIS includes the recently revised zoning districts overlaid on the vacant parcel map. Approximately half of the vacant parcels are located in Mixed Commercial, Town Commercial, General Business, Light Industrial, Heavy Industrial, or light Enterprise zones. The remaining vacant parcels are zoned as Suburban Residential, Agriculture Residential, Single Family Residence, or Multi-Family Residence. As shown in Figure 3-7A, most of the residential parcels are located further away from the Project site to the north, south, or east.		
		Figure 3-7B of the FEIS shows the vacant parcel map overlaid onto the theoretical viewshed of the Facility stacks and electric transmission lines. As shown from this figure, most of the vacant parcels are not within the Project's viewshed.		
		As shown on this figure, the entire 1.5 mile radius study area, with the exception of the western edge, is located within a Priority Growth Area identified in the Orange County Comprehensive Plan. This area is designated as such due to its proximity to Middletown and access to I-84 and New York Route 17M, which is a roadway corridor designated for Intensive Business Development. The Orange County Comprehensive Plan describes interchange areas as key locations for development given their immediate Interstate highway accessibility. Therefore, the plan is supportive of major land use facilities, including regional retail centers or industrial, business, or office parks, in interchange areas.		
		Construction activities may result in limited increases in noise and traffic for undeveloped land that is in proximity to the Project site; however, these impacts would be relatively short in duration and would not be expected to result in significant adverse impacts due to their temporary nature. For undeveloped land at greater distances from the Project area, construction activities are not expected to have noticeable impacts with regard to noise and traffic due to distance from the Project location.		
		Operation of the Facility will not diminish the future land use of the parcels identified as vacant on Figure 3-7B. 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 energy Facility 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 separating the proposed physical plant from off-site land use development. Route 17M, a four lane arterial roadway, forms the easterly edge to the broader facility site. Highway commercial oriented land uses dominate development along Route 17M. The energy facility as an industrial activity will not have any adverse impact to the highway commercial land uses. There may be some views of the Facility from some of the vacant parcels as shown on Figure 3-7B. Most of the parcels with potential views of the Project are those in close		

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		proximity to the Project site, and are zoned as Mix Commercial and Commercial. Operation of the Facility will not result in any significant noise or traffic impacts to land uses outside the Project site boundary.	
3.0 Land Use	PB1-24A	Section 3.4. This section does not adequately describe the information contained the Town of Wawayanda Comprehensive Plan. The purpose of a comprehensive plan is to be a guide for decision making on public and private development proposals. It compares how a community appears at the time of the adoption to what it vision is for the future. This is important document and the FEIS needs to: **Response:**	
		The DEIS does appropriately address the Town's Comprehensive Plan in Section 3.4.1, Comprehensive Plans. It also must be noted that the comment is outdated because the Town of Wawayanda enacted a comprehensive revision to its Zoning Ordinance subsequent to issuance of the DEIS. As a later-enacted law, developed after consideration of the comprehensive plan, the revised Zoning Ordinance now constitutes the most recent expression of the Town's official land use regulations, goals, and policies. The requested excerpts from the Comprehensive Plan are, nevertheless, provided below.	
3.0 Land Use	PB1-24B	*Include the vision statement found on page 1.2;	
		Response: The following Vision Statement is written as if it was 2020 and one was describing the "ideal" future town. In the Year 2020, the Town of Wawayanda is a community of productive agricultural areas, attractive residential neighborhoods, cohesive hamlet centers, and protected undeveloped lands. These places are suitably connected by accessible regional highways and local streets, adequately served by public transportation, and linked by a network of sidewalks and trails. Wawayanda offers convenient access to all that the region—including surrounding counties, the New York metropolitan area and upstate New York—has to offer. It is recognized for the continuing legacy of its rich agricultural heritage, the excellence of its schools, the quality of its public safety and community services, the abundance of its historic resources and recreational opportunities, the productivity of its local businesses, and the beauty and health of its natural environment. The exceptional quality of life contributes to the economic growth and prosperity of the Town and the region, assuring that Wawayanda can continue to meet the increasingly diverse needs and expectations of its residents in a fiscally sustainable manner.	

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3.0 Land Use	PB1-24C	*Identify the goals from each section of the Plan;	
		Response:	
		Section 4 – Residential Areas	
		4.1 GOALS	
		 To encourage appropriate residential development while preserving Wawayanda's rural character. To provide opportunities and incentives for development of a variety of housing options. To balance these interests—maintaining character while encouraging growth—by encouraging specific land uses and densities in appropriate areas. 	
		Section 5- Commercial and Mixed-Use Areas	
		5.1 GOALS	
		 To improve the appearance of commercial corridors and mixed-use areas. To promote incremental commercial and residential growth in the hamlet centers. 	
		Section 6 – Economic Development	
		6.1 GOALS	
		 Stimulate economic development to produce a more balanced self-sustaining community with a broad tax base and lower taxes. 	
		 Maintain a balance of residential development, commercial development and open space. 	
		Section 7 – Natural Resources	
		7.1 GOALS	
		 To protect Wawayanda's important natural resources such as the Black Dirt area, aquifer recharge areas, scenic views, steep slopes, floodplains and unique ecosystems. 	

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		To preserve the Town's natural environment and open space while providing for both active and passive recreational opportunities.	
		Section 8 – Community Services	
		8.1 GOALS	
		 To maintain Wawayanda's high level of public safety services. To maintain the public utility infrastructure and make improvements where needed. To work with adjoining municipalities on infrastructure studies and initiatives such as the Mid-County Water Study. 	
		Section 9 – Transportation	
		9.1 GOALS	
		 To prioritize community character and transportation needs when making decisions that impact the Town's roads. 	
		 To consider the relationship between the transportation and proposed land uses to ensure that the network is adequate. 	
		 To invest in needed roadway infrastructure, improved access to public transportation, and enhancements to non-motorized modes of travel such as bicycling and walking. 	
		To coordinate with New York State DOT on transportation planning-related activities.	
		Section 10 – Recreation and Historic Resources	
		10.1 GOALS	
		To expand the Town's active and passive recreational resources. To preserve and protect existing historic and sultural resources.	
		 To preserve and protect existing historic and cultural resources. To provide additional activities for children and teenagers. Activities for these age groups are scarce. 	

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		Section 11 – Agriculture	
		11.1 GOALS	
		 To recognize and help sustain the Town's agricultural economy. To ensure that agriculture remains a significant component of the local economy. To promote acquisition of land, or the development interest in land, by the Town as part of a Farmland and Open Space Conservation Program. 	
3.0 Land Use	PB1-24D	*Address the information contained in Section 2.1 <i>Promoting Economic Development and Diversity</i> , particularly the statement regarding "encouraging clean low impact commercial enterprises";	
		<u>Response:</u>	
		The Comprehensive Plan States:	
		"Wawayanda residents have expressed concern about high tax rates, particularly within the Minisink Valley Central School District, where the Commercial ratio of taxes is 11% compared to the Goshen School District (38%) and Middletown School District (48%). In order to diversify the tax burden on Town residents, the Town Board has formed an Economic Development Committee to work with Local and County offices to facilitate bringing alternative sources of revenue to Town with Commercial Development. In the future, the Town must take a more proactive position towards economic development by encouraging clean low impact commercial enterprises, working to attract and retain target industries, and preparing shovel-ready sites for development or redevelopment. These are all items that need attention."	
		The Project will 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 plan.	
		One of the recommendations in the Town's plan is to balance commercial and industrial growth in the Town's three school districts. The Project is located in the Minisink Valley Central School District. The Minisink Valley School District currently has only 11% of its taxes coming from non residential sources, as compared with 38% (Goshen School District) and 48% (Middletown School District) for the other districts.	
		The Project will result in an estimated capital investment of \$800 million for the development and construction of	

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		the Facility. Based on the existing marketplace factors, the Project will significantly boost the local economy by generating new jobs regionally, increasing income, and increasing local revenues. When completed, the CPV Valley Energy Center will represent a long-term source of additional revenue for the Town of Wawayanda, Orange County, and the Minisink School District through a Payment in Lieu of Taxes (PILOT) agreement. During its first two decades in operation, the Project is estimated to provide significant additional revenue that can be used to help reduce or stabilize tax burdens, provide funding for infrastructure maintenance, as well as support school and community service operations. The Project will provide significant financial benefit to the Town of Wawayanda, while requiring minimal supporting Town services. The New Hampton Fire Company will receive financial assistance from the Project because of its location with the district.	
		The Applicant has demonstrated that the Project is a clean commercial enterprise. The CPV Valley Energy Center will be built using the most advanced and environmentally-conscious fossil fuel-fired power generation technology currently available and will be one of New York's cleanest natural gas power plants. Due to the efficiency of natural-gas combined cycle technology, the CPV Valley Energy Center is expected to help reduce dependency on the use of older and less efficient generators that currently serve the region, thus improving the region's environmental profile. The Project's innovative design also incorporates advanced dry cooling technology, which utilizes air instead of water for cooling and reduces water use by approximately 85% as compared to an equivalent facility using wet cooled technology. In addition, as part of the effort to minimize the use of water resources, the Project intends to use treated (filtered and disinfected) effluent from the nearby wastewater treatment facility located in the City of Middletown.	
3.0 Land Use	PB1-24E	*Address Section 2.2 -Maintaining and Supporting Wawayanda's Rural Character, specifically the "desire to maintain the scenic quality and rural character of the Town": *Response:	
		The Comprehensive Plan States:	
		"Throughout the public outreach process, Wawayanda residents expressed their appreciation and desire to maintain the scenic quality and rural character of the Town and its hamlets. Wawayanda's agricultural heritage benefits residents both directly—as a source of income—and indirectly—as an aesthetic and cultural resource. As development pressure increases, it is important to recognize these features that have retained and attracted Town residents. The existing character of the Town's hamlets, scenic roads, and agricultural features should be preserved through the development and application of design guidelines."	
		As shown on the revised Zoning Map adopted on May 7, 2009, the Mixed Commercial district is concentrated in	

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		the north eastern and north central portion of the Town of Wawayanda, consistent with the recommendations of the Comprehensive Plan.	
		Having a condensed zone designated for intensive non-residential development allows for the remaining portions of Town to be maintained as Agriculture Preservation, Agriculture Residential, and Suburban Residential as shown on the map. This Project is extremely beneficial to the Town's Comprehensive Plan in that it will develop a minimal amount of land but produce a significant source of revenue for the Town.	
		As stated previously, the Project site is located within the Mixed Commercial district. According to the Town of Wawayanda's Zoning Law, the Mixed Commercial District is intended to provide the Town with a principal area for intensive non-residential development such as office, retail, service business and manufacturing.	
3.0 Land Use	PB1-24F	*Address the recommendation (p. 5.1) to "Establish more prominent gateways into Town" (We note Route 6 and 17M considered "important focal points");	
		<u>Response:</u>	
		The Comprehensive Plan States:	
		"Establish more prominent gateways into Town. The entrances into Wawayanda do not express a sense of community pride and historical perspective. The degree to which a community shapes this first impression can say a great deal to visitors about the values of residents and businesses. The entrances into Wawayanda from Route 17M and Route 6 should be noted by distinctive signage and landscaping. These sites should be treated as important focal points with a more prominent sign and plantings welcoming visitors into the community and giving drivers a signal to reduce speed.	
		The Town should work with local businesses and volunteers to maintain the gateways. Volunteers may be willing to assist in maintaining the signage and landscaping. A local business organization (or perhaps a future Business Improvement District) should be encouraged to contribute funding for streetscape beautification program in the gateways."	
		The Project will be located in the area of Town specifically targeted for intensive non-residential development such as office, retail, service businesses, and manufacturing. The Project includes a landscaping plan that is intended to enhance the appearance and natural beauty of the historical agricultural use of the existing 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. Land to be left as buffer outside the Facility fence line will be	

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		restored to its current open space use after construction.
		Other landscaping elements include adding trees and shrubs in areas on the site. To the maximum extent practical and where 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; one shade tree (minimum caliper of three inches at four feet) will be planted for each 40 foot distance of lot frontage. The Project's front lot will be covered with grass, trees, and shrubs.
		The Project will not interfere with any community efforts to provide more prominent signage or plantings to welcome visitors to the community.
3.0 Land Use	PB1-24G	*Address the recommendation (p. 7.4) to "Protect water quality in Wawayanda's lakes and streams";
		Response: The Comprehensive Plan States:
		"Protect water quality in Wawayanda's lakes and streams. Currently, NYSDEC has varying levels of protection for Class A, B and C streams. Trout streams have an additional layer of restrictions. The majority of Wawayanda is drained by three major streams and their tributaries, Indigot Creek, Catlin Creek, and Monhegan Creek. The Wallkill River drains the black dirt area of Wawayanda and forms the eastern border with the Town of Goshen, running northeast to the Hudson River. Other important water bodies include Joe Creek, Rutgers Creek, and Ridgebury Lake. These waterways provide additional wildlife habitat and recreational opportunities within the Town. The Orange County Open Space Plan identifies the Wallkill River, one of four priority watersheds in the County, as impacted by both "muck and upland agriculture, two landfills on its banks, numerous sewage treatment plant discharges, and continuous urban development." While the Wallkill River only touches the boundaries of Wawayanda, several of the Town's streams drain into the river, and thus affects the larger Wallkill River watershed."
		The Project is not anticipated to adversely impact the water quality of Wawayanda's lakes and streams. Industrial wastewater from the Facility will be discharged to the City of Middletown's Sewage Treatment Plant under a SPDES Permit that will be issued by the NYSDEC. On-site stormwater will be discharged into an on-site extended detention basin providing quality/quantity control, and this discharge will also be subject to NYSDEC

 $^{^{2}}$ Orange County Department of Planning, Orange County Open Space Plan, 2004 $\,$

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		permit conditions. The Project minimizes and mitigates impacts to on-site wetlands to the maximum extent possible. Approximately 0.35 acres of wetland impacts will be mitigated through an on-site replication area of 0.7 acres, providing a wetland replication area of two times the size of the area that will be impacted. Of the 122 acre site, the Project will only use a 30 acre portion leaving the rest of the site in its existing or	
		natural conditions, including approximately 70 acres of wetlands.	
3.0 Land Use	PB1-24H	*Identify the roads recommended to be noted as view corridors (pg. 9.7)	
		Response:	
		The Comprehensive Plan States:	
		"Recognize scenic roads. There are opportunities throughout the Town to recognize the unique character of scenic roads and preserve them as view corridors with a "Rural Road Standard." The purpose of such a standard is to remind future public officials and NYSDOT that certain roads need to maintain a rural or scenic character.	
		The Plan recommends that the following roads be codified as view corridors in the zoning map:	
		 Guinea Hill Road Greeves Road Lime Kiln Road (County Route 93) Gardnerville Road County Route 12 Stony Bar Road Mt. Orange Road Delmar Hill Road South Centerville Road The "Flats" section of Route 284 Ridgebury Road Jogee Road Post Road 	

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		 The following are some possible design aspects for a rural road standard: Retaining the country curves and hills. Keeping trees, fences and fields near the road. Avoid installing streetlights except at dangerous intersections and in commercial areas and where Town deems otherwise necessary." The Project will not involve alterations of any of the identified corridors, and will not interfere with the implementation of the recommended design aspects for them. The visual impact assessment conducted for the DEIS fully evaluated the recognized scenic roads identified by the Planning Board. See Section 5.2.3.3, Visually Sensitive Resources of Local Concern, of the DEIS (page 5-7). Specifically, the following roads listed above were evaluated: Guinea Hill Road, Greeves Road, Stony Bar Road, Mount Orange Road, Delmar Hill Road, and Post Road, in addition to several others recommended by the Planning Board. Only Greeves Road was determined to have a potential view of the Facility. Such view would be very limited as shown from the photosimulation presented in the DEIS (see Figure 5-15A and Figure 5-15B of the DEIS). 	
3.0 Land Use	PB1-25	The Comprehensive Plan makes a recommendation for the Town to research potential types of agriculture-based tourism. Will this project present a barrier for the Town in pursuing this strategy in terms of the community image because this large industrial proposal is in a prominent area? **Response:* The Project site was previously zoned for Manufacturing Industrial use and has recently been rezoned (as of May 7, 2009) as Mixed Commercial (MC). According to the Town of Wawayanda Zoning Law, Adopted on May 7, 2009, the Mixed Commercial district is "to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses and, manufacturing." The Schedule of Zoning District Regulations for the Mixed Commercial District lists "Essential Services/Utilities" and "Industrial Uses" as permissible with a Site Plan Approval. The Facility is consistent with the uses associated with the new Mixed Commercial district. There are large areas of Town zoned for Agriculture Business, Agriculture Preservation, and Agriculture Residential. As shown on the newly adopted Zoning Map, the Mixed Commercial district is concentrated in the north east and north central portion of the Town and is separated from the Agricultural Preservation and Agriculture Business districts.	

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3.0 Land Use	PB1-26A	The Comprehensive Plan recommends all Zoning districts need to be examined in terms of size and allowable uses. Specifically, it states (p. 12.3) "Currently, the MI district in Wawayanda is large and allows certain uses (i.e., "other manufacturing" or mining) that is vague or not in line with the Town's vision". This type of language in the plan would presents challenges for the proposed action to justify how it is consistent with the plan. It is not difficult to imagine that the crafters of this plan would also consider other industrial uses in a similar way as "other manufacturing" is described above.	
		<u>Response:</u>	
		See response to Comment Numbers PB1-4 and PB1-24.	
3.0 Land Use	PB1-26B	Additionally, the Plan includes a recommendation to "Control nuisances attributable to noise, odors, and unsightly uses in all districts" Once again, the Plan is providing guidance to decision-makers which challenge the consistency of this project with the Plan.	
		Response:	
		The Project does not pose uncontrolled nuisances related to noise or odors. Regarding unsightly uses, significant visual impacts that cannot be fully mitigated due to the facility's size have been disclosed in the DEIS, but the facility will not be unsightly; it will be well maintained and landscaped, and the grounds will be kept neat and clear of litter. Most of the site will be kept in its existing state and no unsightly uses including outdoor storage, additional parking lots, waste disposal or similar noxious uses will be allowed on site. Further, the Project is a permitted use in the MC1 district, pursuant to the revisions to the Zoning Ordinance enacted after, and based upon, the Comprehensive Plan.	
3.0 Land Use	PB1-27	The Orange County Comprehensive Plan (OC Plan) provides a regional perspective and guidance for decision makers. In the DEIS, limited attention is paid to certain perspectives offered by the document. The DEIS notes the project site is located in an Intensive Business Corridor. This is adjacent to a residential/agricultural corridor and this particular Project site appears to be close to the area where the corridor changes from one to another. The guidance offered by the OC Plan is as follows: "Specific roadways may exhibit the characteristics of different corridor types for separate segments along their route. Poor transitions between different segments along the same corridor weaken the character of the corridor. Strategies for enhancing community character could focus on these transition points." This project presents a challenge as the scale of this project, specifically the size and design of the buildings makes it difficult to offer	

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		transition which "enhances community character".	
		<u>Response:</u>	
		The proposed Project is an example of a well-designed industrial facility. The site plan has been developed, in large measure, to avoid impacts to wetland resources, cultural resources, water resources and adjoining land uses, as identified by the Lead Agency and Involved Agencies. The Project is consistent with the Orange County Comprehensive Plan.	
		The Route 17M interchange with Exit 3 of I-84 has developed into a highway commercial oriented land use area. Given the accessibility afforded by the intersection of a major interstate facility (I-84) with a primary arterial roadway (Route 17M), the development of available land for business and commercial use is consistent with County Plan use objectives. With respect to the overall attractiveness of the setting, the Facility's physical plant utilizes only 30 of the 100 plus acre site. The unused portions of the site will remain predominantly in their current condition.	
3.0 Land Use	PB1-28	The OC Plan describes Intensive Business Corridors as follows: "These corridors include most of the primary or larger scale retail, service and related business activity in the County. Here road capacity needs to provide access and mobility for a large number of travelers while improvements may be needed for pedestrian accessibility, streetscape design, and access management." This description varies from the description offered in the DEIS on page 3-25. Specifically, the DEIS adds phrases such as "major land uses" and "industrial".	
		Response:	
		The wording on page 3-25 of the DEIS is from the language in the Comprehensive Plan defining an Interchange area.	
		As stated on Page 3-23 of the DEIS, the Orange County Comprehensive Plan, Strategies for Quality Communities (Orange County Department of Planning, 2003) applies primarily to county and municipal land acquisitions, improvements, or capital projects, but the plan does include a land use plan for managing and directing growth. The land use plan organizes development by designating priority growth areas; establishing countywide, community, and neighborhood centers; transportations hubs; interchanges; crossroads; and corridors.	
		The Strategies for Quality Communities primary guiding strategy builds from the "Urban-Rural Concept" from the 1987 County Comprehensive Plan that anticipated future development trends and defined land use priorities.	

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		This Orange County Comprehensive Plan continues to recognize the importance of the role of historic communities while adding new considerations for transportation hubs, interchanges, crossroads, and corridors linking these with historic centers. Together these land use components are called Priority Growth Areas.	
		The Project site is located in a Priority Growth Area near the County Center of Middletown, at a designated Interchange of the intersection of I-84 and New York Route 17M on a roadway corridor designated for Intensive Business Development. As stated on Page 8 of the Plan, Priority Growth Areas are general areas of preference for future development to maximize efficiency of infrastructure services and to minimize open space losses.	
		Page 35 of the Plan defines Interchange areas as key locations with immediate Interstate highway connections that are also defined by the presence of major facilities including regional retail centers or industrial, business, or office parks. The presence of these high-volume destinations encourages the need for well-designed, expanded mix of land uses including housing and intermodal transportation improvements. As stated on page 36 of the Plan, Intensive Business corridors include most of the primary or larger scale retail, service, and related business activity in the County. Here road capacity needs to provide access and mobility for a large number of travelers while improvements may be needed for pedestrian accessibility, streetscape design, and access management.	
		The vision for quality presented in the Plan (Page 52) includes implementing strategies that enhance the quality of the built environment while protecting natural environments. Strategies and priorities for industrial/office parks include:	
		 Encourage property owners to make their lands ready for economic development projects by conducting environmental reviews that lead to generic environmental approval. 	
		 Promote well planned economic development projects in local municipalities in order to create job opportunities. 	
		 Encourage the development of well-designed industrial and office parks that provide attractive settings for business. 	
		 Encourage municipalities to support coordinated economic development through preparation of overall business park plans that can be implemented incrementally. 	

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3.0 Land Use	PB1-29	The OC Plan offers strategies, priorities and recommended action on a variety of areas including industrial/office parks (p.52). Many of strategies and priorities are noted in the Town of Wawayanda Comprehensive Plan. While the DEIS touches on some of these, the DEIS does not address bullet 3 -"Encourage the development of well-designed industrial and office parks that provide an attractive setting for business".	
		Response:	
		The proposed Project is an example of a well-designed industrial facility. The site plan has been developed, in large measure, to avoid impacts to wetland resources, cultural resources, water resources and adjoining land uses, as identified by the Lead Agency and Involved Agencies.	
3.0 Land Use	PB1-30	Due to the deficiencies regarding the Town of Wawayanda Comprehensive Plan and the OC Plan as noted above, the section on potential impacts and mitigation is inadequate. An analysis of consistency (i.e., impacts) with these two plans including the additional information requested above needs to be included in the FEIS. In our opinion, there are impacts to land use and the mitigation section should identify any un-mitigatable impacts as well as any mitigation measures offered.	
		Response:	
		The DEIS adequately addresses the referenced Comprehensive Plans. The Project does not pose un-mitigatable impacts related to consistency with the Comprehensive Plans.	
		As stated previously, the Project site is located within an area specifically targeted for mixed commercial use. The Project site is appropriately located in a Priority Growth Area identified in the Orange County Comprehensive Plan. This area is designated as such due to the proximity to Middletown and access to I-84 and New York Route 17M, which is a roadway corridor designated for Intensive Business Development. The Orange County Comprehensive Plan describes interchange areas as key locations for development given their immediate Interstate highway accessibility. Therefore, the plan is supportive of major land use facilities including regional retail centers or industrial, business, or office parks in interchange areas.	

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3.0 Land Use	PB1-31	Page 3-32. The discussion of the NYS Bike Route 17 does not accurately reflect the visual simulation of a point along the route -please see viewpoint 11 taken from Route 6. In regards to the simulation, the DEIS states (p.5-19), "The planting of trees along the southern edge of Route 6 will help to soften the impact, but the scale of the facility is such that at this distance no landscaping can fully mitigate the impact from this distance." This needs to be addressed and the impact needs to be acknowledged.
		Response:
		Bicyclists riding through the portion of Route 6 located within the Mixed Commercial District will experience views of the existing and future commercial, industrial, and other allowed uses. Figure 5-12A and Figure 5-12B in the DEIS provide an existing condition photograph and photosimulation of the Facility from Route 6, respectively. The Town Zoning has affirmed that this area was to be used for commercial and industrial purposes recognizing that there was to be a bicycle path along here. The proposed Project will therefore, have no greater potential impact than other permissible uses in the District.
3.0 Land Use	PB1-32	Zoning compliance -Section 195-9. The applicant did not address item B of this section and the DEIS incorrectly states "blinking or flashing lights" are a prohibited use. The Zoning states "blinking or flashing signs" are a prohibited use.
		Response:
		The incorrect reference to blinking or flashing "lights" is noted; the text should reference blinking or flashing "signs."
		An updated Zoning analysis reflecting the new Zoning Law is provided in Section 3.7 of the FEIS.
3.0 Land Use	PB1-33	Page 3-52 states a variance will be required for a number of buildings/facilities. We believe the applicant does not need a variance for the water storage tank as it is listed as an exemption in § 195-11B. The Planning Board should verify this with Mr. Bavoso. There should be some clarification regarding the buildings which will require a variance. The building references should be consistent with the descriptions on page 2-5. The applicant has not indicated there is a need for a variance for the steam generation building which is noted to be 102 feet high on page 2-5.
		<u>Response:</u>
		An updated Zoning analysis reflecting the new Zoning Law is provided in Section 3.7 of the FEIS. As stated in

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		the analysis, the air-cooled condenser, and generation building will require area variances to be granted under this section. The proposed height of the two stacks is 275 feet. The stacks, which are chimneys above 100 feet in height, may also require area variances or may be permitted as special uses provided they are sufficiently setback from adjoining properties and meet all state and federal air safety standards. Since the stacks will be greater than 200 feet above ground surface, the Project provided notification to the Federal Aviation Administration (FAA). The FAA conducted an aeronautical study and determined that the proposed stacks would not be a hazard to air navigation when marked or lighted in accordance with FAA requirements.	
3.0 Land Use	PB1-34	We defer to Allegiance Resources to provide guidance on compliance with § 195-19C & D.	
		Response:	
		No comments on this issue were received from Allegiance. The DEIS adequately addresses these items.	
3.0 Land Use	PB1-35	We direct the Planning Board's attention to § 195-19H which states "No emission of fly ash, dust fumes, vapors, gases or other forms of air pollution shall be permitted on a regular or continuing basis which can cause <i>any damage to health</i> , <i>animals, vegetation, or other forms of property</i> or which can cause any excessive soiling" [emphasis added]. The DEIS states that the project will be in compliance with all applicable federal and state air standards. We defer to Allegiance Resources for their verification however; we note that compliance with standards does not always mean there will be no impact. No doubt your Zoning has set a very high standard in regards to air pollution. If this project cannot achieve this standard (e.g., the DEIS states project can emit 95 tons/year of PM 2.5), then the Planning Board should work with Allegiance to identify additional mitigation strategies (if appropriate) to ensure all impacts have been minimized to the maximum extent practicable.	
		Response:	
		An updated Zoning Analysis is provided in Section 3.7 of the FEIS. The sentence underlined below has been added to the description to further demonstrate how the Project complies with the cited provision of the Zoning Law.	
		Subsection H. No emission of fly ash, dust, fumes, vapors, gases and other forms of air pollution shall be permitted on a regular or continuing basis which can cause any damage to health, animals, vegetation, or other forms of property, or which can cause any excessive soiling.	

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
		Section 9.0 (Air Quality) of the DEIS provides a detailed assessment of potential air impacts from the Project. Information provided in Section 9.0 demonstrates that the Project will comply with:	
		 Primary NAAQS established by EPA for criteria pollutants; Secondary NAAQS established by EPA for criteria pollutants; Annual Guideline Concentrations (AGC) and Short-term Guideline Concentrations (SGC) established by NYSDEC for non-criteria pollutants. 	
		Primary NAAQS have been established at levels to protect human health for even sensitive populations, such as the elderly or infants, while secondary NAAQS have been established to protect against adverse effects on animals, plants, and property. The secondary NAAQS for PM-10 and PM-2.5 have been set to protect against adverse impacts, including those associated with soiling and material damage. NYSDEC guideline concentrations have been established at levels to protect workers and the general public from adverse exposure to toxic air contaminants.	
		A detailed assessment of Air Quality impacts is provided in Section 9.0, Air Quality, of the DEIS. The Project will operate under a permit that will be issued by the U.S. EPA and NYSDEC, and therefore, these permit conditions will ensure the project emissions will not cause damage to health, animals, vegetation, or other forms of property.	
3.0 Land Use	PB1-36	Page 3-56. In the discussion of compliance with § 195-19K, the DEIS does not disclose there are un-mitigatable impacts as noted in Section 5.0. There should be consistency between the two sections along with comments from George Janes on visual should also considered in the FEIS.	
		Response: The interpretation of the visual impact associated with the Facility from the viewshed locations presented in the DEIS was prepared with input from the Planning Board's visual consultant. In similar fashion, photosimulations presented in the FEIS were prepared with input from the visual consultant.	

		Response to Comments on Section 3.0 – Land Use
DEIS Section	Comment Number	Comment/Response
3.0 Land Use	PB1-37	Page 3-63 to 3-64. The discussion of compliance with the City of Middletown Code §389-29 does not offer any evidence to support the conclusion. If this evidence is supplied in another section, then it should be appropriately referenced here. If not, additional information needs to be provided.
		<u>Response:</u>
		Section 12.3.3 of the DEIS discusses the Project's compliance with the Middletown's sewer use limits. Table 12-6 of the DEIS lists the Project's projected wastewater discharge concentrations compared to City of Middletown's Sewer Discharge limits, demonstrating compliance with the City's standards.
3.0 Land Use	PB1-38	The FEIS should explain whether the release of "slug discharge" is a possibility as a result of this project. If it is, then additional information such as frequency and estimated amounts should be provided. If it is not, then it should be stated.
		<u>Response:</u>
		The comment is referring to page 3-64 of the DEIS, which is describing compliance with the following provision of the City of Middletown Sewer Code:
		§ 389-32. Notice of slug discharge required. Notice must be given immediately to the Commissioner of Public Works of any slug discharge into the system.
		Timely notice will be given to the Commissioner of Public Works in the event of any slug discharge.
		The Project will not release any "slug discharges."
3.0 Land Use	PB1-39A	Page 3-65 offers several scenarios (cases) for wastewater discharge. We defer to Allegiance Resources to determine if the analysis provided is appropriate. We note the pH of the discharge appears to be relative close the upper threshold number noted in § 389-29.
		Response:
		Page 3-65 of the DEIS is a discussion of the Facility's wastewater discharge cases under the various Facility operating conditions as summarized in the water balance diagrams (see Table 12-1 and Figure 12-1 of the DEIS) and how such discharge would not require Superintendent approval as it does not contain the characteristics listed in Section 389-33 A of the City of Middletown Sewer Regulations. The Facility's wastewater discharge quality, including hydrogen ion concentration (pH), will be in compliance the City's limitations.

		Response to Comments on Section 3.0 – Land Use
DEIS Section	Comment Number	Comment/Response
3.0 Land Use	PB1-39B	Please note the text in the last paragraph refers to "Item B", but item B is not articulated in the DEIS.
		Response:
		The comment is in reference to pages 3-64 through 3-66 of the DEIS.
		The comment is in reference to Item B of Section 389-33 of the City of Middletown Sewer Code. Section 389-33B of the City of Middletown Sewer Code, states the following:
		B. Where necessary, in the opinion of the Superintendent, the owner shall provide, at his expense, such preliminary treatment as may be necessary to:
		(1) Reduce the biochemical oxygen demand to 300 parts per million by weight;
		(2) Reduce objectionable characteristics or constituents to within the maximum limits provided for in § 389-29; or
		(3) Control the quantities and rates of discharge of such waters and wastes.
		By meeting the City's discharge limits, the wastewater discharged by the Project will not exceed any of these thresholds.
3.0 Land Use	PB1-40	Does CPV have a letter from the City of Middletown Superintendent which concurs with the evaluations made in the DEIS?
		<u>Response:</u>
		The preferred alternative for process makeup water is treated effluent from the City of Middletown's Sewage Treatment Plant. Discussions are underway with the City of Middletown to finalize the terms of the agreement for the grey water supply from the City's Sewage Treatment Plant.
		The City commissioned a study to determine the technical viability of the City's treatment facility providing its effluent to the Project for its needs. The study concluded that there is significant volume of water available and that the City can provide the Project with its required water needs. A copy of the study has been provided to the Town of Wawayanda Planning Board.

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
3.0 Land Use	PB1-41	§389-53 indicates there are discharge limits for certain pollutants; however, the DEIS does not include the list or the limits but simply states there will be compliance. There needs to be evidence to support this statement.	
		Response:	
		Section 12.3.3 of the DEIS discusses the Project's compliance with the Middletown's sewer use limits. Table 12-6 of the DEIS lists the Project's projected wastewater discharge concentrations compared to City of Middletown's Sewer Discharge limits. The Project's discharge would be in compliance with the discharge limitations presented in Table 12-6 of the DEIS if the discharge were to be discharged to the headworks of the Middletown Sewage Treatment Plant.	
3.0 Land Use	PB1-42	Section 3.5.2.3 is likely to need revision once the items noted above have been addressed. We believe additional mitigation measures related to air quality may need to be considered.	
		Response:	
		As stated in this section, no mitigation is necessary because the Project will comply with all applicable municipal codes.	
3.0 Land Use	PB1-43	The conclusion for Section 3.4 (pg. 3-68) should not appear after Section 3.5.	
		Response:	
		This conclusion is intended for the entire Land Use and Zoning Section. As stated previously, the Project site has been rezoned as Mixed Commercial. Thus, the conclusion to the Section 3.7 of the DEIS should read as follows:	
		The Project has been sited on a parcel zoned as Mixed Commercial (previously zoned as industrial) and hence is in keeping with the Town of Wawayanda's desire to foster commercial and industrial development at this location. The impacts on nearby land uses will in general be minimal and will be mitigated through Project design and construction procedures that will minimize disruption of nearby land uses during the construction process (Refer to Section 3.3.2 of the DEIS).	

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
3.0 Land Use	L-5-25	We recommend that any onsite farm fields that remain accessible and free of structures after the project's completion be rented or leased out local fanners for continued production after construction. Maintaining the viability of agriculture is an important goal of Orange County and therefore keeping fields in active production is a high priority.	
		Response:	
		CPV Valley will maintain the unused portion of the Project site in its current condition.	
		If site plan approval is granted to CPV, it will approve only certain activities on the site, and therefore, no other activities will be authorized. To the extent areas of the unused portions are specifically identified for mitigation (such as landscaping or wetlands mitigation), conditions can be imposed to ensure that those areas are secured and maintained for such purpose. No additional, or broader restrictions are necessary.	
3.0 Land Use	L-6-1	The impacts of this project on the agricultural and horticultural districts in the Town of Goshen, including the economic value of the crops and crop yield, must be addressed. These areas are within 5-mile study area of the project, and the property is within a County Agricultural District.	
		Response:	
		The nearest portion of the Town of Goshen is located 1.7 miles from the Project site.	
		Figure 3-8 of the DEIS shows the agricultural districts within a 5 mile radius of the Project site. The figure is based on data from the New York GIS Clearing House - New York State Department of Agriculture and Markets. There will be no impacts on agricultural or any horticultural land within the Town of Goshen as a result of the project. Section 9.5.4.1 of the DEIS (Impacts on Soils and Vegetation) discusses potential impacts on sensitive vegetation in the area due to air emissions from the Project. The analysis described in Section 9.5.4.1 showed that air emissions from the Project would not adversely affect vegetation in the area. As an air cooled facility that will use grey water for makeup process, the CPV Valley Energy Center will have no impact on regional water supplies.	

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
3.0 Land Use	L-6-2	The Applicant must provide an analysis regarding the impacts to the Heritage Trail (in addition to the proposed portion through the Town of Wawayanda), Craigville Park, and the proposed park on Maple Avenue in the Town of Goshen. These recreational facilities are within the 5-mile radius that the Applicant was required to study. The analysis of these facilities should include the impact on the drinking water available at those locations and an examination of the health impacts owing to the inhalation of the pollutants contributed by this project.	
		Response:	
		The Project will not impact the recreational use of the Heritage Trail located in the Town of Goshen. The entire Heritage Trail was evaluated in the visual assessment. Based on the viewshed mapping (see Figure 2-2 of Appendix 4 of the FEIS), the portion of the Heritage Trail within the Town of Goshen is not located in the Project viewshed and therefore, will not have views of the Facility.	
		Craigville Park, located between Oakwood Drive and Brookside Drive in the Town of Goshen, is located over 6 miles from the Project site, and therefore is outside the study radius. Regardless, the Project will not impact this park due to distance and physical separation from the Project site.	
		The Facility will not impact drinking water supplies in any way. The Facility utilizes air cooled technology. Process water makeup will consist of treated grey water from the City of Middletown Sewage Treatment Plant.	
		Section 9.6.7 of the DEIS provides an air quality impact analysis of all identified sensitive receptors within a 5 mile radius of the facility. Maximum project impacts were predicted for NO ₂ , CO, PM ₁₀ , and SO ₂ . All predicted impacts at identified sensitive receptors are below Significant Impact Levels established by the EPA and NYSDEC and also well below National Ambient Air Quality Standards (NAAQS). The NAAQS were established by EPA to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. (http://www.epa.gov/air/criteria.html)	
		The proposed Maple Avenue Park could not be located, as this park is not listed on the Town of Goshen's website as of May 28, 2009. http://www.goshenparksandrecreation.org/index_files/Page711.htm However, the land along Maple Avenue in Goshen is not located within the viewshed area of the Project. Therefore the Project would not be visible from this area.	

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
3.0 Land Use	L-7-10	As far as Orange Environment is concerned, we proposed during the last Master Plan Review, about 3 years ago, that the Town should adopt more stringent watershed and river protection buffers and well head protection ordinances because as this community continues to grow and possibly allow for the expansion of heavier industrial operations like this plant, natural resource protection needs to increase as well. As far as we know, more stringent resource protection ordinances have not been adopted to date. This would be a perfect time to do so!!	
		<u>Response:</u>	
		Comment noted. This comment is directed towards Town legislation, not towards the Project. The Facility will be designed with measures directed towards protecting surface and groundwater resources. A formal Spill Prevention, Containment and Countermeasures Plan (SPCC Plan) will be implemented with Facility personnel fully trained in its execution.	
3.0 Land Use	L-8-8	What about the loss of the "rural quality" of our town, which is still cherished by many people? Are there really people here in town who would prefer to see the CPV power plant over the fields, hills, wetlands, and trees that now grace our highways – oh, ok, I can guess who the few might be who would say they do, but they are certainly not the norm and do not constitute a majority, based on the Town Survey conducted not so long ago. Can we count on CPV to provide a plan to offset this loss? Some more landscaping, trees and a design that does more to preserve as much as possible the character of the original viewshed would be good; perhaps some walking trails.	
		<u>Response</u>	
		The Project is being proposed in the area of Town that is specifically targeted for mixed commercial development. The Project site has recently been rezoned (as of May 7, 2009) as Mixed Commercial. According to the Town of Wawayanda Zoning Law, the Mixed Commercial district is "to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses and, manufacturing." The zoning for this area was developed based on the recommendations of the Town's Comprehensive Plan (See Section 12.1 of the Comprehensive Plan).	
		As shown on the revised Zoning Map adopted on May 7, 2009, the Mixed Commercial district is concentrated in the north eastern and north central portion of the Town of Wawayanda, consistent with the recommendations of the Comprehensive Plan. Having a condensed zone designated for intensive non-residential development, allows for the remaining portions of Town to be maintained as Agriculture Preservation, Agriculture Residential, and	

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
		Suburban Residential as shown on the map.	
		The Project will only utilize 30 acres of the total 122 acre Project site (less than 24%), and the remaining land (76% of the parcel) will be left in its natural or existing state. The Project includes a landscaping plan that is intended 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. Land to be left as buffer outside the Facility fence line will be restored to its current open space use after construction.	
3.0 Land Use	L-9-1 H-16-1	In perusing our sadly lacking town website, it is impossible for the regular taxpaying citizen to access information that they have a basic right to. For instance: The newly adopted Comprehensive Plan is not on the website. The reason that this is important is because first and foremost, NY zoning regulations require that "all land use regulations of a community must be consistent with the plan, and, any provision of a community's municipal code concerning land use, such as site plan, must be consistent with the goals, objectives, and strategies set forth by the comprehensive plan. Other governmental agencies, such as state agencies, must consider the local comprehensive plan in shaping projects within the locality." How many PB members are thoroughly knowledgeable about the Comprehensive Plan that this town spent such a hideous amount of money on? Nowhere in there does it make provision for the equivalent of a power plant.	
		Needless to say, this project does not fall into a category acceptable to the Comprehensive Plan and can therefore be challenged at higher levels for several reasons.	
		<u>Response:</u>	
		The comments about the Town's website and accessibility of the Comprehensive Plan are not comments about the Project.	
		The Project is being proposed in an area of Town that is specifically targeted for mixed commercial development. The Project site has recently been rezoned (as of May 7, 2009) as Mixed Commercial (MC). According to the Town of Wawayanda Zoning Law, the MC district is "to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses and, manufacturing." The zoning for this area was developed based on the recommendations of the Town's Comprehensive Plan (See Section 12.1 of the Comprehensive Plan), which specifically targeted this area of Town for Mixed Commercial land use. See Section 12.1 of the Comprehensive Plan, which states: "Figure 12-1, Plan Recommendations Map, was created based on a set of environmentally-based criteria, existing land use and zoning, current land use planning principals and residents' preferences".	

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
		Also, the Project will only utilize 30 acres of the total 122 acre Project site (less than 24%), and the remaining land (76% of the parcel) will be left in its natural or existing state.	
3.0 Land Use	L-11-1	The power plant proposed by CPV Valley for the Town of Wawayanda is clearly an inappropriate project for our town. The only prospective long-term benefit for the townspeople is the possibility of 25 permanent jobs, some of which would be too technical for the majority of residents. Otherwise, every aspect of this project would be a detriment to the health, property values and quality of life of the town residents. This is precisely the kind of project that the residents overwhelmingly rejected when, in the town-wide survey, they expressed a desire that the Town maintain its rural tone. **Response:* See response to **Comment Numbers L-8-8.**	
3.0 Land Use	L-11-2	Although the proposed site is zoned industrial, it is next to a low-cost housing development and directly across the street from a residential neighborhood. Wawayanda is so small, that a project of this kind is virtually right next to many of the Town's residential streets. It belongs in a town that has miles of open fields not a tight residential community such as ours. **Response:*	
		The energy facility structures are proposed to be located in the far south-west portion of the 122-acre parcel, providing a buffer from the residences along Route 6 and Horizons at Wawayanda apartment complex. There is a physical separation of approximately 0.5 mile between the main facility structures and the apartment complex.	
3.0 Land Use	L-14-1	I moved to the area due to the rural and scenic location. I feel Wawayanda has kept the importance of this characteristic as a true value for the town. I feel that this plant would take much of that characteristic away. Right as you turn on Route 6, "Welcome to Wawayanda" with a huge facility with huge stacks and plumes that can go to 500 meters tall and 10,000 meters long and let's not forget the huge electric wires and lines that will also welcome everyone into our rural setting. I do not feel that this is the location that something like this should be located.	
		In looking at the Town's Final Comprehensive Plan, it does not indicate that this is what was intended. Some examples are as follows:	

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
		2.2 MAINTAINING AND SUPPORTING WAWAYANDA'S RURAL CHARACTER Throughout the outreach process, Wawayanda residents expressed their appreciation and desire to maintain the scenic quality and character of the Town its hamlets. Wawayanda's agricultural heritage benefits residents both directly-as a source of indirectly-as an aesthetic cultural resource. As development pressure increases, it is important to recognize these features that have retained and attracted Town residents. The existing character of the Town's hamlets, scenic roads, and agricultural features should be preserved through the development application of design guidelines	
		4.3 RECOMMENDATIONS Implement appropriate land use regulations to ensure that housing is built to standards that preserve rural character in designated areas. A Significant portion of Wawayanda is dominated by farmland; parcels are valued rural character and quality of life. However, residential development pressure is working way into these areas with more frequency. Approvals for any development should be considered in terms of impacts on the welfare of its citizens." As a result, a town's zoning law must comply with its Comprehensive Plan.	
		Safeguard Wawayanda's aesthetic quality and scenic vistas. By all accounts, the character is one of the qualities that its residents most value. However, if residential and commercial development is allowed to continue in its current manner, the rural character will be irrevocably damaged, as it has been in other parts of the region. This Plan recommends that Wawayanda implement visual quality ordinance and protect its natural resources as described in Section 7. In addition, adding scenic corridors to the Zoning Map will help to preserve the rural character and beauty that attract people to Wawayanda.	
		Define "rural character" and identify strategies for development that complement the definition. (4.3). The Town should implement "Rural Design Guidelines" for commercial and residential areas, including density and open space in the residential areas. Limit density near waterways and aquifer recharge areas (7.3.1). As stated above, the protection of groundwater must be a primary goal for the Town.	
		Response: Please refer to the response to Comment Number L-8-8 above regarding the Project's consistency with the Comprehensive Plan.	

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
		The proposed combustion turbine stack heights are typical for this type of facility. The stack heights are designed to limit local air quality impacts and do not exceed Good Engineering Practice stack height defined by EPA. The reference to very tall and very long visible plumes is based on the original visible plume modeling analysis that included conditions when natural occurring fog would be expected to occur and obscure any plume from the project. A revised summary excluding these hours was prepared (see Appendix 3A of the FEIS) and provides a more representative and meaningful estimate of likely visible plume effects.	
		The Project will not impact any of the view corridors identified in the Comprehensive Plan, and will not interfere with the implementation of the recommended design aspects for them. The visual impact assessment conducted for the DEIS fully evaluated the recognized scenic roads identified by the Planning Board. See Section 5.2.3.3, Visually Sensitive Resources of Local Concern, of the DEIS (page 5-7). Specifically, the following roads are listed as view corridors in the Comprehensive Plan and were evaluated in the DEIS visual impact assessment: Guinea Hill Road, Greeves Road, Stony Bar Road, Mount Orange Road, Delmar Hill Road, and Post Road, in addition to several others recommended by the Planning Board. Only Greeves Road was determined to have a potential view of the Facility. Such view would be very limited as shown from the photosimulation presented in the DEIS (see Figure 5-15A and Figure 5-15B of the DEIS).	
		With respect to impacts on water, the Project will minimize water use by using treated effluent from the City of Middletown Sewage Treatment Plant. In addition, the Project will discharge process water back to the City of Middletown Sewage Treatment Plant in compliance with any pre-treatment requirements and thus will not affect surface water quality. The Project will not discharge to groundwater and will have a SWPPP and a SPCC Plan in place to prevent impacts to surface and groundwater quality. CPV Valley is committed to operating the Facility in a safe manner, with systems in place for spill prevention and spill control and protection of the environment as a primary goal. The oil and hazardous materials required to support facility operation would include materials (e.g., natural gas, fuel oil, aqueous ammonia) that 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. Section 12.5 of the DEIS (pages 12-25 through 12-32) provides an overview of the techniques that would be used to minimize the potential for pollutants in stormwater runoff from the site during Facility operation. It addresses chemical storage areas, product delivery, plant maintenance, waste handling activities, vehicle maintenance, and stormwater pollution prevention (SWPP) and monitoring requirements. Secondary containment, that is, a second layer of engineering defense, is a key component of the Facility design. If a release were to occur, secondary containment features capture a release and prevent migration to soil, surface water, or groundwater.	

	Response to Comments on Section 3.0 – Land Use		
DEIS Section	Comment Number	Comment/Response	
3.0 Land Use	H-14-2	I live across the street from this project. And I just want the people to know that when this thing is built, it's going to define Wawayanda. We already got dumps, we already got junk yards; now you got power plants? I can't see the viability to this community. The cars going into Wawayanda, no more residential, no more clean buildings or anything. You are just going to define usyou have nothing but smoke stacks in here.	
		I have lived here for over 30 years. When this thing is built, I am pushed out of here. That's all I got to say.	
		Response:	
		The Facility will change the use of the Project Site from a vacant parcel previously used for agricultural to more of an industrial setting due to the large scale of the Facility structures. However, this type of development is allowed by the Town's Zoning Law. The zoning for this area is Mixed Commercial, which allows for industrial and essential/service uses.	
		The planting of trees along the southern edge of Route 6 will help to soften the views of the Facility; however, it is acknowledged that the scale of the Facility is such that at this distance no landscaping can fully mitigate the entire impact.	
		Please also see the response to Comment Number L-14-1 above.	
3.0 Land Use	H-16-1	New York zoning regulations require that, "All land use regulations of a community must be consistent with their comprehensive plan. And any provision of a community's municipal code concerning land use such as site plan must be consistent with the goals, objectives and strategies set forth by the comprehensive plan. Other governmental agencies, such as state agencies, must consider the local comprehensive plan in shaping projects within the locality."	
		Needless to say this project does not fall into a category acceptable to our comprehensive plan and can therefore be challenged at higher levels for several reasons.	
		Response:	
		The Project is consistent with the Comprehensive Plan. See responses to <u>Comment Numbers PB1-24A</u> <u>through PB-24H and L-9-1</u> .	

	Response to Comments on Section 4.0 – Cultural Resources		
DEIS Section	Comment Number	Comment/Response	
4.0 Cultural Resources	PB1-44	The DEIS states additional fieldwork was necessary to satisfy the NYS Office of Parks, Recreation and Historic Preservation (OPRHP). The Planning Board cannot reach a finding on cultural resources until OPRHP requirements have been satisfied and a determination of significance issued.	
		Response:	
		The results of the additional field work and final consultation with the OPRHP are included in Appendix 7 of the FEIS. As recommended by the OPRHP, additional shovel testing was conducted at two small areas on the Project site (A07119.000197 and A07119.000198). No significant archeological resources were identified. Consistent with the conclusions of the DEIS, no significant archeological resources have been identified on the Project site or off site interconnections. As such, no impacts to archeological resources will result from the construction, operation and maintenance of the Project. The OPRHP has concluded that the Project will have No Adverse Impact on properties that are listed or eligible for inclusion in the State and National Register of Historic Places as stated in their letter dated November 5, 2009 (see Appendix 7).	
4.0 Cultural Resources	PB1-45	The DEIS states CPV has requested recommendations from OPRHP regarding the Cooley Cemetery. Any recommendations made by OPRHP should be incorporated into the FEIS.	
		Response:	
		CPV Valley has received a consultation letter back from OPRHP dated April 13, 2009. See Appendix 7 of the FEIS. It is the opinion of the OPRHP that the avoidance measures proposed by CPV Valley for archeological resources are appropriate and that the Project will have No Adverse Impact upon properties in or eligible for inclusion in the State or National Register of Historic Places. For the Cooley Cemetery they indicate that the proposed fence will help protect the headstones from further deterioration.	

	Response to Comments on Section 4.0 – Cultural Resources		
DEIS Section	Comment Number	Comment/Response	
4.0 Cultural Resources	PB1-46	Page 4-16. In the discussion of noise as it relates to the Pine Hill Cemetery, the text indicates there will be some noticeable noise from construction. The text describes the impacts as "relatively short in duration". This needs to be explained more fully by indicating what is meant by the phrase and more fully describing what type of noise can be expected. **Response:** The phrase "relatively short in duration" is referring to the 24-month construction period. Section 10.4.1 of the DEIS describes the noise impacts associated with construction. Specifically, Table 10-4 provides construction noise levels at the Pine Hill Cemetery for the various phases of construction (e.g., site clearing, excavation, foundations, building assembly, finishing, etc.). The calculated construction noise levels were found to be well below existing daytime Leq (equivalent continuous noise level) noise levels at the Cemetery.	

	Response to Comments on Section 5.0 – Visual		
DEIS Section	Comment Number	Comment/Response	
5.0 Visual Resources	PB2-1	An important component of the action appears to be missing from the drawings and the site plan. The on-site overhead electrical transmission lines that are proposed to follow 1-84 on-site are not shown on the technical drawings (Figures ES-I, ES-2, SP-3, SP-4, SP-6 and others). They are not represented in the visual simulations, do they appear to be on the rendering on the cover and spine of the document. This appears to be an error in the submission. This error can be remedied by correcting these materials and including the transmission wires. In the visual simulation this would mean recreating the visual simulations so that they showed the entire action. For the viewshed map, it means assessing the materiality of the change in the viewshed with the added portion of the action, and the removal of vegetation required for the line that will no longer be screening the action and redoing the viewshed map should the differences prove material. Material differences may require additional visual analysis for viewpoints that were shown as having no views to the project.	
		A short section called "Visual Impacts Associated with Aboveground Electrical Transmission Line" is on page 5-21. This section, however, merely describes the wires in text and writes where they "will" or "may" be visible, and does not discuss visual impacts. This section is not supported by any viewshed mapping, visual simulations, renderings, or any evidence that would support any claims regarding impacts on visual resources.	
		If the action were changed so that these wires were buried, no additional materials would be required to describe these transmission lines for the purposes of visual resources.	
		Response:	
		The subject of this comment, the overhead wires, are now being placed underground, thereby eliminating all of their visual impacts. This change in the Project renders the comment moot.	
5.0 Visual Resources	PB2-2	Chapter 9, Air Quality, discloses in Table 9-29 ³ that the plume for the action can be over 10,000 meters long. This very long plume is not discussed in the Visual Resources section and the plumes simulated in photosimulation are 50 meters. Chapter 9 states:	
		"The apparent prediction of very long visible plumes [over six miles] for 3 to 4% of daylight hours is merely a reflection of the	

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	Response to Comments on Section 5.0 – Visual		
DEIS Section	Comment Number	Comment/Response	
		number of day light hours during the modeling period with ambient saturated conditions These long plumes should be considered an artifact of the modeling assumptions particularly the inclusion of hours with very high relative humidity when natural fogging would be expected to occur, thus obscuring any visible combustion plume." (Pg 9-74.) [Bracketed text added]	
		Further, Chapter 9 also discloses that the plume can rise over 500 meters vertically from the stack, and should be over 200 meters (about 655 feet) from the stack height (a total of about 940 feet) between eight and nine percent of day light hours. For comparative purposes, the Empire State Building is 381 meters tall. A longer plume is shown as Figure 5-20, but this example is still fraction of the size of these much longer plumes described in the Air Quality chapter.	
		Because of the materiality of a six mile long plume, extending more than three times higher than the proposed action additional discussion of the visual impact of the plume needs to be studied, analyzed and disclosed as a part of the FEIS. The expression artifactof modeling assumptions needs to be fully explained. Will the plume actually be visible for six miles, or will such plumes only occur when they are obscured, partially or completely, by fog? Will there even be a six mile long plume in reality or is it simply a glitch in the modeling system?	
		<u>Response:</u>	
		The model that was used for predicting visible vapor plume length and height relies upon the dilution of moist plume air with drier ambient air to determine when a plume would no longer be visible. If the ambient air is cold and moist, then the water vapor emitted by the combined cycle stacks may condense to form water droplets. This may produce a visible, white plume. As the plume travels downwind and mixes with the drier and cooler ambient air, water droplets in the plume would evaporate and the plume at some point would no longer be visible.	
		In modeling to estimate the extent of visible plumes, it is customary to exclude from the analysis those hours in which a plume would not actually be visible, such as hours with precipitation and/or fog, including hours when the ambient air is saturated or nearly saturated. Under these conditions, the mechanism used by the model to determine visible vapor plume length and height would not apply. If the ambient air is saturated, then no amount of mixing of saturated ambient air with the saturated water vapor plume will yield plume water vapor concentrations that are less than the saturation values. Under these conditions, the model will continue to predict visible plumes at all downwind distances considered along the plume path. The prediction of very long and high visible plumes for these hours when they would not actually be expected to occur is what was meant by the phrase "an artifact of modeling assumptions."	
		The visible plume statistics presented in Table 9-29 of the DEIS were based on all hours that were modeled over	

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		a 5-year period of meteorological data, including hours with naturally occurring fog and/or hours with saturated or near saturated ambient conditions. The very long ("six mile") and high visible plumes that were predicted for approximately 3 to 4% of daylight hours were associated with hours with saturated or near saturated ambient conditions.	
		In order to provide more meaningful results concerning the frequency and extent of visible plumes, a new summary was prepared that excluded hours for which natural occurring fog would be expected to occur (i.e., those hours with relative humidity ≥ 99%). These results are provided in a separate memorandum included in Appendix 3A along with a more detailed discussion and should be regarded as a more representative and physically meaningful estimate of likely visible plume effects.	
		The plumes presented in the photosimulations are representative of the most frequent category of predicted plumes (i.e., plumes of less than 50 meters in length).	
		The plume heights mentioned in the comment are not accurate. For clarity, the plume heights listed in Table 9-29 and in the revised table in the memorandum in Appendix 3A are heights above ground, not heights above stack top. They represent plume height, not plume rise.	
		See memorandum in Appendix 3A of the FEIS for a more detailed discussion of visible plume issues.	
5.0 Visual Resources	L-2-5	According to the Visual Impact Section (Section 1.7.3 page 1-12) of the DEIS, the greatest potential for viewing the facility is limited to the open areas in low-lying areas and higher elevations in the vicinity of the proposed generating facility site. These are areas where views are not obscured by topography, buildings, or vegetation. Many people will see the proposed facility's exhaust stack because of its height. The applicant's proposed mitigation includes the use of a neutral color (beige, according to Section 5.5.5 page 5-26.) for the plant façade installation of red lights on the exhaust stack (Federal Aviation Administration marking requirements), preservation of on-site natural vegetation to the extent possible, and the use of landscape planting for screening purposes	
		The DEIS visual analysis concentrates on the visual impacts associated with the proposed plant. There is limited discussion of the visual impacts of the overhead 345 kV transmission facility. While the five steel pole structures traversing the facility site range in height from 10-feet (Pole #1) to 130-feet (Pole #5) (DEIS Subsection 5.4.2.5 page 5-21), steel pole structures #2 to #5 will be more apparent to a large number of people traveling and living in proximity to the structures. There is the transition structure from overhead to underground at the site property line. The proposed transmission facility is underground from the property line to the interconnection to New York Power Authority's	

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	Number	(NYPA) Marcy South 345 kV transmission facility. The 1-84 and NY Route 17-M Interchange is a roadway corridor area designated for Intensive Business Development. This is a key location for development given the highway accessibility and is considered supportive of regional retail centers or industrial, business or office parks. The Town of Wawayanda's Comprehensive Plan seeks to channel commercial and industrial uses into these designated zones such as the Mixed Commercial Zone which includes the site for the proposed facility. The DEIS Section 17.0 Cumulative Impacts points out that according to the Town and/or the Orange County Planning Department, there are nine proposed projects in the immediate project area. While the site of the proposed facility is zoned for Manufacturing Industrial, the primary land uses proximate to the site are transportation—highways, commercial, undeveloped, and residential. The residents and those that work in the many businesses in the immediate area as well as travelers on 1-84, NY Route 17-M and the other roads in the immediate area will view the overhead facilities. According to the New York State Department of Transportation (July 2008) Traffic Volume Report, the estimated annual average daily traffic (AADT) volumes for vehicles passing the proposed facility are 32,000 AADT (estimated) for 1-84 and 39,300 AADT (estimated) for NY Route 17-M. The structures will be more than apparent to the viewers given the proximity of the overhead transmission structures to these roads. Traffic lights at the intersections of NY Route 17-M and Dolsontown Road/County Route 108 and Route 17-M and Sunrise Park Road and NY Route 6 would extend the duration of travelers' views of the overhead structures.	
		In our experience, underground placement of a transmission facility frequently occurs within the confines of the generating facility to reduce congestion of numerous overhead lines and then overhead placement occurs outside the generating plant-DPS Staff does not object to the underground placement from the generating plant to the interconnection with the New York Power Authority (NYPA) Marcy South transmission facility. However, given the number of travelers, workers and residents that will see the overhead structures, the duration of time during which viewers will see the overhead structures, the facts that the immediate area is slated for additional development, and which is the southerly entrance to Middletown, DPS Staff recommends that the transmission facility be placed underground for its entire length from the generating facility switchyard to the NYPA interconnection. **Response:** In responses to comments received on the DEIS, the visual impacts of the overhead electric transmission line have been further evaluated. Appendix 4 of the FEIS includes a Technical Memorandum that further analyzes the visual impacts of the above ground electric transmission line. This information serves to complement the	

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		information contained in Section 5.0, Visual Resources, of the DEIS. However, CPV Valley is now pursuing the option of installing the electric transmission lines underground within the Project site as discussed in Section 2.3 of the FEIS. With the underground option, the poles and wires associated with the above ground option described in Appendix 4 would not be visible. It should be noted that the cost of underground transmission cable can be significantly more expensive than overhead cable.	
5.0 Visual Resources	L-5-17	We recommend that the computerized renderings of the proposed facility be regenerated to include the proposed chain link fencing well as the electric transmission lines that proposed along 1-84. These renderings should be used consistently in the materials associated with this project in order to more correctly represent how the facility will appear. **Response:** The photosimulations with views of the electric transmission line have been updated to include the above ground electric transmission line. See response to **Comment Number PB2-1**. Appendix 4 of the FEIS includes a Technical Memorandum which further evaluates the visual impacts of the above ground electric transmission line. The chain link fence has been added to the photosimulation from I-84. The fence is barely visible in the rendering due to a dip in the topography that blocks the view of the fence on the left portion of the rendering and the small size of the fence in comparison to the Facility. See Figure 4B of Appendix 4. See Section 2.3 of this FEIS regarding the selection of the proposed underground option for the electric transmission line.	

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5.0 Visual Resources	L-5-18	We recommend that the landscape plan include additional vegetated buffers in order to visually soften the view of the proposed facility. Specific examples include but are not limited to, planting a line of trees along boundaries with 1-84 and Route 6 for the same reason. Priority should be given to native tree species that grow in substantial heights with a full canopy. Native evergreens may be an appropriate choice.	
		Response:	
		The landscaping plan will be dictated by local code. The landscaping plan has been revised to reflect tree plantings along Carpenter Creek that comply with Conservation Reserve Program guidelines. As they mature, these trees will eventually provide enhanced visual buffering of the Project. The revised landscaping plan is included in Appendix 5B of this FEIS. The landscaping of the final Project site plan will be addressed in the site plan review and approval process and will be in compliance with local code.	
5.0 Visual Resources	L-5-19	We appreciate the inclusion of downward-facing outdoor light fixtures, which will reduce the negative impact of the proposed project on the local visibility of the night sky. We suggest that all lighting be designed so as to minimize the amount of light projected off of the site including illumination of the night sky.	
		Response:	
		Site lighting will be incorporated into the Project design in order to accommodate site operations, security, access to the office, and shift operations. The Project's lighting plan has been developed in accordance with the International Dark Sky Standards in order to prevent off-site impacts and to limit regional light pollution in general. Illuminance levels will be the minimum required to ensure worker safety during routine operations and maintenance. The site lighting will also be designed to meet the standards of the Illuminating Engineering Society (IES) Lighting Handbook.	
		Lighting within the operational areas will consist of 400 watt Pulse Start Metal Halide (PSMH) fixtures mounted at 30-feet above grade. These fixtures will include full-cut-off optics to reduce unwanted glare and fugitive light. The fixtures will be oriented such that the emitted light is directed inwards toward the plant and will be controlled by light sensing switches.	
		Entry door and truck access doorway lighting are anticipated to consist of 70 watt PSMH and 100 watt wall lighting fixtures, respectively. These fixtures will also include full cut-off optics to reduce unwanted glare and fugitive light. The doorway fixtures will be located above the doors and directed downward. Photovoltaic cells will control these fixtures.	

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		Operational areas will remain lighted each working day until outdoor maintenance activities are completed. At that time, site lighting will be reduced to minimal, security levels. These measures will ensure that off-site impacts and general area light pollution will be minimized.
5.0 Visual Resources	L-6-4	The visual and other environmental impacts of the steam and smoke emitted from the stacks was not, and must be, studied. The visual impacts of the steam and smoke are as significant as the visual impact of the physical stacks. The height of the steam and smoke are higher than the stacks, requiring the radius of impacts to be greater. What are the impacts of the steam and smoke, and how is the Applicant going to mitigate the impacts from the steam and smoke? **Response:** Condensed water vapor exiting the stack is the only visual plume impact of a combined cycle plant which employs air cooled condensers. The plant stacks will not emit visible "smoke." Visibility of the water vapor plume was fully studied, and the results are presented in Section 5.4.2.8 (Visual Impacts Associated with Visible Plumes) and Section 9.6.5 of the DEIS. See figures 5-6B, 5-7B, 5-10B, 5-11B, 5-12B, 5-14B, 5-15B, 5-16B, and 5-20 of the DEIS, which show photosimulations of the Project including the water vapor plume. Plume length of 50 meters and rise of 32.5 meters was assumed in the photosimulations even though plume lengths would often be shorter or not visible at all depending on ambient conditions. Visible plumes of 50 meters or greater were predicted to occur for only about 6.7% of the daylight hours. The 5-mile radius study area is sufficient for studying the impacts of the plume. Figures 5-5A and 5-5B of the DEIS provide photographs of existing conditions and the proposed photosimulation of the Project at a point 2.9 miles from the Project site. As shown in Figure 5-5B of the DEIS, the Facility and plume cannot be seen from this location.
5.0 Visual Resources	L-6-5	The Applicant should study the visual impact of the height of the buildings and stacks from all along I-84 corridor where the buildings and stacks will be visible. This area contains significant scenic views that will be impacted by this project. *Response:*
		The DEIS does discuss the potential visual impacts along I-84. See Section 5.4.2.3 (Results of Daytime Photosimulations) discussion of Viewpoint 13 – I-84 (page 5-19), and Section 5.4.2.4 (Potential Impacts Along I-84).
		Also, please refer to Figures 5-14A and 5-14B of the DEIS— existing conditions photograph and photosimulation

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		from I-84.	
		In addition, Figure 5-1B of the DEIS and Figure 2-3 of Appendix 4 FEIS provides a viewshed map of the Project. From review of the pink area on this map, the reader can determine where along I-84 the Facility will be visible. The viewshed area was developed using a Digital Elevation Model as explained in Section 5.4.1 of the DEIS and is the theoretical geographical area where a person could potentially see the Project.	
		In response to comments received on the DEIS, additional photosimulations were prepared for the FEIS to depict the main Facility and above ground electric transmission line and poles and are included in Appendix 4 of the FEIS. Two locations were studied to represent views of the Project from each direction (east and west) along I-84.	
		As stated previously, CPV Valley is pursuing the option of installing the electric transmission lines underground within the Project site as discussed in Section 2.3 of the FEIS. With the underground option, the poles and wires associated with the above ground option described below would not be visible. Nonetheless, for purposes of completeness, the following paragraphs directly respond to the comment based upon the prior proposal for above-ground transmission on the Project site.	
		Figures 3-4A and 3-4B of Appendix 4 of the FEIS provide a panoramic existing conditions photograph and a photosimulation of the Facility and above ground electric transmission line at the entrance ramp at Route 17M heading west on I-84. As shown in the photosimulation, the upper portion of the Facility stacks can be seen above the tree line in the background of the photograph. Poles 2, 3, 4, and the riser pole (pole 5) are visible from this location. Pole 2 is furthest from the viewer, approximately 0.3 miles from the vantage point location; pole 3 is 0.2 miles away; poles 4 and 5 are approximately 490 and 480 feet away, respectively. In the near-field of the photosimulation, both the riser pole and Pole 4 are prominent and unscreened. They are larger in scale than other elements in the view and they break the established ridgeline. The lower portions of Poles 2 and 3 are partially screened by vegetation and their scale is mitigated by their distance from the viewpoint. The visual impact of the transmission pole structures and wires is mitigated by the typical duration of the view and the purpose most people have for traveling to this view. Most viewers will only experience this view for a short period when entering the highway. Further, this is not a destination view that is sought out. Rather, people travel to this view to enter the Interstate and typically only experience the view incidentally.	
		Figures 3-5A and 3-5B of Appendix 4 of the FEIS provide a panoramic existing conditions photograph and photosimulation of the Facility and above ground electric transmission line from a location just west of the main Facility heading eastbound on I-84. The existing view towards the site from I-84 eastbound, west of the Facility is one of open fields mixed with a forested area and scattered clusters of trees lining the highway. While partially screened by vegetation, the Facility introduces a spatially dominant industrial structure into a rural side-	

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		of-the-road view that will redefine the nature of this view. The Facility will create visual impacts due to its use, scale, and spatial dominance from this viewpoint similar to those disclosed in Viewpoint 13 from the DEIS. The aboveground electric transmission lines can be seen as they leave the Facility, and enter the right-of-way heading east. Poles 1 and 2 are visible from this location, with Pole 2 furthest from the viewer. The visual impact of the electrical transmission lines is small largely because the view is dominated by the scale of the Facility. In addition, the view of the transmission poles and right-of-way is foreshortened from this viewpoint, masking its overall length. The impact on this viewpoint shown by the photosimulation is mitigated due to the brief period the view will be experienced due to the speed of traffic traveling along I-84 and the resulting brief opportunity to view the Facility.	
		The electrical transmission wires and Poles 1 and 2 fade into the darker image created by the wooded areas in the background of the photograph. As I-84 eastbound motorists progress by the site, they will have a view of the transmission Pole structures which parallel I-84. This view will be fleeting in duration due to the speed of vehicles on I-84.	
5.0 Visual Resources	L-6-6	What mitigation is the Applicant proposing for the destruction and loss of the present and significant uninterrupted views that will be caused by both the facility and the stack? The Applicant should consider funding open space preservation projects to mitigate the inevitable adverse impacts to the surrounding municipalities, including the Town of Goshen, as to air quality and loss of scenic viewsheds.	
		Response:	
		The Project is appropriately sited in a location recently re-zoned by the Town of Wawayanda as Mixed Commercial (MC) (and previously zoned as Manufacturing Industrial (MI)). According to the Town of Wawayanda Zoning Law, the MC district is "to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses, and manufacturing." The Schedule of Zoning District Regulations for the MC District lists "Essential Services/Utilities" and "Industrial Uses" as permissible with a Site Plan Approval. The proposed Facility is consistent with the uses associated with the new MC district.	
		See Section 5.6 (Conclusions) of the DEIS – the Project will not result in the destruction or loss of the present significant uninterrupted views. Mitigation in unaffected areas is therefore neither proposed nor required. Section 5.5 (Design, Appearance, and Mitigation) summarizes the proposed mitigation for the Facility.	
5.0 Visual Resources	L-11-3	In spite of the ridiculous visual impact studies that the applicant conducted with a balloon (as though a balloon has the same visual impact as enormous stacks), the proposed stacks would be an eyesore for miles around and interfere with the resident's visual enjoyment of their property.	

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		Response: The visual impact assessment was conducted in accordance with the Scoping Document and also the New York State Department of Environmental Conservation policy guidance. The visual impact assessment was extremely rigorous and was thoroughly reviewed by the Planning Board's visual impact assessment consultant. Use of a balloon is a common technique to help identify locations from which stacks would be visible and to optimize locations for more detailed photosimulations. Once these locations are determined, computer simulations of the stack and facility were created and evaluated.	
5.0 Visual Resources	H23-3	The other thing is those stacks are going to really look lovely from my house, my front window, really lovely. And the stuff coming out of them, that wind blows the wrong way, I guess I am going to be loaded just like I am with that green stuff we have all over the place that floats down every year, which we have to power wash off. Are we going to do that with our homes too from this stuff? I don't know. **Response:** The "green stuff" referred to in the comment is most likely mold, alga, or moss. Emissions from the Project will not cause or contribute to the growth of these substances on the outside of homes or buildings. Emissions of particulate matter, generally in the form of carbon compounds, can result from fuel combustion and have the potential to deposit on building surfaces. Over long periods of time, particles can accumulate and affect the appearance of painted surfaces. This process is referred to as soiling. The secondary annual National Ambient Air Quality Standard (NAAQS) for PM ₁₀ was set to protect against numerous welfare effects, including the soiling of buildings. The secondary annual NAAQS for PM ₁₀ was set at a level of 50 µg/m³. The maximum annual PM ₁₀ impact from the Project was predicted to be 0.14 µg/m³. This level is less than 0.3% of the corresponding secondary NAAQS. Therefore, emissions from the Project would not be expected to cause any soiling on homes or buildings in the area. In addition, the maximum predicted annual impact is well below the 1.0 µg/m³ annual significant impact level (SIL) for PM ₁₀ . Impacts less than the SILs are regarded as negligible or de minimis by EPA.	

		Response to Comments on Section 6.0 – Community Facilities
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6.0 Community Facilities	PB1-47	Comments related to community facilities being provided by the Hudson Group in a separate memorandum. **Response:*
6.0 Community Facilities	L-6-3 H-18-10	Details of the present capability of all likely emergency service organizations (fire, police and ambulance) must be
	22 20 20	analyzed as to their ability to respond in a coordinated manner to a variety of emergencies at the plant. Further, identification of any necessary equipment (including foam machines) to appropriately respond to such emergencies must be set forth. **Response:*
		Section 6.0, Community Facilities, of the DEIS addresses emergency response services, including Police, Fire, and Emergency Medical Services. Specifically, please refer to subsections 6.2.1 and 6.2.2.
		Appendix 6-A of the DEIS (Volume II) includes correspondence to and from the emergency responders that will serve the Project, including the New York State Police and the New Hampton Fire Department. CPV Valley has been, and will continue to work closely with, these emergency responders throughout development, construction, and operation of the Project.
		A Preliminary Emergency Response Plan prepared for the Facility is included in Appendix 12-C of the DEIS (Volume III).
		CPV Valley consulted with the New Hampton Fire Company regarding emergency planning and fire protection requirements for the Project. No concerns were raised during the meetings regarding the ability of the service providers to provide adequate emergency response services to the Project. Discussions at the meetings focused on the status of the Project, proposed fire suppression devices and requirements, vehicular access to the site, and community outreach efforts. In addition, CPV Valley has provided the New Hampton Fire Company with a copy of the Preliminary Emergency Response Plan and has requested input from the Company. CPV Valley met with the Fire Company on January 27, 2009 to discuss the Project and the Emergency Response Plan. Appendix 6-A of the DEIS includes a letter from the New Hampton Fire Company summarizing their initial comments on the Project and Emergency Response Plan.

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		In addition, CPV Valley has received a written response dated December 30, 2008 from the State Police regarding the Emergency Response Plan (included in Appendix 6-A of the DEIS, Volume II). Commander Robert Downs of the New York State Police confirmed receipt of the Emergency Response Plan and, based on preliminary review, did not have comments. CPV Valley will maintain frequent communication with the appropriate emergency responders throughout the design, construction, and operation of the Facility.	
6.0 Community Facilities	L-6-76	One item of major importance to the Town of Goshen, which did not appear to be studied or presented in the DEIS, is an emergency response procedure. It is important to all municipalities in the region to know what the protocol is should there be a disaster situation, or should there need to be an emergency response. Have the impacts of such a situation been studied? What are the impacts to the Town of Goshen, including impacts on air, water, and emergency services? What are the impacts on humans and animals? Are the emergency service personnel of the Town of Wawayanda or the neighboring municipalities prepared, knowledgeable and equipped to handle this kind of disaster? Is special training for local responders necessary or desirable, and if so how will it be provided? If remote sensory devices are being utilized, what is the alternative plan if those devices malfunction? How is the Applicant proposing to protect the surrounding municipalities, including the Town of Goshen from unexpected impacts offsite?	
		Please see response to <u>Comment Number L-6-3</u> . On-going discussions are being held with police and fire services. A draft Emergency Response Plan for the Facility is provided in Appendix 12-C of the DEIS (Volume III). Safety is always a primary concern on site, and extensive planning, training, and coordination are undertaken to ensure the safety of employees, the community, and Facility. In review of the Project with emergency responders, no additional equipment was identified as needed to service the Facility. Various factors were considered, such the number of operators on site, the relative height of where operators will be working at the time of a potential fire, the on-site fire water storage, spill containment bermage, etc., in the design of the Facility to minimize the impact on surrounding service providers. However, the emergency responders will be the State Police and the New Hampton Fire District. Both organizations were contacted to review the Facility design and emergency response plan. While no equipment or additional training was identified as needed, it is important to note that the Project will be making annual payments to the fire district. These funds can be used for any training that is subsequently identified as a result of the Project, or these funds can be used for other equipment needed by the district to help better service the community.	

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6.0 Community Facilities	L-6-81	Is there an onsite, ongoing environmental and safety organization to monitor and safeguard the facility? What are the security procedures, and what personnel is being used to safeguard the site?	
		Response:	
		The physical plant will be enclosed within a security fence with gate control. Security cameras will be monitored through the Facility's command center.	
		Typically, one operational person is assigned to monitor safety and/or environmental issues, but the plant manager has the ultimate responsibility in these areas.	
		Facility personnel will receive ongoing training consistent with Occupational Safety and Health Act (OSHA) safety regulations. Training with respect to specific environmental requirements will also be provided.	
		Facility personnel will be responsible for ensuring compliance with the Facility permit requirements. The required monitoring and testing reports will be filed with the appropriate agencies.	
		See response to Comment Number L-6-76 regarding the security for the Facility.	
6.0 Community Facilities	L-7-14	An evacuation plan or emergency response protocol needs to be established for this plant in the event of an emergency and shared with surrounding communities, schools and officials within Orange County Government. Whether it is the use of sirens or certain road ways for exiting, the FEIS needs to address and present a study on this important issue using Federal Evacuation Guidelines. Over the years, Orange Environment has been concerned with and commented on Indian Point Nuclear Power Plants lack of evacuation plans for those leaving the east side of the Hudson River and heading north into Orange County and Sullivan County. There needs to be a real protocol in place in the event of an accident.	
		<u>Response:</u>	
		Section 6.0, Community Facilities, of the DEIS addresses emergency response services, including Police, Fire, and Emergency Medical Services. Specifically, please refer to subsections 6.2.1 and 6.2.2.	
		Appendix 6-A of the DEIS (Volume II) includes correspondence to and from the emergency responders that will serve the project, including the New York State Police and the New Hampton Fire Department. CPV Valley has been and will continue to work closely with these emergency responders throughout development, construction,	

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		and operation of the Project.	
		A Preliminary Emergency Response Plan prepared for the Facility is included in Appendix 12-C) of the DEIS (Volume III).	
		Please see response to Comment Number L-6-3 .	
6.0 Community Facilities	L-8-11	Similarly, what will be the impact related to the new pipelines that will pass through our town? Specifically, what measures will ensure the security of the gas pipeline? And, will there be disaster plans and training programs developed to address any incidents such as a gas line explosion and/or a gray water line rupture from the Middletown Sewage Plan? Will the fire truck CPV proposes to donate to the New Hampton Fire Department be the only offset? Will CPV be mandated to pay restoration for any damages, which may result from the construction and operation of their facility?	
		<u>Response:</u>	
		Natural Gas Pipeline:	
		A discussion of the natural gas pipeline was provided in Section 17.5 (Gas Line Cumulative Impacts) of the DEIS. At the time, CPV Valley was reviewing two discrete options for gas transportation service to link the Facility to the Millennium system. The licensing of the natural gas pipeline lateral ultimately used to transport natural gas supplies to the Project is not part of this SEQRA review because, as an independent project, it would go through its own separate environmental review and approval process under a separate non-affiliated entity from CPV Valley.	
		The two potential options included a direct interconnection with the Millennium system, which will also be the upstream transportation path for the CPV Valley Energy Center, via a new lateral pipeline from the Millennium system to the CPV Valley Energy Center, with an estimated length of 7 to 8 miles. The lateral would be built, owned, and operated by Millennium Pipeline Company L.L.C., a FERC-regulated interstate pipeline company, and would be the subject of a separate FERC Section 7(c) permitting and environmental review process. The exact location and routing of the lateral would be determined by Millennium and approved by FERC as part of this process.	
		The second option for service to the facility was a connection to the Orange & Rockland (O&R) distribution system via a new lateral to the CPV Valley Energy Center. Preliminary discussions have indicated that the laterals would be 2 to 3 miles in length and would interconnect with a proposed O&R bulk transportation line that will originate at Minisink and terminate in New Hampton. The O&R lateral would be the subject of its own	

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		permitting and environmental review process through the Article VII of the N.Y.S. Public Service Law, with location and final routing to be determined by O&R and approved by the appropriate regulatory agencies.		
		Both routing options were anticipated to have relatively minimal environmental impacts and minimal cumulative environmental impacts with the proposed Project. The pipeline routes will use existing roadway rights-of-way and existing utility rights-of-way to the extent practicable, with further evaluations and re-routing likely in sections of the lines where it would be possible to avoid wetland and water body crossings. Utilization of construction techniques that minimize potential impacts in sensitive locations along potential routing options are standard practice in the construction of underground pipelines. Regulatory agencies view impacts associated with pipeline construction as temporary in nature. Once construction is completed, rights-of-way are restored wherever possible to their original conditions.		
		As indicated in Section 2.6 of the FEIS, CPV Valley has reached agreement with Millennium, and the Millennium lateral is now the preferred option for gas delivery to the Project.		
		Gas pipelines are regulated extensively by the federal Department of Transportation (DOT) under Title 49 (Transportation) of the Code of Federal Regulations (CFR). DOT requires all pipeline operators to develop an Emergency Response Plan that outlines the operator's plan for emergencies. This plan must be approved by DOT and include the detailed measures to maintain pipeline security and safe operation. Gas lines that are close to occupied areas will be reviewed with the local Fire Department and drills conducted to minimize damage in the event the line is ruptured. Pipeline operators are responsible for any damage caused by an incident or release. The Plan must be submitted and reviewed by the DOT.		
		CPV Valley Energy Center:		
		Section 6.0, Community Facilities, of the DEIS addresses emergency response services, including Police, Fire, and Emergency Medical Services for the CPV Valley Energy Center. Specifically, please refer to subsections 6.2.1 and 6.2.2.		
		Appendix 6-A of the DEIS (Volume II) includes correspondence to and from the emergency responders that will serve the Project, including the New York State Police and the New Hampton Fire Department. CPV Valley has been and will continue to work closely with these emergency responders throughout development, construction, and operation of the Project.		
		A Preliminary Emergency Response Plan for the CPV Valley Energy Center is included in Appendix 12-C of the DEIS (Volume III).		
		The grey and discharge water lines are proposed to be maintained by the respective municipality under a contract. In the event of a line rupture, the line can be isolated to minimize any leakage and facilitate repair. As		

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		discussed in the DEIS, the water will be of the quality the City of Middletown currently discharges to the Wallkill River.
		The reference of a donation of a fire truck by CPV Valley to the New Hampton Fire Department is incorrect. CPV Valley is unaware of any such arrangement, and therefore has no new information to provide in response to that comment.

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7.0 Socioeconomics	PB1-5	Issued related to fiscal impacts remain outstanding.	
		Response:	
		The fiscal impacts provided in Section 7.0 of the DEIS conform to the requirements of the approved Scoping Document for the DEIS.	
7.0 Socioeconomics	PB1-48	Comments on socioeconomics being provided by the Hudson Group in a separate memorandum.	
		Response:	
		Comment noted.	
7.0 Socioeconomics	PB1-49	It is our understanding comments environmental justice being provided by Allegiance Resources.	
		Response:	
		Comment noted.	
7.0 Socioeconomics 7.4.1.2 – Construction	PB3-1	While not major, there are minor discrepancies between the allocation of construction costs by purpose and by year in table 7-8 on page 7-10 in Section 7.0 and table 6 on page 19 of Appendix 7-A.	
Expenditures		Financing and owner costs are shown in table 7-8 to be \$120 million. It is assumed that all costs for infrastructure are included within the \$120 million. A breakdown of this \$120 million into its component parts is requested.	
		Response:	
		Table 7-8 on page 7-10 of the DEIS is a breakdown of estimated construction costs by year and category. The line item breakdown was discussed with the Town of Wawayanda Planning Board's consultants and determined to be of sufficient detail for SEQRA purposes and consistent with the approved scope. Table 7-8 of the DEIS and the comments referenced in Table 6 on page 19 of Appendix 7-A are not presenting the same information, and therefore, would not contain the same information. Table 7-8 of the DEIS are the construction costs, while Table	

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		6 of Appendix 7-A is presenting the economic impacts (benefit) to Orange County. These tables were not represented to present the same information.	
		The \$120 million provided as Financing and Owner Costs is of sufficient detail for the level of economic analysis under SEQRA.	
7.0 Socioeconomics 7.4.2.4 – Impacts of Potential Revenue	PB3-2	While the two paragraphs on pages 7-15 and 7-16 are technically accurate, they contain incomplete information on the impact on potential revenues and state aid for the Minisink Valley School District and are therefore misleading. School state aid will not be impacted as long as the Valley Energy Center (VEC) project remains on the assessment roll as a tax exempt property. However, once PILOT ends the VEC will become taxable and its assessed value will become a factor in the determination of school aid. If the VEC project at \$800 million were factored into the current school aid formulas the loss in school aid is estimated to be \$6.4 million.	
		It is unknown at this time what the PILOT to the Minisink Valley School District will be. Assuming \$800 million in taxable value and no increase in the property tax levy for the Minisink Valley School District (lower tax rates) the VEC project would pay \$8.7 million in property tax, which is greater than the projected amount of school aid loss.	
		However, in the year in which the VEC project becomes taxable, the increase in property taxes may be less than the expected loss in school aid.	
		The DEIS needs to explain what happens when PILOT payments end and the VEC property shifts from tax exempt to taxable, and the school aid loss kicks in. Section 7.4.8.4 on page 7-23 addresses this issue of reduced school aid at the end of the PILOT program. Loss of school aid is more appropriately addressed in this section, since it covers school revenues, while Section 7.4.8.4 covers school costs.	
		Response:	
		The time horizon for the economic analysis was determined to be 20 years as this is consistent with the Project life, and it is difficult to make any reasonable estimates of several relevant variables after 20 years of operation, such as the value of the Facility for property tax purposes, the School District's budget and property tax levy, the School District's overall taxable assessed value, the School District's property tax rate, the Town's equalization rate and how school aid would be determined. In an attempt to provide full disclosure, the potential for the Facility to go on the tax roll upon the expiration of the PILOT and how it may potentially impact school aid allocation was described in the DEIS. However, as noted in the DEIS, the Orange County IDA and CPV Valley	

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		could extend the PILOT such that the school aid would continue to be realized by the Minisink Valley School District without being impacted by the addition of the Facility to the school tax roll, along with School District's allocable share of the PILOT payments under the extension. As the comment above highlights, there is a significant challenge in estimating whether the tax revenue from the Project after 20 years of operation and the expiration of the PILOT in 2032 may or may not be greater than any school aid loss. No additional information needs to be provided.		
7.0 Socioeconomics 7.4.3 – Project Taxes	PB3-3	The first paragraph under this section on page 7-16 on PILOT does not belong in this section, which is focused on taxes (of all kinds) generated throughout the State and region as a result of the VEC project. It belongs in Section 7.4.4. It only adds confusion by juxtaposing it with the model derived projected taxes.		
		The second and third paragraphs go back to the IMPLAN models and their projection of taxes during the <u>construction phase</u> discussed in Appendix 7-A. We need more comprehensive understanding and information of how the IMPLAN model estimates \$4,560,584 in property taxes (out of the total of \$22,239,125 during construction-see page 26/27 and table 12 of Appendix 7-A. We had spoken after the first submittal of the DEIS by phone to an IMPLAN staffer and read the material referenced in footnote 6 page 27, but that was not completely satisfactory. Further adding to our confusion is the (added) last paragraph on page 27, and the statement in footnote 7 to it We request more detailed and satisfactory information about the IMPLAN model's tax estimating elements.		
		Response:		
		The first paragraph of Section 7.4.3 introduces the role of the PILOT, which is a Payment in Lieu of Taxes, because it is a surrogate for property taxes, which is discussed under the section topic of "Projected Taxes". The objective of the section is to identify and discuss the projected taxes the Project will pay. As such, the PILOT is discussed along with the other taxes that will be derived from the Project.		
		The information in the second and third paragraphs describes the Project taxes that would be realized during the construction phase using the IMPLAN model. As described on page 16 of Appendix 7-A of the DEIS, the IMPLAN model is an industry recognized "input/output" model that traces the linkages between industry purchases and economic output with a given county, region, state or country. These models utilize US census data, data from the US Bureau of Economic Analysis, and other sources to determine economic relationships between various sectors of the economy. These models are able to estimate, based on historical data, how much economic activity is realized in a sector of the economy from a dollar amount spent in another sector of the economy. These models were developed by the government to understand economic relationships in our economy. This methodology is described in Appendix 7-A of the DEIS and the input-output modeling approach is consistent with		

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		the approved Scoping Document of the DEIS.		
		As described in Appendix 7-A of the DEIS, the input/output model includes information on non-market monetary flows between households and government and between businesses and government. This information is developed based on the data from the US Census, US Bureau of Economic Analysis and other sources, which provide the historical linkages or relationships between these sectors of the economy. The model can estimate change in the value added in a region based on a proposed project. This information can then be applied to the non-market monetary flows in the region to derive an estimate of the revenue impact on various levels of the government due to changes in economic activity (i.e., the project expenditures for construction and operations). The analysis of projected taxes included in the Appendix 7-A specifically excluded any PILOT payments as those payments were not known at the time of the analysis, and are currently still under negotiation with the Orange County IDA. Specific details regarding the IMPLAN model were provided to the Town of Wawayanda Planning Board's consultants during the preparation of the DEIS, and were identified in the DEIS for additional information regarding the model.		
7.0 Socioeconomics 7.4.4 – Project Financing and PILOT Agreement	PB3-4	This section discusses payments in lieu of taxes and the planned Host Community Benefits Agreement with the town of Wawayanda. The VEC facility is projected to be 630 megawatts (MW). Information in this section is provided on the Athens Generating Project, the PSEG Power Bethlehem Energy Center, and the Besicorp/Empire Generating Facility, including a schedule of the PILOT payments being made or agreed upon.		
		The Office of Real Property Services (ORPS) in its regular publication, the Property Tax Monitor, March 2009, published an article entitled, Wind farms making impact on energy production, local landscapes and finance. This article provides further information on the PILOT payments being made in relation to energy generation. In this article, ORPS indicated that some wind farms are making PILOT payments. The article states that Noble Wind Energy is paying in PILOT payments \$8,000 to \$8,365 per megawatt produced. The Madison Wind Power Project is paying approximately \$5,200 per installed megawatt and the Fenner Wind Power Project is paying approximately \$5,000 per installed megawatt.		
		The assessments for the Athens Generating Plant and the PSEG Power Bethlehem Energy Center differ widely. The Athens Generating Plant at 1080 megawatts has a 44% higher megawatt capacity than the PSEG Power Bethlehem Energy Center at 750 megawatts, but an assessment nine times higher. The assessed value of the five parcels composing the Athens Generating Plant is \$899,610,000 (the town has an equalization rate for 2009 of 58.5, thus theoretically creating a full value of \$1,537,794,871). The PSEG Power Bethlehem Energy Center has an assessed value of \$100 million (the town has a 2009 equalization rate of 93.0, thus theoretically creating a full value of \$107,526,882). If these		

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		facilities had been fully taxable in 2007, the Athens plant would have paid \$25.3 million in property taxes (excluding special districts) and the Bethlehem facility \$2.3 million (excluding special district taxes), or less than their PILOT payment. For 2009, the PILOT payment for the Athens plant (\$4,095,000) is 25.9% higher than that for the Bethlehem plant (\$3,252,799).	
		The assessment data, especially for the Bethlehem facility prevents any meaningful analysis. Assessments become very critical when they move from tax exempt to taxable. The appearance is that the Athens assessor is carrying a realistic assessment on the assessment roll, while the Bethlehem assessor is carrying a nominal assessment.	
		Response:	
		The information provided was consistent with the approved Scoping Document for the DEIS and the level of socioeconomic analysis required under SEQRA. The examples provided were those requested by the Planning Board's consultants, and included in the DEIS despite the above mentioned concerns raised by CPV Valley, demonstrating the inability of utilizing other projects as a method to provide any meaningful calculations surrounding the PILOT and assessed values.	
		The information referenced above are related to wind projects, which by nature are vastly different than the type of project proposed. The information regarding the PSEG, Athens, and Besicorp projects highlights this point.	
		Further, the calculations above demonstrate the State's rationale for enabling industrial development agencies to use a PILOT program as a tool to encourage and incentivize industrial and commercial development. Had the Athens facility been taxed at \$25.5 million per year, the facility would likely not have been developed. However, with the PILOT program, the Facility was built and is now providing a significant source of income to the county, Town, and school district.	
7.0 Socioeconomics 7.4.5 -Sales Tax (Mortgage Tax)		This section now contains more detailed information on the benefit of the IDA exemption to the VEC project from sales tax payments than earlier DEIS versions. The overall sales tax estimate, based on \$75 million in taxable expenditures, is \$6.1 million. Of this amount, it is estimated that the town of Wawayanda's portion of the forgone sales tax is \$92,600. It has no impact on the Minisink. Valley School District, since the County sales tax is not shared with school districts.	
		Information similar to that provided for the Sales Tax is requested from CPV for the Mortgage Tax. The existing mortgage tax rate is 1.05%. Of the 1.05% tax rate, 0.50% goes to the town of the origin of the mortgage, which in this case is the town of Wawayanda.	

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		Response: Although the approved scope did not require an analysis or estimate of the mortgage tax for the facility, it is estimated the that the Town of Wawayanda's distribution of the mortgage recording tax would be approximately \$34,000, based on the commenter's 1.05% tax rate, of which .5% would be distributed to the Town. This would be a onetime tax, and thus not a recurring revenue stream for the Town. To induce economic development, the IDA has the ability to provide a Mortgage Recording Tax exemption to projects. In its evaluation a PILOT program for a given project, the IDA takes such an exemption into consideration along with the potential economic benefits derived from a project. Traditionally, energy projects have been granted mortgage recording tax exemptions as part of the PILOTs negotiated with the respective IDAs. CPV Valley has requested a Mortgage Tax Exemption in its application to the IDA. However, it should be noted that if an exemption is granted, the annual revenue the Town would realize from the Host Community Benefits payments would offset the onetime payment from the mortgage recording tax.	
7.0 Socioeconomics 7.4.6 –Assessed Value and Special Districts	PB3-6	The total project cost is estimated to be \$800 million. This \$800 million is broken down into land \$6 million, building \$15 million, equipment \$659 million, and other costs \$120 million (table 7-8 on page 7-10). The taxable full value of the property, absent tax exempt status, is estimated to be \$259 million. This leaves \$541 million as being permanently tax exempt, which presumably is related to the pollution control equipment exemption. This indicates that of the total equipment cost of \$659 million, approximately 82% is related to pollution control equipment. On the surface this seems very unrealistic.	
		A detailed explanation and breakdown of how the \$259 million in potential taxable value and \$541 million in exempt value was determined is required. The taxable full value is a very important number in making school aid calculations and in other fiscal analysis.	
		On page 7-20, a property tax payment of \$200,000 shown for the New Hampton Fire District. Using the stated taxable assessed value of \$130,800,000 and the stated tax rate of \$3.00 per thousand of assessed value produces a property tax payment of \$395,400, not \$200,000 for the New Hampton Fire District.	
		Response:	
		As stated in Section 7.4.5 of the DEIS, with the concurrence of the Planning Board and Planning Board's consultant, an "estimate" of potential sales was provided and noted that the estimate should not be interpreted	

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		as sales tax revenue that would be realized from the Project because without the incentives, the Project would likely not be constructed. The DEIS outlined that there are specific exemptions assumed, such as the exemptions associated with manufacturing equipment and items not subject to sales tax (i.e., pollution control equipment). The presumption in the comment that the tax exempt portion was solely related to pollution control equipment is incorrect. With regard to the estimate for Fire District payments, the amount calculated in the DEIS reflects the reduction in the rate due to the addition of the Project's assessed value in the computation of the districts taxable assessed value. This is \$3.00 per thousand, which was the rate at the time of the DEIS publication.	
7.0 Socioeconomics 7.4.8 Incremental Costs to the Public –Selected Municipal Services	PB3-7	Pages 7-21 to 7-24 discuss the incremental costs on Police Services, on Fire/Emergency Services, School Districts, Water Services, Solid Waste Services. There is no indication that the applicant has talked to anyone about the potential impact of the VEC project on all municipal governmental services. Letters have been sent to the State Police and Fire District, with a focus on executing emergency plans. The inference, and implication, is that the VEC project will have zero impact on all governmental services. The Applicant has provided no evidence or documentation to substantiate its claim of no fiscal impact on services. The EIS needs to provide support for its claim of non-impact on any, and all, governmental services.	
		Response: The governmental services provided directly by the Town of Wawayanda are identified as Animal Control and Code Enforcement per the web site. The other services discussed in Section 7.4.8 address the traditional services of concern such as police, fire, and emergency response, schools, water and sewer. The Project will not increase the cost of these services to the public since the Project will bear its cost of interconnection and service. It is not expected that the Project will have an impact on the animal control service by nature of the project. With regard to the code enforcement services, a fee will be collected by the Town from the Project to compensate the Town for such services. If necessary, the Project will ensure that there is adequate funding for such services prior to the start of construction. Documentation from the emergency responders, police and fire, indicating negative impacts to services is included in Appendix 6A of the DEIS (Volume II of the DEIS). In consultation with the Town's engineer and the Planning Board's consultants, the Town engineer confirmed that the Project will not have an impact on the Town provided services. The Project will have minimal impacts on other services such as roads, courts, administration, etc. Services such as roads will not be impacted due to the short duration of construction and the little traffic associated with the Project's operation. However, through the Host Community Benefits Agreement, the Project will be making contributions to the town which will more than offset any perceived impacts to these additional services.	

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7.0 Socioeconomics 7.4.8.5 – Incremental Cost to Water Services	PB3-8	It is stated in this section that "the expected net impact (water supply) would be that there would not be any incremental cost to current services". Somewhat more information is required on the use of town potable water and sewer services. Will these services be paid for from user charges or will the added costs to the town be an expense against the PILOT payment it receives?	
		Response: The PILOT program does not pertain to water or sewer charges. The PILOT is a payment in lieu of taxes program. As stated in Section 7.4.8.5 of the DEIS, the Project will bear all costs associated with interconnecting to the water and sewer system, and will pay its costs based upon a contract rate to be negotiated with the Town.	
7.0 Socioeconomics 7.4.8.7 Incremental Cost of Partial Externalities		Starting under the subheading <i>Facility Operational Externalities</i> towards the bottom of page 7-27 and continuing on page 7-28, there is a discussion of visual impacts and property value implications for residential properties in proximity to power plants. While the DEIS includes reference to a study, Davis -University of Michigan, that was omitted from an earlier draft EIS that we had recommended for inclusion, it cites a supposed weakness this study – self-reporting in the Census of housing values. We take exception to this self reporting bias affecting any comprehensive hedonic pricing modeling of housing values and proximity to power plants. If there is such a bias, the Applicant's consultant needs to explain why this bias is not randomly distributed among all the thousand of price/housing value points in the model?	
		Response: On page 9 of the referenced study, the author explains that the data set used is from census data that is "self-reported". The author continues to comment that "with any self-reported data one may be concerned about whether or not the households are able to answer accurately." The author further states that the housing values are self-reported in response to a question that prompts respondents to report how much they their home would sell for it were for sale. So, the values are not based on housing values supported in the market, but rather are a homeowners current thoughts on what their home value was at the time the question was asked.	

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7.0 Socioeconomics 7.4.8.7 Incremental Cost of Partial Externalities	PB3-9B	As we stated in a previous comments memorandum of January 16, 2009, the studies quoted and referenced in this section, other than Davis, and also in Appendix 7 D and 7E lack rigorous quantitative analysis. Only hedonic pricing modeling methodology -the study cited previously -has the capability if properly done to quantitatively with rigor identify and separate out the unique factor contribution of proximity to a power plant (or its transmission line -see below) to the value of residential properties, given all the numerous and complex factors that affect values.		
		Response:		
		In accordance with the approved Scoping Document for the DEIS, several relevant studies were provided regarding impacts on property values. These studies focused on specific areas where a similar type of project was constructed, and compared the before and after housing values. Specific to New York, a study was conducted regarding a natural gas fueled facility on Long Island. The study was performed to determine if any property values were negatively impacted as a result of a power plant being sited nearby. This study was performed and accepted by other lead agencies under SEQRA as well as the Article X process. These studies rely on data which compare housing values before and after the siting of a power project.		
7.0 Socioeconomics 7.4.8.7 Incremental Cost of Partial Externalities	PB3-9C	In reviewing the Visual Resources and Aesthetics Section of the DEIS, particularly the Viewshed Map on Aerial, figure 5-15B, we were struck by the large number of residential concentrations within a mile of the Project site that have been classified as areas being able to see all or one the smoke stacks, even adjusted for effects of trees -the purple colored areas. We believe a much more in-depth analysis, including field work, needs to be undertaken to document the visual impacts for the residential neighborhoods within a mile, from northwest to north of the Project site -We have conducted some preliminary filed work. For this work we recommend technical sessions between the Applicant, its consultants and the Planning Board's consultants to review the findings and agree on next steps to assess potential property value impacts.		
		Response:		
		The analyses provided in the DEIS provide several data points to assess the impact on housing prices. The conclusion of two of the three studies were that there was no negative impacts to housing values resulting from the siting of a power plant nearby. The third study, which utilized census data upon the limitations of which the author commented, yielded results indicating a modest negative impact. However, the data was not based on house values from actual sales, but rather was based on the respondent's current view of what their house would sell for, which produced a more speculative result than could have been achieved through use of actual		

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		market data.	
		Another study performed by the Hudson Group (the economic consultants who made this comment) during the Article X proceeding for the Empire Generation Facility in Rensselaer concluded "that after evaluating the potential negative and positive environmental, visual, and traffic externalities, there are not likely to be any discernable impacts on property values - pro or con - to residential or non-residential properties in the vicinity of the proposed facility."	
7.0 Socioeconomics 7.4.8.7 Incremental Cost of Partial Externalities	PB3-9D	We would also believe no field work is needed to determine whether the plant will have a significant visual impact of the facility on it next door neighbor -the large subsidized workforce rental housing complex now being constructed-The Horizons at Wawayanda.	
		An important visual and property value impact issue missing from this entire section of the DEIS is the absence of any discussion of visual impacts of power plant <u>transmission lines</u> on property values. We have been told that the transmission lines from the power plant will be underground once they reach Route 17B. However, they will be above ground on the Project site and passing close to the Workforce Housing complex, noted above. This might have an adverse impact on the value of this housing, although less so than if the site was market value rental housing.	
		There is a wealth of literature/studies that we have found on electric transmission lines and property values that we list in Attachment A. We recommend the following: 1) The applicant determine if the above ground transmission line section from the plant might be viewed from within quarter mile of other residential locations, besides the Horizons; 2) The applicant summarize the literature and develop any pertinent findings in conjunction with the Planning Board's consultants on transmission line property value impacts of the project.	
		Above and beyond the issue of the potential visual impacts of the facility and above ground transmission lines property values, there are other aspects of this project that might adversely impact property values. There are many credible studies that demonstrate a relationship between air quality and property values. Air emissions from this plant will be significantly controlled and modeling shows no potential problems within the airshed meeting federal and state air quality standards for designated pollutants. However, because of large tonnage emission for some pollutants, the incremental increase in ambient concentrations of certain pollutants for particulates, CO and S02 - appear high in closeby residential areas appearing northwest of the Project site (see DEIS Appendix 9-D, Graphical Plots of Maximum Predicted Project Impacts).	

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		We recommend a literature search and evaluation of how low levels of certain air pollutants increases may affect residential property values.	
		Response: Section 5.0 of the DEIS adequately evaluates visual impacts of the closest residential areas (Kirbytown Road, Horizons at Wawayanda, Bates Gates Road). The information provided in Section 7.0 of the DEIS provided all of the information required per the approved Scoping Document for the DEIS and therefore no additional literature searches are necessary. Further, since the issuance of the DEIS, and as discussed in Section 2.3 of the FEIS, CPV Valley is now pursuing the option to underground the electric transmission line on the Project site.	
7.0 Socioeconomics	PB3-10	The only correspondence contained within this Appendix [Appendix 6-A] is correspondence with the New York State Police and the New Hampton Fire Company. The State Police wrote back indicating they have no comments at this time. The letter to the New Hampton Fire Company concerned the "draft emergency response plan". The New Hampton Fire Company responded with a concern about building height, since they have no ladder truck. This concern was, however, alleviated when the Applicant indicated that all Power plant personnel would be in normal course be working in areas not needing ladders to be reached.	
		There are, however, no letters and other correspondence, or other information, regarding fiscal impact which the VEC project may have on <u>all</u> municipal services, or the school district (see our comment under 7.4.8).	
		Response:	
		Please refer to the response to <u>Comment Number PB3-7</u> .	
7.0 Socioeconomics Appendix 7-A	PB3-11	As we noted earlier in our comments under Section 7.4.3, we are confused by the Tax Impact calculations resulting from the Models used in Section IX of this Appendix. We do not understand how property taxes of \$4,560,584 are generated during the construction phase of the VEC project.	
		Response: Please refer to the response to Comment Number PB3-3.	

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7.0 Socioeconomics Appendix 7-B	PB3-12	This letter from the Orange County IDA acknowledges the eligibility of the VEC project to receive IDA benefits. The letter assists in understanding the IDA's involvement in the VEC project.		
		Response:		
		No response required.		
7.0 Socioeconomics Appendix 7-C	PB3-13	The Applicant has adequately responded to the request for data on insurability of properties in the vicinity of the project.		
		Response:		
		No response required.		
7.0 Socioeconomics Appendix 7-D	PB3-14	This consultant study, by JA Cowan and Associates, Inc. (undated), done for an energy generating plant being built in the town of Huntington on Long Island, addressed the question of the potential impact of the new energy facility on the value of surrounding properties. The consultant concluded there would not be a negative impact on property values. This study was done through an analysis of residential property sales in three communities that have existing power plants. Sales were analyzed within certain distances from the respective power plant. By inference it suggests the VEC project will have minimal impact on property values in Wawayanda.		
		See our extensive previous comments on power plant property valuation studies. This study is not acceptable -It lack sufficient quantitative data bases and statistical rigor to account for all the numerous factors that contribute to residential property valuation, before identifying proximity to the power plant as a bottom line variable.		
		Response:		
		This is a study that was included in the Spangoli Road Project's Article X Application and was deemed complete by the New York Public Service Commission. This is an acceptable study as it uses actual housing value data, demonstrating that similar projects do not trigger adverse impacts to property values. The studies provided were consistent with the requirements of DEIS Scoping Document. The Scoping Document called for relevant studies on the impacts to property values. In response, three studies were provided and discussed in the DEIS. The analysis methodology for each study was different. However, the conclusions remained consistent that there was no discernable impact to property values as a result of a power plant.		

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7.0 Socioeconomics Appendix 7-E Real Estate Impact Report	PB3-15	This referenced four page summary, of a presumed longer report, was prepared by Creative Strategies & Communications Inc, dated August 2007. It studied real estate values for two areas in Maine and one area in New Hampshire that host power plants. It says that the study methods included interviews with real estate agents and local officials and research on property values. It concludes that, "The research indicated that there have been "no negative impacts identified with power plants in the host community or neighboring communities" (page 2 of summary).		
		We cannot ascertain the merits of this study without seeing all of the databases and methods used in the analysis and findings. The information contained in the summary is not sufficient for us to determine the validity of the analysis or findings.		
		<u>Response:</u>		
		The study outlined the methodology and information of how the study was conducted. It focused on three (3) areas in New England. The process included reviews of the residential property values, surveys of residents in the host communities, and discussions with Town assessors and local real estate agents. The approach solicited data from a variety of sources and concluded that there was no impact to property values as result of a power plant nearby.		
7.0 Socioeconomics	L-6-82	How is the Applicant proposing to maintain the environmental surety in the future?		
		Response:		
		The Facility must operate per all the specific environmental requirements. These requirements are continuously monitored recorded, tracked, and reported. If the Facility is in jeopardy of exceeding any of the permit requirements, the Facility must adjust operations or ultimately shutdown in order to maintain compliance. Any violations may result in significant fines and/or operating limitations.		
7.0 Socioeconomics	L-6-83	Is sufficient bonding going to be in place for any and all remedial action that could potentially be necessary because of this facility? If so, how long will the bonding be kept in place (<i>i.e.</i> , for the life of the facility, after the PILOT agreement has expired, or a set number of years)?		
		Response:		
		Should there be an event that would require "remedial action", insurance is the traditional mechanism to provide		

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		financial resources to address such action. Insurance is required by the lenders and is kept in place throughout the operation of the Facility regardless of PILOT agreement terms.	
7.0 Socioeconomics	L-6-87	The Host Benefits Package must be attached to the FEIS so as to be available for public review and comment. Also, the Applicant should provide a copy to the Town Board of the Town of Goshen.	
		Response:	
		The Host Benefits Package is not a component of the SEQRA process. The SEQRA process is specifically designed to focus on environmental impacts. The Host Community Benefits Package therefore is not part of the FEIS. However, once executed with the Town, a copy can be obtained as it will be considered a public document.	
7.0 Socioeconomics	L-6-91	Has the Lead Agency considered requiring a bond to remove the stacks and storage tank should this plant close down, and what is the Applicant proposing if that is the case?	
		Response:	
		Decommissioning of the plant is addressed in Section 7.4.9 (Funding for Decommissioning) of the DEIS.	
7.0 Socioeconomic	L-7-13	While we understand that this issue, PILOT, has somehow been relegated to the Town Board, we felt that because it was addressed in the DEIS that it was fair game to comment. It is a very risky proposition that the Town of Wawayanda is proposing to undertake, that by not collecting any taxes, that whatever is given by the Applicant to the town (school, town or local service donations) will be enough to offset any probable costs. The charts provided by the applicant only show county/state, and employer taxes collected, etc, etc, but when really looking at what the true impacts a facility like this could have on a town over the course of 25 to 50 years or more, it is hard to understand why a town would make such a gamble. Additionally, from what we have read, there haven't even been any proposals for monies to be placed in escrow by the applicant in the event of any unforeseen expenses the town may and could incur. The Town of Wawayanda needs to do a study on how much money would be collected if taxed and what expenses could possibly be incurred by the Town for the life of the plant (contamination issues-air and water, emergency and police response, town engineer and other town employees time with regard to oversight and enforcement, neighborhood conflicts, traffic impacts to roads, infrastructure costs (waste water, water, roads, traffic lights, etc), to see if the negatives outweigh the benefits of housing this industrial facility within the Town of Wawayanda. This study needs to then be examined by the	

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		residents of Wawayanda, before the town makes any PILOT decisions. Additionally, when and if the plant ever closes, there is no mention in the DEIS of safe removal and remediation of any buildings, storage tanks or smoke stacks for said site. After properly being studied, monies in escrow could safe guard the Town of Wawayanda from any unforeseen plant closures and any expenses the town may have to incur with the removal of contaminated facilities or tanks and stacks left at the site.		
		Response:		
		Section 7.0 of the DEIS focuses on the economic impacts associated with the Project. As stated in the DEIS, the Project will not have any economic impacts on the services described above. Air related matters are addressed via the air permitting process and strict permit conditions are imposed on the Project to ensure that the Facility meets the required emissions standards for the life of the project. Based on the information outlined in Section 7.0 of the DEIS, the economics are such that any identified costs attributable to the Project are borne by the Project. For example, water and sewer services are those the Project will pay under the contract to be negotiated by the Town and CPV Valley. The Project also will pay for interconnecting. As described in Section 7.0, there are no impacts to the emergency response services as a result of the Project. The School District will receive significant benefits from the Project as a result of the PILOT payment. Since there are no incremental costs to the Town, the PILOT and Host Community Benefits are discussed in the DEIS to show the qualitative positive economic impact the Project will have for the Town. The Orange County IDA is responsible for the PILOT, not the Town. With regard to the comment on removal, the topic was discussed in Section 7.4.9 of the DEIS.		
		As described in Section 7.4.9 of the DEIS, the typical operating life span for a new electric generating facility ranges from 30 to 40 years. With respect to funding for decommissioning, it is expected that the aboveground portion of the Facility's components would be offered for sale, for salvage or at least scrap value in the event of decommissioning. Even if there were no market for purchasing the Project's components for salvage purposes, the scrap value of the equipment, buildings, and structures on the Project site would be anticipated to be more than sufficient to offset the complete cost of demolition of the Facility.		
		It should be noted that decommissioning is unlikely to occur under any reasonable scenario during either construction or any period when the Facility is economically viable. During Project construction, there are contractual requirements for the Project to reach commercial operation, and several levels of remedies in place to cure a potential default. These remedies could include re-financing the facility as needed, working out financial contracts to address financial concerns, and transferring ownership to another entity along with all permit condition requirements and PILOT obligations. During Project operation, as long as the facility remains		

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		economically viable, continuing operations would negate any need to pursue decommissioning.	
		Once operational, the Project would be one of the cleanest, most efficient and reliable baseload electric generation facilities in the region. Thus, one would expect older less efficient plants in the current fleet to be retired well before the CPV Valley Project.	
7.0 Socioeconomics	L-8-14	Obviously, CPV plans to make a lot of money by this venture. The question on the minds of some taxpayers is whether CPV will be required to pay their "fair share" of taxes. I am aware that according to some town Board members, who support this project, allowing CPV to provide a Payment in Lieu of Taxes, or PILOT, is the only "appropriate" way to tax an entity like a power plant; the concern being that were CPV to be taxed on the assessed value of their estimated \$800 million facility, they would not locate in our town. Still, questions arise as to how a "fair or reasonable" PILOT is to be decided, by whom; and, will there be "transparency" and/or oversight of governmental negotiations? Is a 20 year PILOT the "norm" for similar projects elsewhere? How can the integrity of a PILOT be assessed?	
		<u>Response:</u>	
		The Project will represent a significant new source of revenue for the Town via the PILOT Agreement, which is currently being negotiated among the Orange County IDA and CPV Valley. In New York, county Industrial Development Agencies are authorized to negotiate these types of agreements to facilitate economic development opportunities, and provide incremental revenue to the communities in which the development occurs. The PILOT payments have been proposed to commence during the construction period, which will allow the economic benefits to commence even before the Project starts commercial operation. In addition, CPV Valley intends to execute a Host Community Benefits Agreement with the Town of Wawayanda. Payments under the Host Community Benefits Agreement will be in addition to the PILOT payments. The Host Community Benefits package is an opportunity for CPV Valley to provide additional, direct benefits to the Town of Wawayanda.	
		A PILOT term of 20 years is typical in the State of New York. As stated above, the Orange County IDA is responsible for negotiating the terms of the PILOT.	
7.0 Socioeconomics	L-9-3	The 20 PILOT program another HUGE issue. The experts hired by this board were summarily shut down several times during one of your meetings by CPV's lawyer, Mr. Bonacic. What about a tax baseline to be established up front? Doesn't the public, who will be expected to breathe this foul and polluted air forever, have a right to see whether they will at least benefit financially in some way? Mr. Cole stated at that same meeting that this will be under the province of the Town Board, and not for discussion with the Planning Board. However, how can the Planning Board, and indeed the	

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		town citizens make any intelligent decisions without knowing the financials, as the ONLY and I repeat ONLY reason this project is allowed to come to Wawayanda is that SOMEONE out there will benefit financially at the expense of town residents.	
		Response:	
		See response to <u>Comment Number L-8-13</u> .	
7.0 Socioeconomics	L-12-2	Regarding impact on property value -please provide the actual study and locations that are relevant to this immediate area.	
		Response:	
		Appendices 7D and 7E of the DEIS (Volume II of the DEIS) contain the studies. According to the approved Scoping Document for the DEIS, if based on relevant technical analysis there was a potential for significant impacts, additional analysis would be conducted. The relevant studies included in the DEIS concluded that there was no significant impacts to property values.	
7.0 Socioeconomics	L-12-5	What specifically will the \$30 Million (PILOT) be used for? What % will be applied towards residential real estate taxes & how will the public be informed?	
		Response:	
		The PILOT payments will be distributed to the Town, County, and School District and will be used at the discretion of each recipient group. It is plausible that the PILOT payments that will go to the Town and Minisink school district could be used to help reduce or stabilize the local taxes. The public can stay informed in how the Town and school district utilize this revenue by participating in the respective budgeting processes for the Town and school district.	
7.0 Socioeconomics	L-13-2	Section 7: Socioeconomics & Environmental Justice: Property value impact reports cited and included in the DEIS appear to be cursory, not locally relevant, unsubstantiated, and not quantitative. A study should be commissioned or cited that relates to power plants either sited in the Hudson Valley or proposed in generally unindustrialized locations.	

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		Response:	
		The assessment of the impacts on property values was discussed in preparation of the approved Scoping Document. In particular, the scope called for an analysis if "loss" of value was determined. The scope further specified that the analysis was to be based on relevant and applicable literature in the field of property values associated with this type of power plant. As presented in the DEIS, the search yielded the three studies. Of the three studies, two studies concluded that there was no impact, or loss, on property values associated with the siting of this type of power plant nearby. The third study indicated that based on census data, one could conclude that there may be an impact on property values. However, the author cautioned the reader that the results were not based on market data, but rather census data. This was further explored in direction communication with the author, who reiterated his caution that the results of his study needed to be considered limited due to the data set and source. The discussion presented in Section 7.0 of the DEIS is consistent with the requirements of the approved Scoping Document.	
7.0 Socioeconomics	L-14-4	How will this impact property values? We all try to improve our value of our property and increase the value of what we to have – to have something be put within sight of property and have a potential impact on our air, our water, our natural wildlife and our values of our homes fair to the Town of Wawayanda's residents.	
		Response:	
		As described in the DEIS, the studies of areas where power generation facilities were constructed concluded that the facilities did not have a negative impact on property values. The impacts to air, water and natural wildlife are also discussed in the DEIS.	
7.0 Socioeconomics	Н-1-6	The life cycle fiscal impact to the Town of Wawayanda and the larger community has not been fully explored. A 20 year PILOT program with a well structured host community fee may well meet the immediate cost. The question of the fiscal impacts from the year 21 and beyond have not been addressed at all.	
		Response:	
		During the development of the DEIS, the time horizon for the fiscal analysis was discussed with Planning Board's consultants. A 20 year analysis period was considered acceptable. Although a 20 year term for the PILOT agreement is common, an extension could be negotiated, offering CPV Valley and the IDA the option to extend	

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		the term of the PILOT agreement.	
		Please see the response to <u>Comment Number PB3-2</u> .	
7.0 Socioeconomic	Н-1-7	As with most technologies, there is a limited period where the performance of a facility is profitable and efficient. Beyond that point, the technology is old, the efficiency is lost, the plant and equipment is nearing its point replacement and the assessed value of the facility might well be claimed to be almost nothing. In fact, it may be a liability if it had to be closed and cleaned up. It may be more profitable at that point to abandon the site or sell to a less concerned company about the environment, and can become a liability to the town, the school district and the larger community.	
		Response:	
		Due to the nature of the Facility, if the efficiency of the equipment is no longer competitive, then the option of retrofitting the Facility with new technology is an attractive option. Retrofitting an existing facility typically is the most cost effective solution as the infrastructure has been established (i.e., water supply and discharge, electrical interconnection, etc.). Therefore, to change the internal components typically is the most viable alternative.	
		For the reasons above, it is unlikely that the Facility would be abandoned as it represents a significant capital investment. As described in Section 7.4.9 of the DEIS, in the unlikely event the Facility were to close permanently, the scrap value of the equipment and buildings represent significant value. In this situation, the Facility would be dismantled for the salvage value costs.	
7.0 Socioeconomics	H-7-1	Whatever we build on this site will bring construction jobs. We need projects with construction jobs -very very important. However, they are temporary. And what we are left with in the community is very important. So we have to consider how we are using the land that we have left. What about Crystal Run Healthcare? Construction jobs, when they built that. What are we left with? 25 jobs? No, hundreds and hundreds of jobs in that one facility. After the temporary construction jobs, we are left for us in the community permanent jobs. We are left with professionals, technical, administrative, clerical, secretarial. Everybody in this room, there is something for everybody, not just construction workers, not just whoever will be the 25 people who will qualify to man this plant, but hundreds of jobs. And no 275 foot stacks which areI mean talk about environmental impact, no 15,000 gallons of ammonia in a possible fault line; no 965 gallons of fuel, if the gas line doesn't work.	
		When you have a facility like Crystal Run Healthcare or even the office building near Taco Bell, again, five stories, you have got everything there. Everybody here could get a job in that place -professional, technical, hundreds of jobs, not 25	

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		jobs. And none of those facilities have a pipeline going to it.	
		Whose property is the pipeline going across?	
		Response:	
		The job creation and economic benefits of the Project are significant to the Town and local community. A project such as this creates jobs during construction, which in turn bolster the local economy. During operation, the PILOT payments from the Project will continue to provide significant revenue to the Town and community for greater than the current tax revenue derived from the existing Project site. This revenue can be used to reduce or stabilize local taxes. In addition to the PILOT payments, the operation of the Facility will create an estimated \$19.8 million of annual economic benefit to Orange County. While there are 25 to 30 direct, permanent employees during operation, the Project will be procuring services from local providers (i.e., cleaning, landscaping and maintenance, snow removal, painters, etc.). This increased activity for local service providers will assist in maintaining and growing their local businesses.	
		The pipeline for the natural gas supply will be provided by Millennium Pipeline. As discussed in Section 2.6 of this FEIS, CPV Valley has executed an agreement with Millennium Pipeline, who will be responsible for the permitting of the pipeline through the FERC 7c process.	
7.0 Socioeconomics	H-15-1	I am also a resident of Orange County. Live in the Town of Montgomery.	
		Nobody has mentioned that this Valley Energy Center represents an \$800,000,000 private investment in the regional infrastructure. The project is estimated to be approximately \$30,000,000 over 20 years in payments in lieu of taxes. As a county resident, everybody's taxes have gone up over the last few years and they continue to go up. And we need to get some kind of infrastructure in here which is going to lower our property taxes, also in a clean way. And this is supposedly one of the cleanest plants in the country and Mill Rights have worked out these out in Yaphank, as we said before. So we know what this is about. It's clean, safe energy. I have no problem raising my family here.	
		Response: Comment Noted.	
7.0 Socioeconomics	H-16-3	I have been here when Maureen Hallihan of Orange County Partnership spoke to you demanding that you pull the trigger to accept this DEIS. That she had other towns that were begging for a project like this. I would like to say that CPV	

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		should take this project to another town who might welcome this. And Miss Hallihan would be happy to hook them up and therefore provide work for all of these nice gentlemen.	
		I also heard one of your board members say that she wants those 600 jobs for this community. Well, those jobs will be of short duration, while the project is being built, and then there will only be 25 jobs available. While it would be really great to provide someone with 600 jobs for two short years, the price the rest of us will have to pay forever is too high. It's extremely short sighted to think that way. What we will be stuck with forever in terms of pollution, acid rain, lower values for our properties, noise, and having to look at those two 275 chimneys is just not worth the 600 short lived jobs that probably won't be going to locals anyway, as in the case of Orange Regional Medical Center.	
		<u>Response:</u>	
		Please refer to the response to Comment Number H-7-1 .	
7.0 Socioeconomics	H-16-5	The 20-year PILOT program is another huge issue. The experts hired by this board were summarily shut down several times during one of your meetings that I was here at by CPV's lawyer. What about a tax base line to be established up front? Doesn't the public, who will be expected to breathe this foul and polluted air forever have a right to see the financials before the project is approved?	
		This project will not lower our taxes.	
		Response:	
		There was an appropriate and adequate level of discourse among the Planning Board, its consultants, and CPV Valley to provide clarity and guidance on what was required for completeness under SEQRA. Further, there was agreement among the Planning Board, its consultants, and CPV Valley as to what was to be included in the DEIS for completeness. CPV Valley complied with all of the consultants' requests as demonstrated by the consultants' confirmation that the required information was provided and complete for public review and comment of the document.	
		The base line for the comparison can be compared to the current level of taxes derived from the property today, which is less than \$10,000 per year. The PILOT payments will be greater than this amount. CPV Valley has stated publicly that its proposal to the Orange County IDA is for PILOT payments of at least \$30,000,000 over the term of the PILOT. Based on this amount, the annual amount of taxes would be greater than \$1,000,000	

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	(based on \$30,000,000 spread equally across the 20 years of operation and 2 years of construction). Of this amount, the school district and Town will receive a significant portion, which is significantly greater than the amounts received from the property today.
7.0 Socioeconomics H-17-1	My concern was about taxes also. I am not at all clear on the 20-year PILOT plan and how that is all laid out and how that is going to benefit. I don't know how this power plant will affect my land value. I know that when the community was surveyed a few -years ago, the overwhelming interest of the community was to maintain the rural nature of the community. I don't know whether this does that. Power plants also have a very poor reputation locally for their tax situation, within 40 miles of us there are three power plants who have been grossly devalued over the last few years. If you go down to Tompkins Cove, the O&R plant was taken over by Morantz, it was devalued. It was devalued over a period of several years of court cases. And when the re-assessment was put through, it bankrupted the North Rockland School District. The assessment went down. And in fact the North Rockland School District had to re-pay the difference between the current assessment and what the assessment had been three or four years before. And the taxes went up in the North Rockland School District almost triple. The same thing is happening over in New Windsor right now with the Roseton power plant is being devalued. And the people in New Windsor are going to have their taxes doubled and tripled. Right in our own town we have a power plant right behind Orange and Rockland, the Shoemaker power plant, which at one time was the highest valued piece of property in Town of Wawayanda. They went through the exact same process it was sold off, devalued and now it contributes virtually nothing. So, what assurances do we have that this PILOT plant is going to pay us taxes? And what is it really going to do to our tax basis? At, again, the end of the 20 year PILOT plan this thing will obviously be obsolete. So I am not at all sure that this is going to benefit the people who live here. I celebrate the 600 job. And the vast majority of the people who spoke here tonight, 80% have a vested interest in a job. But I live here and we are going to be lef

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		deemed by the courts to be unfair for independent power producers. Utilities did not have an incentive to challenge assessments and property values as the expenses were passed through to the rate payers. Now, as these facilities are operated in a more fiscally responsible manner, the issue of assessed value is of concern. The current owners of the facilities challenged the assessments and the courts have agreed that the assessments were unjust. The PILOT proposed by CPV Valley is not based on or dependent upon the assessed value of the Facility.	
		The PILOT will provide an opportunity for the community to benefit from this project. Without the PILOT, the project would not be built and provide the significant payment stream to the County, Town and School District). The school district's share of the PILOT payments could be used to help to lower the amount of taxes required to be raised to support the school. In addition, the school district would still maintain its school aid allocation from the State. This is a direct benefit to the community and its tax payers. In addition, a portion of the PILOT payment is distributed to the Town. This payment from the project would help reduce the amount of taxes collected to cover the Town's operating costs. Thus, the PILOT can help stabilize or potentially reduce taxes. The payment would be realized for the 20 years of the PILOT, and are in addition to the economic benefits the county would realize from the construction (\$394 million) and operation (\$19.8 million) of the Facility. Any discussion of the period beyond the 20-year PILOT term necessarily depends upon speculation because it is not currently possible to predict with a reasonable degree of certainty what will happen with respect to the relevant issues 20 years in the future.	
7.0 Socioeconomics	H-18-14	Obviously, CPV plans to make a lot of money by this venture. The question on the minds of some taxpayers is whether CPV will be required to pay quote unquote "their fair share of taxes"? I am well aware that according to some Town Board members who support this project, allowing CPV to provide a payment in lieu of taxes or a PILOT is the only quote unquote "appropriate way to tax an entity like a power plant". The concern, of course, is that were CPV to be taxed on the assessed value of their estimated 800 million dollar facility, they would not locate in our town. Still, questions arise as to how a fair and reasonable PILOT is to be decided, by whom, and will there be transparency and oversight of governmental negotiations? Is a 20 year PILOT the norm for similar projects in other communities?	
		How can the integrity of the PILOT be assessed? **Response:* Please refer to the response to **Comment Number L-8-14*. The Project will represent a significant new source of revenue for the Town via the PILOT Agreement, which is currently being negotiated with the Orange County IDA and the Project. In New York, county Industrial	

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		Development Agencies (IDAs) are authorized to negotiate these types of agreements to facilitate economic development opportunities, and provide incremental revenue to the communities in which the development occurs. The PILOT payments have been proposed to commence during the construction period, which will allow the economic benefits to commence even before the Project starts commercial operation. The IDA process is a public process. There is precedence for a 20 year term, based on other PILOTs for projects of this nature.	
7.0 Socioeconomics	Н-19-1	Where when it comes to the 20 years PILOT program instead of taxes, I don't understand why 20 years. You know, I understand that it's protocol to give some sort of incentive to bring commercial business into town, to do something like that, but 20 years is an awful long time. I think that can really be cut in half or even less. That waybecause we are not benefitting at all tax-wise, it's not having any affect on our community at all. And the whole reason for us even looking for rateables is because of the tax burden. Bringing something in that's not going to add more to the school district and make our taxes even higher, but bringing something that will help off-set it and this will not offset it for 20 years, which is no help whatsoever.	
		Response: A 20 year term for the PILOT is customary for projects of this nature. It should be noted that during the period of the PILOT, the PILOT payment is shared among the school district, the Town, and county. So, a significant portion of the payment will go to help the school district, which the Project will have little to no impact on, with only 25 to 30 employees. This increased revenue to the school district will be in addition to the school aid allocation the district receives from the state. Therefore, the benefit to the school district can translate into improvements for the schools, and/or a reduction in the amount of tax revenue required to be collected to support the schools. Further, the amount of the PILOT payment distributed to the Town will be greater than what is currently being derived from the property today. This increase in revenue to the Town from the Project can also be used to help to reduce or stabilize taxes required to cover the Town's cost of operation.	
7.0 Socioeconomics	H-22-1	I am local from New Hampton, New York. I am a vendor who is a benefit, and we need the jobs, and we need energy. I think it's a win/win myself for me and my family and the community. There are the reference to solar panels in our schools, maybe some stuff like that would be nice if we can come to agreement, something like that for the schools and our taxes are so important. And I am not so clear on the PILOT 20 year program pay off, but there is some room to benefit the town, I am all for it.	

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		And the jobs, we need the jobs. And it's only 2, 3 year project for the union guys, but it doesn't hurt the infrastructure.
		And I don't think the side roads, Guinea Hill and Ridgebury, I think the commercial trucks bringing commercial equipment to the jobs are going to take the I-84 and right onto 6.
		Response:
		The benefits from the Project are acknowledged.
7.0 Socioeconomics	H-23-1	I sympathize with all of the construction guys that need jobs, but, again, you were going to be here for a very short time on this project.
		Response:
		Comment Noted.
7.0 Socioeconomics	H-24-1	I served and performed with Teamsters 445, served the Town of Wallkill for a lot of years. When that board sat in front of the decision on that golf course, there is a lot of pros and cons both ways, as far as pesticide run-off. Some of the positives were the generation of some green space. So there was a lot of issues both ways. It was a real tough time for that board, but I will tell you they had the foresight to understand what it meant to the Town of Wallkill down the road. And I could tell you I hear a lot of minimizing about the 25 to 30 remaining jobs when this job is done, we know the direct benefit from the construction process. But I could tell you I know personally that 20 to 25 workers that are directly employed by just the golf course itself at the Town of Wallkill, and they are thankful that that board had the foresight to make the project happen, because there is 20 to 25 families that have been able to raise themselves and stay in Orange County because of that job. It's a good paying job, you get your benefits. So, it's not reallyI don't think we
		should minimize the fact of the 25 to 30 jobs at the end. It has a powerful impact when you start to realize it in the community itself. **Response:*
		The benefits from the Project are acknowledged.

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7.0 Socioeconomics and Environmental Justice	L25-1	The Middletown NAACP is has serious concerns regarding the impact of the planned CPV Valley Energy Center Power Plant. The process approval for the construction of this facility raises many concerns regarding air quality, greenhouse gas emissions (GHG), and hazardous chemical storage, and impact on the environmental safety of ALL Americans and (particularly African Americans) currently living in direct proximity of the proposed project. While the CPV project touts its economic benefits, we are requesting an assurance that the economic benefits of the power plant, will not supersede, ignore, or negatively impact the health and safety of residents, living in proximity, and children, teachers, and other employees of co-located schools.	
		It is a well known fact that power plants produce a myriad of pollutants that negatively impact air quality, and historically we find these plants are usually located near low income, minority communities, as is in this case to wit: David Moore Heights, and its surrounding residential housing complexes.	
		African Americans, Asian Americans, Latinos, indigenous peoples and the poor bear a disproportionate burden of America's environmental problems, all of which can be avoided with valid and comprehensive impact studies that consider the residents of the community, and thoroughly assess and publish accurately, the impact to the community. Government agencies and industries overwhelmingly locate polluting facilities in communities of color and engage in hazardous and unsustainable development, despite protests of residents and in some case, disregard other safe and environmentally protective alternatives. In spite of protest and objection, minority neighborhoods have frequently become host sites for dangerous facilities such as landfills, electrical power stations, incinerators, and waste treatment plants.	
		According to a recently released study,	
		"Toxic Wastes and Race at Twenty, 1987-2007," people of color are more concentrated hazardous waste facilities than twenty years ago. Among the study's findings, 40 of 44 states with hazardous waste facilities have disproportionately high percentages of minorities living in host communities. Today, African-Americans other minorities represent 56% of those living in neighborhoods within two miles of commercial hazardous waste facilities. Historically, African American and other people of communities disproportionate burden of pollution from landfills, garbage dumps, incinerators, sewage treatment plants, chemical industries and a host of other polluting facilities. Many dirty industries have followed the "path of resistance" allowing communities of color to become environmental "sacrificial lambs" and the "dumping grounds for all kinds of health-threatening operations".	

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		For example, according to a review conducted by Orange Environment,	
		"The plant will be located in a federal air quality non-attainment area for ozone and certain particulate matter" DEIS page 9-7. It is proposed that the plant will purchase non-attainment emissions offsets for nitrogen oxides and volatile organic compounds to mitigate the impact of greenhouse gas. However, these be traded across state lines. Page 9-20. The air quality in and around Wawayanda and Orange County likely will suffer from further deterioration unless is ensured that offsets are available and purchased in a manner such that existing emissions from sources in the Wawayanda area are reduced in appropriate amounts. Similarly the plant will have to purchase allowances for its sulfur dioxide emissions. Page 9-24. Once again, unless corresponding local reduction of existing emissions o/this irritating acid rain contributing gas are achieved, the air quality in around Wawayanda will deteriorate at the expense of the residents, minority population, the schools.	
		According to the USEPA "Children are uniquely vulnerable to toxic chemicals in the environment and should not be required by law to spend up to eight hours a day exposed to landfills, incinerators or even Superfund sites. Our schools should be a safe space. According to the USEPA "As part of a new air toxics monitoring initiative, EPA, state and local air pollution control agencies will monitor the outdoor air around schools for pollutants known as toxic air pollutants or air toxics. The Clean Air Act includes a list of 187 of these pollutants. Air toxics are of potential concern because exposure to high levels of these pollutants over many decades could result in long-term health effects.	
		Response:	
		From the Project's inception, the CPV Valley team has been dedicated to working with the local community to address questions and concerns regarding the project. CPV's communications efforts have included a broad range of interactions to keep the local community informed about the Project and to receive input from the community. These efforts have consisted of numerous presentations to local civic and social clubs, open houses, public meetings, an informational web site, and private meetings with concerned citizens. CPV Valley has encouraged open dialogue throughout the process and continues to be available for an open discussion. CPV has also spent time meeting with concerned citizens in the comfort of their own homes, giving them and their neighbors an opportunity to speak with CPV directly. There have also been circumstances where CPV has met with interested parties or groups in a "one-on-one" meeting format. CPV has designed a user-friendly website with toll-free phone and e-mail contact information and easy access to permitting documents.	
		CPV has voluntarily sponsored informational open houses to provide community members with the opportunity to have any questions about the project answered. These open houses were held in both Wawayanda and	

	Response to Comments on Section 7.0 – Socioeconomics		
DEIS Section	Comment Number	Comment/Response	
		Middletown, with the latter held at Orange County Community College to ensure it was easily accessible to all segments of the local community. For both open houses, CPV provided extensive community notification and hired Spanish-English translators.	
		CPV remains committed to working with the community, including the segments concerned with environmental justice.	
		The comment letter discussed concerns regarding the location from which emission offsets will be obtained for the Facility. Although the emission offsets for the Project have not yet been identified, CPV will be required to obtain those offsets in accordance with 6 NYCRR Subpart 231-5 (New Major Facilities and Modifications to Existing Non-major Facilities in Nonattainment Areas, and Attainment Areas of the State within the Ozone Transport Region) and specifically the requirements set forth in 231-5.5 (Emission Offset Requirements). Emission offsets may come from the same ozone nonattainment area or from another ozone nonattainment area within the state of equal or higher classification if certain conditions are met. Emission offsets may also come from other ozone nonattainment areas of equal or higher classification in another state if certain conditions are met and if an interstate reciprocal emissions trading agreement is in place. This process in closely monitored by the DEC and designed to result in a reduction of air emissions in the region in which the facility is located. The Facility must comply with this process in order to obtain an air permit for operation.	
		The potential (i.e., maximum allowable) nitrogen oxides (NO_x) and volatile organic compound (VOC) emissions from the CPV Valley Energy Center will each be offset by a factor of 1 to 1.15 due to permanent actual emission reductions from other sources. This ensures that emissions of NO_x and VOC will actually be reduced in the region. Ozone is formed in the atmosphere as a result of photochemical reactions involving precursor pollutants (NO_x and VOC). Ozone is created over a time scale of many hours to days and generally forms to hundreds of miles downwind of the sources of its precursors. Due to the nature of formation, ozone is a regional scale pollutant and is regulated on a regional basis, rather than a local basis. Therefore, regional reductions in ozone precursors will result from the required emission offsets and will lead to regional air quality improvements.	
		As for the issue regarding sulfur dioxide (SO_2) emissions and the associated allowances; the combustion turbines for the facility will be subject to the federal Acid Rain Program and the Clean Air Interstate Rule (CAIR) requirements for these programs require that emission sources track and report their SO_2 emissions, and that they obtain, hold, and surrender sufficient SO_2 allowances to account for their actual emissions during a specific control period. Acid rain is looked at on a regional scale, which is why a regional cap-and-trade program for SO_2 was implemented. The Acid Rain Program assures that overall SO_2 emissions in the region do not increase. In addition, the dispersion modeling analyses performed for the CPV Valley Energy Center demonstrate that maximum SO_2 air quality impacts will be insignificant, as defined by both the U.S. Environmental Protection Agency (EPA) and DEC, at all locations. In those modeling analyses show that the SO_2 air quality impacts of the	

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		CPV Valley Energy Center will be much smaller than the significant impact levels (SILs) defined by EPA and DEC. Thus, the SO_2 emissions of the CPV Valley Energy Center will produce no adverse, disproportionate or unhealthy impacts on the local community or residents.	
		To address concerns about the potential effects on human health and the environment, NYSDEC has established annual guideline concentrations (AGC) and short-term guideline concentrations (SGC) for various air toxics. The dispersion modeling analyses performed for the CPV Valley Project demonstrate that the maximum impacts of its potential air toxics emissions will be well below (by at least a factor of 11.5) the associated SGC and AGC values. The results of those dispersion modeling analyses provide no indication of any adverse, disproportionate or unhealthy impacts on the local community or its residents. Rather, the small sizes of the potential air toxics emissions and predicted impacts show that they will be inconsequential.	
	L25-2	Additionally, we have concerns about the storage and use of hazardous chemicals within the community and the environs of the minority community. For instance, when ammonia at a 20% concentration and is stored, the Clean Act and federal regulations require that a catastrophic release model be developed. However, the plant will avoid this requirement by using a 19% concentration. Page 9-25. This appears to be a direct attempt to "evade" the tenets of responsible environmental stewardship while "flying under the legal radar." If this was the strategy of CPV, it is disappointing and justifiably raises a concern whether safety was the highest priority in project planning. The borderline concentration level suggests the potential for a catastrophic release model.	
		Response:	
		The aqueous ammonia solution of 19% by weight will be used at the Facility within the selective catalytic reduction (SCR) control system. The SCR system is used to reduce the amount of air emissions from the facility; SCRs are considered by the governmental and environmental bodies as beneficial environmental control systems. The use of 19% aqueous ammonia for this purpose is a standard industry practice. This mixture of ammonia and water is used to minimize the risk that may be associated with anhydrous ammonia.	
		Even though the use of 19% aqueous solution of ammonia by weight exempts the project from the Risk Management Program requirements in 40 CFR Part 68, the Applicant performed the modeling described in your letter. Section 9.6.4 (Assessment of Accidental Ammonia Release) of the DEIS provides the results of a modeling analysis of a worst-case, hypothetical aqueous ammonia spill as represented by a complete failure of the ammonia storage tank. The modeling analysis calculated the downwind distances at which the ammonia concentration resulting from the hypothetical modeled accidental releases would decrease to less than the Emergency Response Planning Guideline Level 2 (ERPG-2) threshold. The ERPG-2 is defined as the maximum	

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		airborne concentration to which nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action. This threshold was defined by the American Industrial Hygiene Association (AIHA) and is recommended by EPA for calculating endpoint distances for the Risk Management Planning (RMP) Rule. The more stringent ERPG-2 value of 150 ppm, recommended by AIHA was used for this assessment. The modeling concluded that the predicted endpoint distances were 103 meters for the worst-case scenario and 68 meters for the alternate scenario. The closest public receptor to the ammonia tank is the nearest residence, which is located approximately 1,545 feet (or approximately 472 meters) away. This nearest public receptor is located well beyond the calculated endpoint distance (103 meters). The Applicant did take the additional steps, even though not required, to fully evaluate and disclose the potential impacts of the CPV Valley Project.	
7.0 Socioeconomics and Environmental Justice	L25-3	The above mentioned concerns provide a brief summary of our total concerns regarding this project. The Middletown NAACP is committed to protecting and advocating for the rights and causes of the disenfranchised. Therefore it is our deliberate objective to ensure that environmental justice is not overlooked at the expense of the health and well-being of any Americans who are uninformed, have no access to the legal system, and or are simply afraid to speak up because they have no other place to live.	
		Response: The New York State Environmental Quality Review Act (SEQRA) has outlined a process in which projects are studied and analyzed to determine the significance of their potential environmental impacts for all of the surrounding communities and citizens. CPV Valley has been working through this process since April of 2008. The Town of Wawayanda Planning Board, acting as Lead Agency, has hired expert consultants to review the Project's proposal, which has also been sent to dozens of interested and involved agencies for review. Once review of the Project and all of its attributes is complete, a Findings Statement will be issued by the Lead Agency declaring whether or not the proposed project has met all of the requirements of this process. Even then, the Lead Agency will outline all of the necessary mitigation that must be undertaken to complete the project. For	
		this reason, the Applicant believes that the CPV Valley Energy Center is a positive project for this community, and that no impacts have been overlooked, especially not those areas that you have highlighted in your letter.	

	Response to Comments on Section 8.0 – Traffic		
DEIS Section	Comment Number	Comment/Response	
8.0 Traffic	PB1-50	It is our understanding Pat Hines is providing comments on this section.	
		Response:	
		Comments have been received from McGoey-Hauser and Edsall, consultant to the Planning Board, on the DEIS. Responses to the comments are included in the FEIS.	
8.0 Traffic	L-2-6a	The DEIS identifies potential traffic Level of Service (LOS) degradations at several locations during peak AM and PM rush hours NY Rt. 17-M and NY Route 6 Sunrise Park Road would degrade from C to D LOS; and NY Route 6 at Kirbytown Road from D to F LOS. The proposed plan for mitigationto employ a police officer at each intersection during each rush hour period during constructionappears to be appropriate at this time but should be revisited during the initial stages of construction to ensure the appropriateness of the measure.	
		Response: Traffic operations during Facility construction will be monitored to ensure that police officer control during the AM	
		and PM commuter peak periods at the two intersection locations is minimizing vehicle delay.	
		The Maintenance and Protection of Traffic Plan will be reviewed and approved by DOT prior to issuance of the Highway Work Permit.	
8.0 Traffic	L-2-6b	A traffic management plan should be prepared for all utility pipeline work along NY Route 17-M that includes traffic control, traffic diversion/lane closures and equipment and material deliveries during construction. It should recognize the need for trailblazer signage and traffic warning signs, consider the use of electronic message boards and utilize the	
		measures set forth in the most current edition of the Manual on Uniform Traffic Control Devices and New York State Supplement. The applicant should prepare a detailed work plan in coordination with the appropriate agencies (including but not limited to the municipal departments of public works, the Orange County Highway Department, the New York State Thruway Authority (responsible for I-84) and the New York State Department of Transportation) that, at a minimum, complies with 17 NYCRR Part 131. Periodic notices about utility construction plans along the main traffic routes should be placed in area newspapers and broadcast on radio stations.	

	Response to Comments on Section 8.0 – Traffic		
DEIS Section	Comment Number	Comment/Response	
		Response: Meetings have been held with the New York State Department of Transportation Poughkeepsie office to discuss the traffic access plans for the CPV Valley Energy Center and the planned use of Route 17M state right-of-way for water, sewer, and electrical utility interconnections. Consistent with New York State Department of Transportation procedures, a traffic management plan is being developed for construction involving use of Route 6 and Route 17M rights-of-way. The traffic management plan includes specification of trailblazer signage, traffic warning signs, electronic message boards, and police officer control. The Maintenance and Protection of Traffic Plan will be reviewed and approved by DOT prior to issuance of the Highway Work Permit.	
8.0 Traffic	L-8-13 H-18-12	These questions may irritate or make some people uncomfortable, but only the self-serving would want to ignore them, or those who seek to advance their own agenda and interests at the expense of others. I would hope these questions will be addressed by all parties with vested interests in this project. Assuming this proposal will go forward at a rapid pace regardless of public sentiment, I want to remind the Board that residential roadways such as Post, Guinea Hill, and Ridgebury Roads, which are used as short cuts by construction and supply companies, were not designed to handle dump trucks, concrete trucks or tractor trailer trucks hauling heavy equipment such as bull dozers and backhoes. I would ask CPV and the Town Planning Board to offer some consideration and require these construction vehicles to use major county or state roads, such as Lower Road (County Route 12), Routes 17M and US 6, especially during the construction of all CPV facilities. Such vehicles are noisy and dangerous to children and pedestrians out for a walk or run and those who care enough about their community to pick up some of the trash littered along the roadsides. They are also dangerous to the passenger vehicles and commuters who regularly use on these roads. I view this as a common sense safety precaution and I hope the Planning Board, CPV and local contractor/suppliers agree. Will they?	
		Response: Construction truck traffic will generally be following the major roadways – I-84 to Route 17, and Route 6. Some trucks may come from I-84/Route 6 from the west. The truck deliveries will be scheduled during off peak hours. Truck routes will be designed to avoid local residential roads to the greatest extent possible. Prior to construction, CPV Valley will review truck routes with equipment suppliers. See pages 8-21 and 8-22 of the DEIS regarding traffic during construction.	

		Response to Comments on Section 8.0 – Traffic
DEIS Section	Comment Number	Comment/Response
8.0 Traffic	L-12-9	What are the truck routes to be used pre, during and post construction?
		Response: See response to Comment Number L-8-13.
8.0 Traffic	H-18-13	I want to remind the board that the residential roadways such as Post, Guinea hill and Ridgebury Roads which are used as shortcuts by construction and supply companies were not designed to handle dump trucks, concrete trucks or tractor trailer trucks hauling heavy equipment such as bulldozers and backhoes. I would ask CPV and the town Planning Board to offer some consideration and require these construction vehicles to use major county or state roads, such as Lower Road, County Route 12, Route 17M and U.S. 6, especially during the construction of the CPV facilities. Such vehicles are noisy and dangerous to children and pedestrians out for a walk or a run, and those who care enough about our community who pick up some of the trash that litter our roadsides. They are also dangerous to the passenger vehicles and commuters who regularly use these roads. I view this as common sense safety precaution and I hope the Planning Board, CPV and local contractors and suppliers will agree. My question is, will they?
		Response: See response to Comment Number L-8-13.
8.0 Traffic	H-25-2	And I have three small children that when I moved here three years ago, we didn't have the trucks that are going to be coming in with the warehouses that are here now. We are looking at a recycling plant coming at the time other end of the road and now we are looking at this.
		<u>Response:</u>
		Operation of the proposed Facility will contribute a small number of vehicle trips to the local roadway network. The Project is expected to provide an estimated 25 permanent operations jobs. The Facility will typically have 8 to 10 persons on duty during any one shift. To be conservative, during Facility operation there would be a maximum of 20 vehicle trips during the morning (15 entering, 5 exiting) and evening peak hour periods (15 exiting, 5 entering). Truck deliveries would typically range from 3 to 5 per day when the Facility is operating on natural gas.
		There are a few instances when construction related traffic will impact an intersection level of service (LOS); the

Response to Comments on Section 8.0 – Traffic					
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		potentially impacted intersections include Route 17M and Route 6, and Route 6 and Kirbytown Road. However, the impacts are generally moderate and will be temporary in nature lasting only during the 4 to 5 months of peak construction activity. A significant percentage of the construction workers will arrive and leave the Project site before and after the peak traffic periods of the local roads. If required, State Police traffic officer control paid by CPV Valley will be used at the intersection of Route 6 and Kirbytown Road, and the Facility site access drive during the 4 to 5 month peak construction period.			

		Response to Comments on Section 9.0 – Air Quality
DEIS Section	Comment Number	Comment/Response
9.0 Air Quality	H-18-1	Will this plant replace a less efficient facility that is currently serving this area and contributing more pollution to our regional atmosphere? My understanding is that it will not.
		Response:
		Regional emissions are expected to decrease as a result of dispatch and operation of the Project due to the displacement of generation from older, less efficient, and more polluting power plants. The proposed project will not directly replace another plant; however, it will displace an equal generating capacity at some, or several, older, less efficient plants. According to information cited in an April 21, 2009 news release from the New York Independent System Operator (NYISO) and available in an associated briefing paper (New York State Power Plant Emissions: 1999 – 2008), significant reductions in emissions from power plants in New York have occurred in the last decade. Over the last decade, power plant emissions in New York State have decreased by 77% for SO ₂ , by 28% for CO ₂ , and by 61% for NO _x . These emissions decreases have occurred as more than 7,000 MW of new, more efficient, and less polluting sources of electrical generation have come on line. Due to the relatively high efficiency and low heat rate associated with modern, combined cycle power plants, it is
		expected that facilities of this type (including the Project) will be dispatched in preference to older, less efficient, and more polluting generating sources and continue the trend in reducing overall emissions from power plants.
9.0 Air Quality	PB1-51	It is our understanding Allegiance Resources is providing comments on this section.
		<u>Response:</u>
		Comments have been received from Allegiance on this section.
9.0 Air Quality	PB5-1	Allegiance Resources Corporation (ARC) previously reviewed the referenced Draft Environmental Impact Statement (DEIS); and submitted a letter to the Town of Wawayanda Planning Board ("Planning Board"), dated February 23, 2009. This letter recommended the Planning Board accept the DEIS (February 2009, Rev. 2) with subsequently revised Pages 9-30, 9-62, and 9-63; as complete for public review." The Planning Board formally accepted the DEIS as "complete for public review" at the Planning Board meeting on February 23, 2009.
		A DEIS Public Hearing was subsequently held on April 8, 2009. ARC has reviewed the public comments from the DEIS Public Hearing and written public comments subsequently received by the Planning Board and forwarded to our

		Response to Comments on Section 9.0 – Air Quality
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		office. These comments have been reviewed with respect to ARC's areas of responsibility as a technical consultant to the Planning Board.
		Consistent with the DEIS text and our referenced February 23 $^{\text{rd}}$ letter, ARC recommends at this time the Planning Board request the applicant to propose an approach and begin technical discussions with the Planning Board's consultants, to adequately characterize the local and regional air quality impacts associated with <i>secondary formation of fine particulate matter</i> ($PM_{2.5}$) from the applicant's proposed facility.
		Response:
		As requested, the applicant proposed a methodology for estimating the air quality impacts associated with the secondary formation of PM _{2.5} due to emissions from the proposed Facility. The methodology was reviewed with the Planning Board's consultants and was modified to account for their suggestions and recommendations. The methodology and results are described in a series of three technical memoranda that are provided in Appendix 3A of the FEIS.
9.0 Air Quality	PB5-2	Air-Quality Impact Analysis: Secondary Formation of Fine Particulate Matter (PM _{2.5}) Although an air-quality impact analysis for PM _{2.5} precursor emissions is <u>not</u> currently required for the applicant to receive a New York State Department of Environmental Conservation (NYSDEC) <u>air permit</u> ; the requirement for this <u>air-quality impact</u> analysis was included in the DEIS to satisfy the Planning Board's obligation to provide "full disclosure of the project's environmental impacts". The Planning Board serves as Lead Agency for the preparation of the Environmental Impact Statement (EIS) for the proposed facility. Unlike <u>conventional</u> air permit application and related compliance activities that follow standard engineering procedures, evaluation of secondary formation of PM _{2.5} from the applicant's proposed facility will require <u>scientific approaches</u>
		<u>using practical assumptions</u> to appropriately characterize the secondary formation of fine particulate matter (PM _{2.5})' This effort will most probably include the applicant reviewing analytical and computational methodologies used by others, and the Planning Board and Planning Board consultants working with applicant to ensure the completion of an analysis that is acceptable for EIS reporting purposes <u>and</u> approvable by the Planning Board as Lead Agency. <u>Response:</u>
		The methodology proposed by the applicant for estimating the air quality impacts associated with the secondary

		Response to Comments on Section 9.0 – Air Quality
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		formation of $PM_{2.5}$ due to emissions from the proposed Facility was developed based on a review of the scientific literature. The proposed methodology incorporated relationships between changes in $PM_{2.5}$ precursor emissions and ambient $PM_{2.5}$ concentrations that were described in studies conducted to support decision making related to the development of EPA's Clean Air Interstate Rule (CAIR). The Planning Board's consultants reviewed the proposed methodology, and the methodology was subsequently revised to account for their suggestions and recommendations.
		The additional analyses demonstrate that the estimated potential secondary $PM_{2.5}$ formation attributable to the Project will be below $PM_{2.5}$ significance thresholds used by NYSDEC. In addition, the analyses show that secondary $PM_{2.5}$ formation will not interfere with the compliance with National Ambient Air Quality Standards for $PM_{2.5}$.
		The methodology and results are described in a series of three technical memoranda that are provided in Appendix 3A of the FEIS.
9.0 Air Quality	PB5-3	ARC further recommends that once the <u>protocol</u> for this air-quality impact analysis is completed and accepted by the Planning Board; a decision will be needed by the Planning Board with regard to how this <u>new</u> information will presented, and in what format (e.g., Revised DEIS, Draft Final Environmental Impact Statement (FEIS), Supplemental DEIS and/or FEIS, Addenda, etc.) to allow for appropriate review and public comment in accordance with applicable State Environmental Quality Review Act (SEQRA) requirements.
		Response:
		Comment noted. The additional analysis of potential secondary $PM_{2.5}$ formation is presented in three technical memoranda in Appendix 3A of this FEIS, which was made available for Public Review prior to the FEIS being finalized and deemed complete by the Planning Board.

		Response to Comments on Section 9.0 – Air Quality
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9.0 Air Quality	PB5-4	In closing, a considerable number of air emission / ambient air quality $\underline{\text{technical}}$ issues identified by ARC were satisfactorily addressed by the applicant and the applicant's consultant during the DEIS "Completeness Review". The $PM_{2.5}$ precursor emissions and secondary formation of $PM_{2.5}$ were identified during the DEIS "Completeness Review" for review and evaluation at this time.
		Response:
		See prior response to <u>Comment Number PB5-2</u> .
9.0 Air Quality	PB5-5	Other air emission / ambient air quality technical details, which have <u>not</u> been specifically listed in this letter, are related to the above-described, air-quality impact analysis. These items will be identified, discussed with the applicant and the applicant's consultant, and presented to the Planning Board by letter at a later date as the air-quality analysis proceeds. **Response:*
		All air quality impacts identified by the Town's consultants to date have been addressed either in the DEIS or in separate technical memoranda submitted to the Town of Wawayanda Planning Board, and now incorporated into this FEIS.
9.0 Air Quality	PB5-6	Other Issues: Presentation Format for Post-DEIS Information As noted above, a Planning Board decision will be needed regarding how new air-quality impact information will presented (i.e., post-DEIS), and in what format (e.g., Revised DEIS, Draft Final Environmental Impact Statement (FEIS), Supplemental DEIS and/or FEIS, Addenda, etc.).
		Response: See response to Comment Number PB5-3.

		Response to Comments on Section 9.0 – Air Quality
DEIS Section	Comment Number	Comment/Response
9.0 Air Quality	L-1-6	This section of the DEIS addresses the current existing conditions related to topography, meteorology and air quality within the project area. The section also discusses the potential impacts to air quality from the proposed project. Page 9-1 of this section also incorporates by reference the air permit application dated November 2008 submitted by CPV Valley. The Department has also reviewed the air permit application and supporting documentation. Staff has determined all the information required to commence the preparation of a draft permit is included in the application. **Response:*
		Comment noted.
9.0 Air Quality	L-1-7	The Department, however, does have some additional comments not directly related its air permit jurisdiction. The first comment relates to the potential for increased icing and fogging on local roads and highways as a result of the facility's air cooled condensers. Given the close proximity of I-84 to the project this issue should at least be addressed in the environmental review of the project.
		Response:
		The Project incorporates the use of air cooled condensers, a dry cooling mechanism. As discussed in the DEIS, air-cooled condensing will be used to minimize water use and to eliminate potential impacts associated with wet cooling towers. Air cooled condensers were selected for cooling in place of other alternatives, such as oncethrough cooling, mechanical draft (wet) cooling towers, hybrid (wet/dry) cooling tower systems, and natural draft towers.
		The air cooled condensers will use ambient air for cooling without the use of water or other intermediary heat transfer medium. Therefore, there will not be any potential for icing or fogging effects on local roads or highways due to the air cooled condensers. Icing and fogging effects can result from the use of wet cooling technologies. Section 19.6 of the DEIS discusses alternate cooling technologies that were not selected for the Project.
9.0 Air Quality	L-1-8	The DEIS also lacks any detailed analysis of impacts on the environment from the use of gray water for cooling. Previous energy project utilizing gray water for cooling addressed the potential impacts to the environment and human health. All current guidelines regarding the use of gray water for cooling purposes should be referenced. The NYS Department of Health should be consulted as part of the analysis.

Comment Number	Comment/Response Response:
	<u>Response:</u>
	The treated grey water is not being used for cooling purposes. Treated grey water will be used as process water and converted to steam for the combined cycle facility. A closed loop system will be used to transport grey water from the City of Middletown Sewage Treatment Plant to the Facility for process use and then back to the Treatment Plant. Grey water for process use will be drawn from the effluent of the new ultraviolet (UV) disinfection system being installed at the Treatment Plant. From this point, it would be chlorinated and forwarded to a new packaged, multimedia filter system and pumped to the CPV Valley Facility. A sodium hypochlorite feed system would be provided on-site to adjust the chlorine content of the Facility's reclaim water storage tank. Following process use of the treated water by the Facility, the water will be routed back to the outfall pipe of the City of Middletown Sewage Treatment Plant. Discussions were held with Mr. Kevin Gleason of the NYS Department of Health pertaining to the Facility's use of reclaim water. Given that the treated water is being used for Facility operational processes and not being used for evaporative cooling, the Department of Health stated that there would be no public health issues or concerns with this water usage and evaluation guidelines addressing potential impacts to the environment and human health are met.
L-1-9	Section 9.6.8 of the DEIS addresses the issue of Global Warming. The information contained within this section is accurate, however, the Department has recently issued draft guidance titled Assessing Energy Use and Greenhouse Gas Emissions in Environmental Impact Statements (March 2009)1 ⁴ . Even though the guidance is draft the Department recommends that the analysis regarding global warming and greenhouse gas emissions be consistent with the guidance document for the CPV Valley project. **Response:** The CPV Valley Energy Center's DEIS was prepared and accepted by the Town of Wawayanda Planning Board acting in its capacity as Lead Agency for the Facility's SEQRA review prior to the issuance of the NYSDEC draft guidance document for assessing energy use and greenhouse gas emissions. In a proactive manner, the Planning Board had included in the SEQRA EIS scope a requirement that the issue of global warming be
L-1-:	9

⁴ The document can found on the DEC Website at http://www.dec.ny.gov/permits 52508.html

		Response to Comments on Section 9.0 – Air Quality
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DEIS Section		The analysis presented in the DEIS indicated that the greatest proportion of the potential global warming gas emissions from the Facility would be CO ₂ from the combustion process utilizing primarily natural gas with provision to use ultra-low sulfur distillate fuel as the back-up fuel. The proposed CPV Valley Energy Center would conservatively emit approximately 0.59 million metric tons of carbon equivalent (MMTCE) per year of CO ₂ emissions. This value is based on the worst-case Facility wide full load operating with a 100% capacity factor, which is an unrealistic operation scenario. The annual emissions of CO ₂ for the State of New York for the years 1990 through 2000 have averaged about 54 MMTCE. On the state level, the annual emissions from proposed Project would represent a level of approximately 1.1% of the total New York CO ₂ inventory. Because of the regulated daily and hourly markets operated by the New York State Independent System Operator (NYISO) – for the matching of generation with load, there is a very high likelihood that energy generated by the CPV Valley Energy Center would primarily displace electricity that would have been generated by less efficient oil, gas, coal or heavy fuel oil power plants. These sources emit more greenhouse gases on a per megawatt (MW) basis than those that would result from proposed Project due to a higher efficiency of the Project and (with respect to oil and coal plants) to the lower emission of greenhouse gases from the Project's source of fuel which is primarily natural gas. Therefore, a general statement can be made regarding the importance of high efficiency combined cycle generation. This is in direct agreement with international protocols and efforts to reduce green house gas emissions. Displacement and reduction of emissions of CO ₂ (and other greenhouse gases) is a key tenant of these efforts. In this way, the development of efficient power generation facilities, such as this project, is not only important in achieving a national reduction in greenh
		Construction of the Facility is expected to take approximately 24 months. The peak construction period is anticipated to occur for approximately 4 to 5 months. The maximum number of construction workers projected to be employed at any one time is approximately 664 workers. During much of the remaining construction period, the number of workers is projected to be significantly less than during the peak period. CO ₂ greenhouse gas emissions associated with construction workers' travel, material deliveries and construction equipment operation will be insubstantial in quantity and duration.

		Response to Comments on Section 9.0 – Air Quality
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9.0 Air Quality	L-5-2	We found the Section 9: Air Quality to be difficult to interpret. Though this undoubtedly due, in part, to our limited expertise in such a specific technical field, were unable to find answers to basic questions in this Section. Orange County is currently in non-attainment for both ozone and fine particulate matter (PM 2,5). As such, the potential for any air quality impacts is among the most significant of all impacts associated with this project. We recommend that this Section be amended improve its readability to the average reader.
		Response:
		The presentation of air quality information in Section 9.0 of the DEIS is consistent with technical information required by both EPA and NYSDEC for an electric generating facility.
		Tables 1-1 and 9-3 of the DEIS summarize the potential annual Facility emissions. With respect to new sources of air emissions, EPA and NYSDEC have adopted Significant Impact Levels (SILs) to determine if modeled concentrations require more comprehensive analysis. Being below the SILs indicates potential impacts are so small as to not require further analysis. The predicted maximum impacts from the Facility are below the SILs for all criteria pollutants with the exception of PM_{10} when backup ultra low sulfur distillate oil is being used. Use of backup fuel will be limited to the equivalent of 720 hours per combustion turbine annually. The cumulative impact modeling of the Facility, with other major sources, indicated compliance with the PM_{10} air quality standards.
		Appendix 3B of the FEIS provides additional impact analysis demonstrating compliance with the new or revised NAAQS and PSD increments for NO_2 , SO_2 , Pb , and $PM_{2.5.}$
		A major source in a EPA designated nonattainment area must obtain emission offsets as a condition for approval. The offsets required result in a net air quality benefit to the region given they are greater in magnitude than the potential emissions from the Facility. The Facility's location in a non-attainment area for ozone requires the purchase of Emission Reduction Credits (ERCs) for NO_x and VOC .

		Response to Comments on Section 9.0 – Air Quality
DEIS Section	Comment Number	Comment/Response
9.0 Air Quality	L-5-3	Specifically, we also recommend that the following be clearly answered:
		What is the likelihood of clear air turbulence (also known as air pockets) affecting small planes, gliders, skydivers, helicopters, and hang-gliders? Randall Airport is roughly two miles from the Project site and therefore explanation is needed relevant to potential that heat emitted from the stacks of the proposed power plant could create a serious hazard for local air traffic.
		Response:
		The nearest portion of any runway at Randall Airport is 2.5 miles from the proposed combustion turbine stacks. More distant portions of runways at Randall Airport are 3.0 miles away.
		Aeronautical Studies No. 2009-AEA-368-OE and 2009-AEA-369-OE prepared by the Federal Aviation Administration (FAA) concluded that the proposed stacks would not be a hazard to air navigation. However, FAA aeronautical obstruction evaluations are conducted in accordance with 14 CFR Part 77(Objects Affecting Navigable Airspace), which does not currently contain obstruction standards for industrial plant exhaust plumes.
		The FAA has issued a safety study report entitled "Safety Risk Analysis of Aircraft Overflight of Industrial Exhaust Plumes" (January 2006). The study examined whether the high temperatures and velocities from exhaust plumes could damage aircraft bodies or coverings ("airframes") or affect aircraft stability in flight. Associated potential hazards considered included possible detrimental effects of water vapor, icing, restricted visibility, and engine/aircraft contaminants on aircraft performance. The risk analysis team determined that the greatest risk associated with the overflight of vertical exhaust plumes would be in the takeoff and approach/landing phases of flight.
		This safety study included an extensive review of data from aviation safety systems maintained by the FAA, the National Aeronautical Space Administration (NASA), and the National Transportation Safety Board (NTSB). This review found no accidents or incidents in which overflight of exhaust plumes was determined to be the cause or probable cause. Approximately 850 million flight hours by general aviation aircraft in the period between 1975 and 2004 were included in the records that were reviewed. If even a single incident during this period had been attributed to the overflight of exhaust plumes, the associated accident/incident rate would be approximately 1.2 x 10 ⁻⁹ (slightly over one in a billion). On this basis, the study concludes that the likelihood of an accident or incident caused by overflight of an exhaust plume would be on the order of 10 ⁻⁹ or less. In addition, the study concludes that "the risk associated with plumes is deemed acceptable without restriction, limitation, or further mitigation."

DEIS Section	Comment Number	Comment/Response								
9.0 Air Quality	L-5-4	L-5-4 What will be the specific changes (degradation), if any, in local air quality once this facility is in operation?								
		Response:								
		Extensive air including the of the potent	extent to whi	ich existing ai	ir quality mig	ght be degi	raded by e	missions fr	om the Proje	
									Project. Mos	
		receptors (ov examined exi different com (including col	rer 2,500) we tensively. The bustion turbin nsideration of mpact levels (re located wit e following su ne operationa an annual m SILs), Nationa	hin 5 miles o Immary table I modes (gas ix of gas-firii	of the Proje e provides s-firing, oil ng and oil-	ect, so tha the maxin -firing, sta firing) aloi	t Project im num predic artup) and t ng with var	npacts in the ted Project in the overall ma ious regulato and Preventio	local area w npacts for aximum ry threshold
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		receptors (ov examined exi different com (including coi (significant ir Deterioration	rer 2,500) we tensively. The abustion turbin insideration of inpact levels ((PSD) incren	re located wite following sume operational annual missils), National ments.)	thin 5 miles of thin 5 miles of the second s	of the Proje e provides s-firing, oil ng and oil- Nir Quality : (µg/m³)	ect, so tha the maxin -firing, sta firing) alor Standards	t Project im num predic artup) and t ng with var (NAAQS), a	npacts in the ted Project in the overall maious regulato and Prevention PSD Increment	local area wanpacts for aximum ry threshold on of Signification NAAQS
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			Response to	Comments or	n Section 9.0	– Air Qualit	7			
DEIS Section	Comment Number	Comment/Response								
		total concen	tration is belo	w the NAAQS.						
						T		T		-
		Pollutant	Averaging	_ Rank	Impac	t PSD Increme	Backgrou	nd Total	NAAQS	
			Period		(µg/m³	(μg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	
		PM ₁₀	24-hour	high second-hig	gh 7.8	30	78	85.8	150	
		and help pro Appendix 3E	ovide a sense of the FEIS p	of relative impa	acts at differe nal impact a	ent locations. nalysis demoi	,	licted impacts fro	-	
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		and residents livi Response:				e residents of	Horizons at '	Wawayanda apart	tment compl	ex
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		and residents living and residents living and residents living and result impacts at the nearest to result in the following shown in the pollutant	ng on Kirbyto s for the opera he model rece esidences on k g tables summ e tables provid Averaging Period	wn Road and Restring cases that ptors nearest to irrbytown Road narize the maximum red, maximum road Maximum Progas-Firing	t yielded the o the Horizon and Route 6 mum predict modeled Produce I wayanda oject Impact ()	maximum Pr ns at Wawaya 5. ted impacts a ject impacts a ject impacts a ject impacts a	nject impact nda apartme receptors n re below the SIL erall (µg/i	s were reviewed ent complex and earest the indica e Significant Imp. PSD Increment n³) (µg/m³)	to determine at receptors ted areas. A act Levels (S	e 4 <i>s</i>
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Comment Number	Comment/Response								
		Averaging		oject Impact	(µg/m³)		SIL	PSD Increment	NAAQS
	Pollutant	Period	Gas-Firing	Oil-Firing	Startup	Overall	(µg/m³)	(µg/m³)	(µg/m³)
	NO ₂	annual	0.22	0.16	-	0.23	1	25	100
	CO	1-hour	29.9	29.9	175.3	175.3	2,000	none	40,000
		8-hour	11.3	11.3	38.5	38.5	500	none	10,000
	SO ₂	3-hour	0.91	0.5	-	0.91	25	512	1,300
		24-hour	0.36	0.2	-	0.36	5	91	365
		annual	0.036	0.006	_	0.036	1	20	80
	PM ₁₀	24-hour	1.06	4.41	4.59	4.59	5	30	150
	PM ₁₀		1.06 0.11	4.41 0.05	4.59			30 17	
	PM ₁₀	24-hour	1.06 0.11 Route 6 Res	4.41 0.05	-	4.59	5	30	150
	PM ₁₀	24-hour annual	1.06 0.11 Route 6 Res	4.41 0.05	-	4.59	5 1	30 17 PSD	150 50
		24-hour annual	1.06 0.11 Route 6 Res Maximum Pi	4.41 0.05 idences	- (μg/m³)	4.59 0.14	5 1	30 17 PSD Increment	150 50 NAAQS
	Pollutant	24-hour annual Averaging Period	1.06 0.11 Route 6 Res Maximum Pi Gas-Firing	idences oject Impact Oil-Firing	- (μg/m³)	4.59 0.14 Overall	5 1	30 17 PSD Increment (μg/m³)	150 50 NAAQS (μg/m³)
	Pollutant NO ₂ CO	24-hour annual Averaging Period annual	Route 6 Res Maximum Pi Gas-Firing	idences roject Impact Oil-Firing 0.21	- (µg/m³) Startup	4.59 0.14 Overall 0.27	5 1 1 SIL (μg/m³)	PSD Increment (µg/m³)	150 50 NAAQS (μg/m³)
	Pollutant NO ₂	24-hour annual Averaging Period annual 1-hour	1.06 0.11 Route 6 Res Maximum Progas-Firing 0.27 10.2 6.5 0.73	idences roject Impact Oil-Firing 0.21 10.2	(µg/m³) Startup - 160.2	4.59 0.14 Overall 0.27 160.2	SIL (μg/m³) 1 2,000	PSD Increment (µg/m³) 25 none	NAAQS (μg/m³) 100 40,000 10,000 1,300
	Pollutant NO ₂ CO	Averaging Period annual 1-hour 8-hour	1.06 0.11 Route 6 Res Maximum Pi Gas-Firing 0.27 10.2 6.5 0.73 0.27	idences roject Impact Oil-Firing 0.21 10.2 6.5 0.43 0.16	(µg/m³) Startup - 160.2 35.8	0.14 Overall 0.27 160.2 35.8 0.73 0.16	SIL (μg/m³) 1 2,000 500	PSD Increment (µg/m³) 25 none none	NAAQS (μg/m³) 100 40,000 10,000 1,300 365
	Pollutant NO ₂ CO SO ₂	Averaging Period annual 1-hour 8-hour 3-hour	1.06 0.11 Route 6 Res Maximum Progas-Firing 0.27 10.2 6.5 0.73	idences roject Impact Oil-Firing 0.21 10.2 6.5 0.43	(µg/m³) Startup - 160.2 35.8	0.14 Overall 0.27 160.2 35.8 0.73	SIL (µg/m³) 1 2,000 500 25	PSD Increment (µg/m³) 25 none none 512	NAAQS (μg/m³) 100 40,000 10,000 1,300
	Pollutant NO ₂ CO	Averaging Period annual 1-hour 8-hour 3-hour 24-hour	1.06 0.11 Route 6 Res Maximum Pi Gas-Firing 0.27 10.2 6.5 0.73 0.27	idences roject Impact Oil-Firing 0.21 10.2 6.5 0.43 0.16	(µg/m³) Startup - 160.2 35.8 -	0.14 Overall 0.27 160.2 35.8 0.73 0.16	SIL (μg/m³) 1 2,000 500 25 5	PSD Increment (µg/m³) 25 none none 512 91	NAAQS (μg/m³) 100 40,000 10,000 1,300 365

	Response to Comments on Section 9.0 – Air Quality				
DEIS Section	Comment Number	Comment/Response			
9.0 Air Quality	L-5-6	What are the alternative emissions offsets and how will they improve local, micro, and regional air quality. In particular, how will NOx's and VOC's be reduced in the region due to the construction of the power plant?			
		Response:			
		Section 9.2.5 of the DEIS describes the requirements for emission offsets (also referred to as emission reduction credits). The Project will be a major source of NO_x and VOC in an ozone nonattainment area. Therefore, the Project will be required to obtain emission offsets for these pollutants in quantities detailed in Table 9-5 of the DEIS.			
		The emission offsets that are required represent the permanent reduction of actual emissions in the nonattainment area. Actual emissions from the Project cannot exceed and may be substantially below its maximum allowable ("potential") emissions. The Project is required to more than fully offset its potential emissions of NO_x and VOC with emission offsets representing actual emissions from other sources. Therefore, by definition, there will be a net reduction in actual regional emissions of NO_x and VOC as a result of construction and operation of the Project.			
		In addition to the regional emission reductions that will occur due to the required emission offsets, regional emissions would also be expected to decrease as a result of dispatch and operation of the Project due to the displacement of generation from older, less efficient, and more polluting power plants. According to information cited in an April 21, 2009 news release from the New York Independent System Operator (NYISO) and available in an associated briefing paper (New York State Power Plant Emissions: 1999 – 2008), significant reductions in emissions from power plants in New York have occurred in the last decade. Over the last decade, power plant emissions in New York State have decreased by 77% for SO ₂ , by 28% for CO ₂ , and by 61% for NO _x . These emissions decreases have occurred as more than 7,000 MW of new, more efficient, and less polluting sources of electrical generation have come on line.			
		Due to the relatively high efficiency and low heat rate associated with modern, combined cycle power plants, it is expected that facilities of this type (including the Project) will be dispatched in preference to older, less efficient, and more polluting generating sources and continue the trend in reducing overall emissions from power plants.			

Response to Comments on Section 9.0 – Air Quality			
DEIS Section	Comment Number	Comment/Response	
9.0 Air Quality	L-5-7	These questions should be answered in a way that clearly distinguishes between impacts associated with combusting natural gas and impacts associated with combusting oil.	
		Response:	
		The required number of emission reduction credits required for emission offset purposes is based on the maximum potential to emit from the Project. The maximum potential to emit from the Project is determined based on a consideration of the full range of possible Facility operations during a year, potentially encompassing combustion of natural gas and ultra-low sulfur distillate ("oil") for portions of the year. The air permits issued by NYSDEC for the Project will specify the emission offsets required.	
9.0 Air Quality	L-5-8	We strongly recommend that the Town ensure that there an investigation of the cumulative air quality impacts of this plant together with other industrial projects that have been approved or are proposed the area. Such projects include, but not limited to, the following:	
		 Tetz Manufacturing Plant on Rykowski Lane the Town of Wallkill Brookfield Resource on Dolsontown Road in the Town of Wawayanda Massada plant in the City of Middletown 	
		Response:	
		Emissions from the following off-site facilities were explicitly included in cumulative impact modeling analyses conducted for PM ₁₀ :	
		 Revere Smelting & Refining Corp. Shoemaker Gas Turbine Facility Al Turi Landfill & Landfill Gas-To-Energy Facility Chemprene, Inc. Dutchess County Resource Recovery Facility 	
		 IBM Corp. South Road Facility Vassar College Orange County Recycling & Ethanol Production Facility Prismatic Dyeing & Finishing Inc. Metal Container Corp. Ball Metal Beverage Container Corp. 	

	Response to Comments on Section 9.0 – Air Quality			
DEIS Section	Comment Number	Comment/Response		
		 Bowline Point Generating Station Novartis – Suffern Plant Good Samaritan Hospital Stony Point Facility BASF Corp. Lafarge North America Inc. – Buchanan New England Laminates 		
		Neither the air permit nor additional information supplied by NYSDEC provided any emission rates, stack parameters, or emission limits for the Tetz Asphalt Plant in Wallkill. Despite the Applicant's best efforts, including additional inquiries to NYSDEC for information, no information was available for modeling this facility.		
		Brookfield Resources is at an earlier stage in the permitting process. Information about air emissions is not available.		
		The cumulative impact modeling for the Project included emissions from the Masada Plant, also known as Orange Recycling & Ethanol Production Facility, located at 159 Dolson Avenue in Middletown. Although those emissions were included because air permits were issued for the Masada facility, that facility has not yet been constructed. Since issuance of the DEIS for the CPV Valley Project, the permits issued for the Masada facility have expired, and it now appears unlikely to be constructed.		
9.0 Air Quality	L-5-9	We recommend that the EIS examine options for making the proposed facility carbon neutral; both during construction and during operation. Options that offset emissions locally would be especially beneficial. For example, certain power plants in other parts of the country have planted trees annually in order offset greenhouse gas emissions. Other examples could include use of renewable energy solutions at the facility or purchase of such solutions to be installed and use offsite, such as at a shopping mall, school, or community building. There examples are certainly not exhaustive but are listed as illustrations of potential scenarios.		
		Response:		
		The Project will be subject to the federal Greenhouse Gas Prevention of Significant Deterioration (PSD) "Tailoring" Rule and 6 NYCRR Part 242 (CO ₂ Budget Trading Program). Under the PSD Tailoring Rule, Best Available Control Technology (BACT) will be required for greenhouse gas emissions. Under Part 242, the Project will need to monitor and report its emissions of CO ₂ and to obtain and subsequently surrender CO ₂ emission allowances each year in an amount corresponding to its actual emissions of CO ₂ from its combustion turbines		

		Response to Comments on Section 9.0 – Air Quality
DEIS Section	Comment Number	Comment/Response
		and duct burners. The CO ₂ Budget Trading Program is designed to cap and, over time, reduce emissions of CO ₂ , a greenhouse gas, from power plants in New York State. The program implements the goals of the Regional Greenhouse Gas Initiative (RGGI) in New York State. RGGI is a cooperative effort involving Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont to limit greenhouse gas emissions from power plants. RGGI has the goal of reducing CO ₂ emissions from power plants in participating states, while maintaining affordability and reliability and accommodating the diversity of policies and programs in individual states. The participating states have agreed to cap CO ₂ emissions from the power sector and to subsequently reduce those emissions by 10% by 2018. Because the Project will be subject to a regional cap-and-trade program covering CO ₂ emissions from power plants and because the Project will need to obtain and surrender CO ₂ emission allowances each year to cover its actual emissions of CO ₂ , operation of the Project will not lead to any increase in regional emissions of CO ₂ .
9.0 Air Quality	L-5-10	The proposed facility includes provisions for combusting ultra low sulfur distillate, commonly referred to as simply "oil," in times of natural gas shortage, up to a maximum of 720 hours per year. The impacted associated with the combustion of ULSD are markedly different from those of natural gas combustion. Foremost are two impacts from use of oil: 1) increase the facility's water demand by roughly factor ten (10), requiring up to 613,440 gpd for process water alone, 2) increase in the output of particulate matter by roughly a factor of six (6). **Response:** The use of ultra-low sulfur distillate oil does require more water (compared to the use of natural gas) for those limited hours of oil firing. In addition, the hourly emissions are greater when operating on ultra-low sulfur distillate oil than those for natural gas firing. The air quality impact analyses presented in the DEIS take account of these increased emissions. All the conclusions presented in the DEIS concerning air quality impacts are based on worst-case scenarios accounting for the limited use of ultra-low sulfur distillate oil as the backup fuel. The air quality modeling analyses predicted maximum short-term impacts from the Project by assuming that the Project could fire oil at any time. Long-term (annual) impacts accounted for the annual limit on oil firing. The Facility will operate on natural gas as the primary fuel. The two combustion turbines incorporate advanced dry low-NO _x combustion techniques when firing natural gas and water injection when firing ultra-low sulfur distillate oil.

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		Additional emission controls on the combined cycle units consist of selective catalytic reduction (SCR) systems to reduce emissions of NO_X , and oxidation catalyst systems to reduce emissions of CO and CO . In addition to the planned emission control systems, the potential use of ultra-low sulfur distillate oil in a backup fuel capacity will be limited to no more than the equivalent of 720 hours annually for each combustion turbine.		
		Potential short-term (pound per hour) emissions of particulate from oil combustion exceed those from natural gas combustion. However, annual emissions of particulate due to oil combustion in the combustion turbines will be limited by permit conditions that will limit the amount of oil firing to the equivalent of 720 hours per year at base load in each turbine and by the prohibition of oil firing in the duct burners.		
		The air quality modeling analyses predicted short-term maximum particulate impacts from the Project by assuming that the Project could fire oil at any time as a highly conservative measure. Long-term (annual) average impacts accounted for the annual limit on hours of oil firing.		
9.0 Air Quality	L-5-11	This Department sees it as critical that the EIS identify the likelihood of use of ULSD at this facility so that the Town, the County, other municipalities and all residents of this region understand the full potential impacts of this proposed facility. We therefore recommend that the applicant model the likelihood of a natural gas shortage in the region of a magnitude that would limit supply to the proposed facility, thereby forcing the facility to use the ULSD its power source.		
		Response:		
		Adequate long-term supplies of natural gas are available to support operation of the CPV Valley Energy Center. Estimates of natural gas reserves in the United States prepared by the Federal Energy Information Administration (EIA) indicate a supply adequate for between 85 and 90 years. Should periods of natural gas shortages become greater in the future, the use of ultra-low sulfur distillate oil by the Facility would still be limited by conditions in its air permit. Therefore, the Facility will only be allowed to fire ultra-low sulfur distillate oil for the equivalent of 720 hours per year per combustion turbine regardless of the state of the regional natural gas supply.		
		CPV Valley would be required to amend its air permit to allow for any additional operation on oil beyond that proposed in the air permit application.		
9.0 Air Quality	L-6-7	Section 4.0 of the Scoping Document ("Proposed DEIS Scope of Work") provides that the DEIS will be "written in plain language that can be easily read and understood by the public." Section 9.0 ("Air Quality") is written in anything but plain language. An average person cannot understand what this section has studied or concluded with regard to		

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		significant environmental impacts to the residents of the Town of Wawayanda <i>or</i> the Town of Goshen. This section should be revised to explain what was required in the DEIS Scope in a manner that can be understood by the average person. Specifically, Section 9.1.4.6 should be reworded in a manner that can be easily read and understood by the average person. The section should also be rewritten because the section sets forth solely conclusory and incorrect statements, containing no factual or scientific support.		
		Response:		
		The documentation associated with describing air quality impacts from an industrial source such as the CPV Valley Energy Center is dictated by regulatory requirements and analysis protocols established by the EPA and NYSDEC. By nature, describing air quality impacts is a highly technical topic. The analytical conclusions presented in the DEIS have now been confirmed through the independent reviews conducted by EPA Region 2 and NYSDEC air quality scientists. The Executive Summary of the DEIS (Section 1.7.7 – Air Quality and Meteorology), provides a more readily reviewed overview of Facility related air quality impacts.		
9.0 Air Quality	L-6-8	The Applicant must set forth the levels and methodology of determining a benchmark from which to measure the degradation of the air quality in the area. There should be numerous computer models incorporating the rate of combustion, the size of the plant, the plant's elements and the prevailing winds to demonstrate how this plant will impact the air quality of the Town, and of those Towns immediately downwind. (This list is not exclusive.) It is essential that a reliable benchmark be established against which the Applicant can study the impacts of its operations.		
		Response:		
		Extensive air quality modeling was conducted to determine the maximum predicted impacts of the Project, including the extent to which existing air quality might be degraded by emissions from the Project. These modeling analyses made use of a five-year data base of representative hourly meteorological data (including measured wind directions and speeds) and explicitly incorporated consideration of many specific Project elements, including the plant layout and stack and emission parameters (such as emission rates, stack gas exit temperature, and stack gas exit velocity) for a wide range of possible plant operating conditions. The modeling analyses produced estimates of potential Project impacts at numerous locations within a radius of 30 km (approximately 18.6 miles) covering the Town and surrounding areas.		
		These modeling analyses were conducted in accordance with the revised Air Quality Modeling Protocol for the Project, a copy of which is included in Appendix 9-A of the DEIS (in Volume II). This protocol was reviewed by both the USEPA and by the NYSDEC. The modeling results presented in the DEIS also account for comments provided by both agencies and include results of additional modeling analyses that were conducted to ensure		

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		that Project impacts during startup of the combustion turbines would be acceptable. The methodology used for the air quality impact analyses is summarized in Section 9.5.2 of the DEIS. Results of the modeling are summarized in Section 9.5.3 of the DEIS. EPA and NYSDEC have reviewed and accepted the results of the modeling.
9.0 Air Quality	L-6-9	It appears after reviewing the document that air quality levels were tested at ground level, and not at the height that the pollutants are being released. Therefore, there is no study showing the actual air quality at that height – the height of the stacks – and the interaction of those pollutants with what is currently existing. It also appears that the Applicant has not considered the prevailing winds of the area. At a minimum, the Applicant should test for accurate ambient air quality in areas downwind of the prevailing winds. The prevailing winds travel west to east or up the coast. **Response:*
		Section 9.1.4 of the DEIS discusses the existing background ambient air quality based upon measurements available from air quality monitors operated by the New York State Department of Environmental Conservation (NYSDEC) and the New Jersey Department of Environmental Protection (NJDEP). These air quality monitors are sited in accordance with applicable federal guidance and requirements and are designed to measure levels of various air pollutants near ground level (i.e., at or near the level at which exposure to those pollutants would occur).
		Similarly, the air quality modeling conducted for the Project predicted maximum impacts at ground level, since this is where exposure to Project emissions would occur and since this is where ambient air quality standards apply. The modeling explicitly accounts for the height at which pollutants will be emitted, the effect of the winds on transporting and dispersing emissions, and variations in terrain elevation.
		Ambient air quality is measured near ground level using ground-based instruments, and compliance with NAAQS is assessed at ground level (where individuals could potentially be exposed to pollutants). Individuals would not be exposed to pollutants at levels well above local ground level. The modeling explicitly accounted for terrain elevations, so that potential impacts on elevated terrain features are included in the results presented in the DEIS.
		The distribution of winds in the Project area is discussed in Section 9.1.3 of the DEIS, and a wind rose plot for Orange County Airport is presented as Figure 9.2 of the DEIS. This figure shows that the prevailing winds in the Project area are from the south-southwest and the north-northeast, consistent with the orientation of the broad surrounding terrain features.

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9.0 Air Quality	L-6-10	Why did the Applicant not use the Gaussian Model to study air quality? It is a more realistic and current model. The studies should be performed using this Model.			
		Response:			
		The modeling analyses for the Project were conducted using the AERMOD model, a steady-state plume model that is specifically recommended for use by the U.S. Environmental Protection Agency (USEPA) in the "Guideline on Air Quality Models" (40 CFR 51, Appendix W).			
		A "Gaussian" model is one in which concentrations across the cross section of a plume are assumed to follow a Gaussian curve. AERMOD is, in fact, a "Gaussian" model. AERMOD assumes that the concentration distribution within a plume is:			
		Gaussian in both the vertical and horizontal directions within the stable boundary layer;			
		 Gaussian in the horizontal direction in the convective boundary layer; and described by a bi-Gaussian probability density function in the vertical direction within the convective boundary layer. 			
9.0 Air Quality	L-6-11	How can the studies performed be adequate when the air testing facility utilized is 27 miles away, when the testing radius is only 5 miles? The modeling performed for the studies uses a 5-mile radius, but such a distance is not static. Air does not stop travelling at 5 miles, nor do the pollutants suddenly disappear. The Applicant should err on the side of caution and reasonably expand the radius.			
		Response:			
		Available ambient air quality monitoring data were reviewed to select the closest and most representative sites for the Project area. However, in many cases, data were selected from sites that would be expected to have higher ambient concentration levels compared to those in the Project area due to more dense land use development. This was done to ensure that existing ambient levels would not be underestimated.			

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		Ambient air quality data were reviewed for two purposes. First, the data were used to provide conservative estimates of existing environmental conditions in the Project area. Next, ambient air quality data were incorporated in the NAAQS compliance demonstration for the only pollutant for which the Project was predicted to have impacts exceeding a defined Significant Impact Level (SIL). For the PM ₁₀ compliance demonstration, existing background concentration (based on the ambient data from the Fort Lee monitor) was added to predicted impacts from the Facility and from the other (off-site) PM ₁₀ sources that were modeled (see response to <u>Comment Number L-5-8</u>). The resulting total ambient concentration was below the NAAQS, thus demonstrating that the ambient standard would not be violated.		
		This PM_{10} compliance demonstration is conservative in several respects. It incorporates a background value from Fort Lee that would be expected to exceed ambient levels in the Project area. Review of the NJDEP Ambient Air Monitoring Network Plan shows that the Fort Lee PM_{10} monitor was sited for the purpose of measuring the impact of I-95 on concentrations in Fort Lee. It is also identified as a "middle scale" site, meaning that it is expected to provide concentrations representative of an area extending out from the monitoring site to a distance of 100 meters to 1,000 meters, namely the area that would be most effected by emissions from I-95. In this sense, it might be argued that the Fort Lee monitor is not representative of the Project area because it overstates the existing ambient levels in the Project area. The PM_{10} compliance demonstration may also be conservative because the assumed background data (from the Fort Lee monitor) may include impacts from sources that were explicitly included in the modeling analysis, so that some impacts may be "double counted." Even with these conservative aspects, the PM_{10} impact assessment demonstrates future compliance with the NAAQS.		
		Air quality modeling was used to predict the impacts from the potential Project emissions at several thousand locations (model receptor points) covering an area extending out as far as 30 km (approximately 18.6 miles) in all directions around the Project location. Therefore, the area included in the modeling analyses extended far beyond a 5-mile radius. The model receptor grid also extended far beyond the areas in which maximum Project impacts were predicted to occur and therefore was more than adequate to determine maximum Project impacts.		
		The modeling domain for the cumulative impact analysis for PM_{10} (in which emissions from off-site sources were also explicitly modeled) was somewhat more limited. In accordance with applicable USEPA and NYSDEC guidance, the receptor grid for the cumulative impact analysis for PM_{10} was limited to a radius in which impacts from the Project alone were predicted to exceed significant impact levels (SILs) defined by USEPA for PM_{10} . Predicted impacts below the SILs are considered to be so small as to be negligible and represent levels at which contributions to total concentrations are not considered to be "significant."		

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9.0 Air Quality	L-6-12	Section 9.2.6 of the DEIS mentions the Ozone Transport Assessment Group Region, essentially a cap and trade program. The DEIS does not mention how this application impacts this Region. Additionally, in various locations in the DEIS, in connection with virtually all of the pollutants listed, the Applicant is <i>just</i> under the permitted amounts of contaminants. This is due to the capping and trading being performed, which means that the figures provided <u>are not accurate</u> . The Applicant must identify the true and accurate levels of the contaminants being produced and released into the environment, their impacts and the mitigation proposed, <u>pre-cap</u> and trade. What is the impact of these pollutants without trading levels? What will the levels be prior to any trade?
		Response:
		The DEIS fully describes the maximum potential short-term (pounds per hour) and long-term (tons per year) emissions from the Project air emission sources as well as the maximum predicted impacts of those emissions irrespective of the effect of any state or federal cap-and-trade programs (such as the acid rain program or the Clean Air Interstate Rule) that will apply to the Project and without accounting for the requirement to obtain emission offsets for certain pollutants. Therefore, the information requested in this comment with respect to potential Project emissions and impacts is the very information that is provided in the DEIS, namely potential emissions from the Project and the predicted impacts of those emissions.
		Regional cap-and-trade programs are distinct from the federally enforceable limit on annual emissions of $PM_{2.5}$ that the project has proposed.
		The statement that "the Applicant is just under the permitted amounts of contaminants" is not accurate, and it is not clear what information is being requested in that respect.
9.0 Air Quality	L-6-13	The first paragraph of Section 4.7 of the Scoping Document provides that all school facilities located within the 5-mile radius shall be designated as sensitive receptors. However, the DEIS fails to, and must, include The New York Boys Annex on the list of schools studied. In addition, the Applicant should address and study playgrounds and nurseries within the area studied.
		Response:
		The DEIS provides predicted impacts at all sensitive receptors that were identified within a radius of five miles from the Project. Receptors representing historic parks, other parks, golf courses, public nature preserves, conservation easements, cemeteries, churches, fire stations, hospitals, nursing homes, police stations, schools,

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		pre-schools, and other recreational areas were included in the modeling. Locations of sensitive receptors and maximum predicted impacts at those receptors are provided in Table 3-1 in Section 9.6.7 of the DEIS.		
		Our inventory of schools in the Project area did not contain the "New York Boys Annex." In addition, internet and GIS searches failed to find a school of that name. Additional enquiries suggest that the facility in question is the "Goshen Annex Training School" in Goshen. Although this facility was not included in the modeling analysis that was conducted specifically for the identified sensitive receptors, the receptor grid used for the more extensive modeling to support the air permit application included a receptor with a location corresponding to the Goshen Annex Training School. The results of the modeling for the permit application were reviewed to select concentrations for this location in a manner consistent with those selected for the other previously identified sensitive receptors. The results are included (see last line) in a revised version of Table 9-31 (attached at end of air comment section).		
9.0 Air Quality	L-6-14	What are the short term and long term impacts of the air quality ambient levels?		
		Response:		
		Existing ambient levels of various air pollutants are discussed in Section 9.1.4 of the DEIS. Maximum predicted impacts of potential emissions from the Project are summarized in Section 9.5.3 of the DEIS. The maximum predicated impacts of the Project are well below the National Ambient Air Quality Standards.		
9.0 Air Quality	L-6-15	Figure 7-6 and 7-13 are not provided with an overlay map of the region, so readers cannot understand where the areas shown are located. The map used in Figure 5-ID would be a good map to use.		
		Response:		
		Revised figures are provided in the figure section of the FEIS. See Figures 7-6 through 7-13 of the FEIS.		
9.0 Air Quality	L-6-16	Identify each and every threshold level that the DEIS notes will be exceeding acceptable levels.		
		Response:		
		Impacts from the Project will not exceed any "acceptable" level. Specifically:		
		 As described in Section 9.5.3.1 of the DEIS, maximum predicted Project impacts are less than defined Significant Impact Levels (SILs) for all pollutants except for PM₁₀ for some cases when oil is fired in the 		

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		combustion turbines. Exceeding a SIL does not mean that impacts are not acceptable. Rather, it means that the predicted Project impacts for PM_{10} during oil firing exceed levels considered negligible or insignificant and that a cumulative impact analysis considering impacts of other facilities is required. Such an analysis was conducted for PM_{10} (see Section 9.5.3.3 of the DEIS) and demonstrates that the Project will not cause or contribute to any violations of National Ambient Air Quality Standards (NAAQS) or Prevention of Significant Deterioration (PSD) increments for PM_{10} . Additional ambient impact analyses are underway for NO_2 , SO_2 , Pb and $PM_{2.5}$. Appendix 3B of the FEIS provides additional impact analysis demonstrating compliance with the new or revised NAAQS and PSD increments for NO_2 , SO_2 , Pb , and $PM_{2.5}$. As described in Section 9.5.3.2 of the DEIS, maximum predicted Project impacts are less than Significant Monitoring Concentrations, meaning that pre-construction monitoring of air quality is not required.	
		 As described in Section 9.5.4 of the DEIS, predicted Project impacts will not exceed established thresholds for impacts to soils and vegetation or visibility impairment. As described in Section 9.6.3 of the DEIS, maximum predicted impacts of potential emissions of non- 	
		criteria pollutants from the Project will not exceed guideline concentrations defined by NYSDEC.	
9.0 Air Quality	L-6-17	What is the impact to the air of using oil for 720 hours annually, considering the different temperatures of the air?	
		Response:	
		The modeling analyses predicted maximum Project impacts from potential oil firing in the proposed combustion turbines. Although oil firing in each combustion turbine will be limited by permit to the equivalent of 720 hours per year, the modeling to assess potential short-term impacts accounted for the possibility of oil being fired during all hours of the year. Annual impacts from oil firing were scaled to account for the proposed annual limits on oil firing. The modeling, therefore, considered the effect of air temperature on plume rise and the resulting Project impacts. The modeling also included a full range of representative turbine operating conditions, so that the effect of air temperature on emissions and stack gas exit parameters was also incorporated.	
		Maximum potential Project impacts due to oil firing are summarized in Table 9-17, which is in Section 9.5.3.1 of the DEIS. Impacts associated with firing ultra- low sulfur distillate oil are well below the National Ambient Air Quality Standards.	

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9.0 Air Quality	L-6-18	The Applicant should address the National Emission Standards for HazarAir Pollutants (NESHAP), which addresses inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclide's and volatile HAPs. Additionally, the Applicant should address the cumulative impacts from area discharges of these elements.
		Response:
		The above mentioned constituents are not processed or produced in the operation of a combined cycle generating facility.
		The NESHAP in 40 CFR Part 61 only apply to specific source categories. The Project does not include equipment in any of the specific source categories covered in Part 61. Therefore, the Part 61 NESHAP do not apply to the Project.
		The Project includes equipment of a type that could potentially be subject to NESHAP in 40 CFR Part 63. The equipment that could be subject to Subpart 63 NESHAP and the associated Subpart in Part 63 are:
		the combustion turbines (Subpart YYYY);
		the auxiliary boiler (Subpart DDDDD); and
		the emergency diesel generator and emergency diesel fire pump (Subpart ZZZZ).
		The NESHAP in 40 CFR Part 63 generally apply to major sources of hazardous air pollutants (HAP). The potential to emit from the Project does not equal or exceed major source threshold levels for HAP (i.e., 10 tons per year of any individual HAP or 25 tons per year of total HAP). Therefore, the Project is not a major HAP source. Subpart YYYY applies only to stationary combustion turbines at major HAP sources. Subpart DDDDD applies only to industrial, commercial, and institutional boilers at major HAP sources. Therefore, neither YYYY nor Subpart DDDDD of Part 63 applies to the Project.
		For some source categories, including Subpart ZZZZ, requirements apply to subject units at non-major HAP sources, also referred to as area sources. Although the emergency diesel engines at the Project will be subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines, there are no emission limitations that apply for HAP. Subpart ZZZZ requires that the engines satisfy emission limitations that apply under New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines in Subpart IIII of Part 60. These limits are discussed in Section 9.2.1.4 of the DEIS and do not include emission limits for HAP.

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		Section 9.6.3 of the DEIS provides the results of modeling of Project emissions of several non-criteria pollutants, including arsenic, benzene, vinyl chloride, mercury, beryllium, and various volatile HAP. The predicted Project impacts are well below guideline concentrations established by NYSDEC for air toxics. The Project will not be a source of emissions of radon, asbestos, or radionuclides.	
9.0 Air Quality	L-6-19	The Applicant must identify a testing regimen that will gauge and report the type and levels of pollutants discharged during the year after the facility is completed. Will there be continuous monitoring of emissions, including continuous opacity monitors, along with a volumetric flow rate with a record of such monitoring?	
		<u>Response:</u>	
		Section 9.0, Air Quality, of the DEIS addresses the air quality regulatory requirements pertaining to Facility testing. Each combustion turbine stack must have a Continuous Emissions Monitoring System (CEMS) installed and operating to monitor air emissions. The reporting requirements to be imposed by NYSDEC will be detailed or referenced in the Facility's Air Permit.	
		The Project will satisfy any initial performance testing requirements that may apply under applicable New Source Performance Standards.	
		The combustion turbines and duct burners will be subject to continuous monitoring requirements as discussed in several sections of the DEIS (see Sections 9.2.1.5, 9.2.6, and 9.2.7.1, for example). Emissions of NO_x and CO_2 will be monitored continuously by a Part 75 certified continuous emissions monitoring system (CEMS) for NO_x . Volumetric flow rate from the combustion turbine stacks will also be measured continuously. Due to the fuels to be fired in the combustion turbines (natural gas and ultra-low sulfur distillate), continuous opacity monitors are not required.	
9.0 Air Quality	L-6-20	What are the cumulative effects of PM _{2.5} , and why was a smaller measurement amount not used?	
		Response:	
		Maximum predicted impacts of $PM_{2.5}$ emissions from the Project were determined by modeling and added to recent upper bound ambient levels measured at the Newburgh, New York $PM_{2.5}$ monitor. The resulting totals are below the NAAQS established by the USEPA for $PM_{2.5}$. The results are provided in Section 9.6.1.3 of the DEIS.	

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9.0 Air Quality	L-6-21	The Applicant continuously states that the levels of the pollutants are below DEC and EPA standards, and therefore does not study the impact of the pollutants. Regardless of whether they are below those levels, they are worthy of study and must be studied, especially the cumulative impact of otherwise below standard discrete pollutants, including but not limited to ammonia, lead, mercury, sulfur dioxide and hydrogen sulfide. The Applicant must confirm the safety of the emissions.
		<u>Response:</u>
		The DEIS provides maximum predicted impacts of potential Project emissions. These impacts are compared to significant impact levels (SILs) established by USEPA for criteria pollutants and to guideline concentrations established by NYSDEC for non-criteria pollutants. Maximum predicted impacts of criteria pollutants are below SILs (except for short-term PM ₁₀ impacts during oil firing in the combustion turbines). Consistent with USEPA and NYSDEC guidance, impacts less than the SILs are considered negligible and do not require additional analysis. A cumulative impact analysis was conducted for PM ₁₀ and demonstrates compliance with the NAAQS. Predicted Project impacts of non-criteria pollutants are in compliance with NYSDEC guideline concentrations. The modeling analyses that were conducted for the DEIS are consistent with requirements in the approved
		SEQRA Scoping Document. The SEQRA Scoping Document only requires cumulative impact analyses for criteria pollutants for which the impact of Project emissions are predicted to exceed SILs.
9.0 Air Quality	L-6-22	Aqueous ammonia is indicated to be on site in Section 9. Has this been studied in connection with spills, safety and best management practices? What contamination can result from a release of varying amounts?
		Response:
		DEIS Section 9.6.4 (Assessment of Accidental Ammonia Release) provides the results of a modeling analysis of a worst-case hypothetical aqueous ammonia spill as represented by a complete failure of the ammonia storage tank. The modeling analysis calculated the downwind distances at which the ammonia concentration resulting from the modeled accidental releases would decrease to less than the Emergency Response Planning Guideline Level 2 (ERPG-2) threshold. The ERPG-2 is defined as the maximum airborne concentration to which nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action. This threshold was defined by the American Industrial Hygiene Association (AIHA) and is recommended by EPA for calculating endpoint distances for the Risk Management Planning (RMP) Rule. The original RMP Rule in 1998 defined the toxic endpoint as the ERPG-2 threshold then in effect. For ammonia, the ERPG-2 value was 200 ppm. The

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		ERPG-2 for ammonia was subsequently revised to 150 ppm by AIHA. Although the RMP Rule has not revised the numerical value of the toxic endpoints, the more stringent ERPG-2 value of 150 ppm for ammonia recommended by AIHA was used in this assessment.	
		The modeling conducted predicted endpoint distances relative to the ERPG-2 value of 150 ppm for ammonia. The predicted endpoint distances were 103 meters for the worst-case scenario and 68 meters for the alternate scenario.	
		The RMP rule defines public receptor as "offsite residences, institutions (e.g., schools, hospitals), industrial, commercial, and office buildings, parks, or recreational areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public could be exposed to toxic concentrations, radiant heat, or overpressure, as a result of an accidental release." The closest public receptor to the ammonia tank is the nearest residence, which is located approximately 1,545 feet (or approximately 472 meters) away. This nearest public receptor is located well beyond the calculated endpoint distance (103 meters).	
		Section 12.7 (Spill Prevention and Control Plan) of the DEIS provides a summary of the spill prevention and control procedures to be implemented for the Facility. As part of final design and in accordance with New York State regulations, a Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) will be prepared for the Facility with as-built drawings. Elements of the plan are summarized in Section 12.7.2 (Spill Prevention, Control and Countermeasures Plan) of the DEIS.	
9.0 Air Quality	L-6-23	Please provide information as to the accuracy and value of using the sampling sites. If the test sites are wrong or inappropriate, the studies using those sites will be wrong, and will impact the amount of pollutants the Applicant is adding.	
		<u>Response:</u>	
		Available ambient air quality monitoring data were reviewed for two purposes – to provide conservative estimates of existing environmental conditions in the Project area and to select values for background air quality to incorporate in impact analyses to demonstrate compliance with the PM ₁₀ NAAQS. In many cases, data were selected from sites that would be expected to have higher ambient concentration levels than those in the Project area in order to ensure that existing ambient levels would not be underestimated. See response to Comment Number L-6-11.	
		Ambient air monitoring programs are subject to regular quality assurance procedures to ensure that the data	

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		collected and reported are accurate, precise, and complete. Monitor operators routinely conduct various checks, such as calibrations, and audits of monitors. In addition, independent monitoring performance audits and systems audits are conducted. In New York State, for example, these independent audits are conducted by NYSDEC at roughly six-month intervals. The performance audits are performed to ensure the accuracy of the field monitoring equipment and are conducted using special auditing standards and equipment to ensure independence from the monitoring operators and their calibration equipment. The systems audits review the entire operation of the monitoring program, including the procedures, techniques, and schedules used by field operators and also review operator's records, the data collected, and the data being reported.	
		Use of conservative background concentrations (based on monitoring sites with ambient levels higher than those expected in the Project area) means that existing ambient levels will be overstated in the NAAQS compliance demonstrations with the result that the total predicted future ambient concentrations (including predicted impacts from sources that were included in the modeling) will also be overestimated. Use of lower background values based on other monitoring sites would potentially increase the allowable emissions and associated impacts from the Project. Conservative background values were used to make sure that existing ambient levels and predicted future total concentrations would not be underestimated.	
9.0 Air Quality	L-6-24	What are the Applicant's plans for testing air quality now and in the future if this project gets approved? How, when, where and how often will it be tested?	
		Response:	
		The Project is not required to and does not plan to conduct post-construction monitoring of ambient air quality. The Project will be required to demonstrate through stack testing and continuous emissions monitoring that air permit conditions are being met. In the cooperative federal, state and local system established for protection of air quality, ambient air monitoring is the responsibility of governmental entities, not private permit holders.	
9.0 Air Quality	L-6-25	Rather than speculating (the DEIS states numerous times "should provide") and using only PM _{2.5} and PM ₁₀ from Fort Lee and Newburgh, the Applicant should test the areas 5, 10 and 15 miles away to get accurate data in order to have an accurate benchmark.	
		Response: The existing ambient air quality data from Fort Lee, New Jersey (for PM_{10}) and Newburgh, New York (for $PM_{2.5}$) are sufficient to establish estimates of maximum existing ambient (background) levels of these pollutants in the	

	Response to Comments on Section 9.0 – Air Quality		
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		Project area. The measurements from these sites are from more urbanized areas that would be expected to have higher ambient levels of fine particulate matter compared to those in the Project area. Because the selected background monitoring sites likely have higher ambient levels of particulates compared to the Project area, their use in the air quality ambient impact analyses results in higher estimates of future total ambient concentrations than if data from sites with lower concentrations had been used.	
9.0 Air Quality	L-6-26	Is the list provided of pollutants provided the definitive list of what the Applicant anticipates will be emitted from of the stacks? If not, the Applicant should provide a definitive list, and any pollutant not studied, must be. **Response:*	
		Yes, the DEIS provides estimates of maximum emissions of all pollutants that may be emitted from the Project stacks based on vendor estimates, emission factors recommended by USEPA, or engineering calculations.	
9.0 Air Quality	L-6-27	What recourse does the public have if the Applicant is wrong in its air emissions studies? To the extent possible, options for recourse should be provided.	
		Response:	
		The Project will be required to conduct initial performance tests to verify compliance with applicable New Source Performance Standards. In addition, it is anticipated that the air quality permit to be issued will contain additional emissions testing requirements to demonstrate compliance with permit emission limits.	
		The combustion turbines will also be subject to continuous emissions monitoring requirements for certain pollutants specified in the Facility air permit and will be required to report any excess emissions. As part of complying with the Title V operating permit that will be issued, the Facility will be required to periodically certify its compliance with applicable requirements, including emission limits and monitoring activities. In the event that permit requirements are not met, the Project would be subject to enforcement action by NYSDEC, EPA, and/or citizen suit. Such enforcement action can include significant fines and suspension or revocation of the Permit.	

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DEIS Section	Comment Number	Comment/Response	
9.0 Air Quality	L-6-28	The first bullet of Section 9.2.2 states "No action is required by the facility." Please clarify this statement.	
		Response:	
		The first bullet of Section 9.2.2 refers to Part 200 of NYSDEC regulations. Part 200 is largely an administrative regulation that contains definitions, generally applicable requirements, lists of information incorporated by reference in other NYSDEC air regulations, and lists of air regulatory programs that have been delegated to NYSDEC. The statement that "no action is required by the facility" was intended to convey that Part 200 does not, by itself, impose any specific requirements that are not found in other applicable regulations considered elsewhere in the DEIS and that nothing in Part 200 requires any specific action by the Facility.	
9.0 Air Quality	L-6-29	Please clarify why the Applicant needs to buy credits or offsets if they are below all of the levels set by the DEC and EPA.	
		Response:	
		Section 9.2.5 of the DEIS describes the requirements for emission offsets (also referred to as emission reduction credits (ERC)) under 6 NYCRR Part 231. The Project will be a major source of NO_x and VOC in an ozone nonattainment area. Therefore, the Project will be required to obtain emission offsets for these pollutants in quantities detailed in Table 9-5. The requirement for a major source to obtain emission offsets applies regardless of the predicted impacts of the source.	
9.0 Air Quality	L-6-30	In the permit application, it states that there was the potential to exceed 100 tons/year -1.0 630 megawatts case for duct firing at 500 mmbtu/hr. What mitigation measures are in place for these?	
		<u>Response:</u>	
		The potential to emit from the Project will exceed 100 tons per year for NO_x and CO . Potential NO_x emissions will be more than fully offset by the purchase of emission offsets for NOx as required by 6 NYCRR Part 231. In addition, emissions of NO_x will be controlled to satisfy stringent levels defined by EPA and NYSDEC as Lowest Achievable Emission Rate (LAER).	
		Emissions of CO will be controlled to levels determined to represent Best Available Control Technology (BACT) as required by the Prevention of Significant Deterioration (PSD) program.	

	Response to Comments on Section 9.0 – Air Quality			
DEIS Section	Comment Number	Comment/Response		
9.0 Air Quality	L-6-31	Where are the monitors, mentioned on page 9-23, going to be located? How many monitors will there be, how accurate are they and will the number of monitors be sufficient?		
		Response:		
		The continuous emissions monitoring system (CEMS) monitors discussed on page 9-23 of the DEIS will be located in the Facility's exhaust equipment downstream of the combined cycle stack exit in accordance with applicable siting criteria. There will be separate CEMS monitors for each combined cycle unit.		
		The CEMS monitors will be required to satisfy requirements in 40 CFR Part 75 (Continuous Emission Monitoring). These include initial monitor certification requirements and requirements for subsequent recertification in the future if elements of the CEMS are replaced, modified, or changed. In addition, the CEMS monitors will be subject to ongoing calibration and linearity checks as well as relative accuracy test audits.		
9.0 Air Quality	L-6-32	What are non-criteria pollutants? Are all of the non-criteria pollutants listed being monitored? The impacts of all of the pollutants listed should be studied regardless of whether they are below the amount allowed by the DEC and/or EPA.		
		Response:		
		Criteria pollutants are those pollutants for which USEPA has established National Ambient Air Quality Standards in 40 CFR Part 50, namely sulfur dioxide (SO_2), nitrogen dioxide (SO_2), carbon monoxide (SO_2), fine particulate matter with a diameter of 2.5 microns or less (SO_2), particulate matter with a diameter of 10 microns or less (SO_2), ozone (SO_3), and lead (SO_2).		
		Non-criteria pollutants are pollutants that are not formally regulated under the NAAQS. The maximum impacts of potential Project emissions of non-criteria pollutants were predicted in air quality modeling analyses. The results of these analyses are presented in Section 9.6.3 of the DEIS. Maximum predicted impacts of potential Project emissions are well below any of the guideline concentrations established by NYSDEC for all non-criteria pollutants.		
		Ambient air concentrations of many of the non-criteria pollutants that may be emitted by the Facility are monitored. The attached table provides a summary indicating which of those non-criteria pollutants are monitored at sites in New York and New Jersey.		

		Response to Comments on Section 9.0 – Air Quality
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9.0 Air Quality	L-6-33	Page 7-27 of the DEIS speculates that this plant <u>could</u> cause a dirtier plant nearby to shut down, and therefore no externality costs associated with air emissions are expected. This is mere speculation, and the Applicant has not stated that this will definitely happen. What are the externality costs if this does not happen? Has the Applicant used the removal of a dirtier plant in each of its benchmark models?
		Response:
		In 2001, Calpine performed an electric generation dispatch simulation analysis using General Electric's MAPS model for an electric generating project in Wawayanda similar to the CPV Valley Energy Center. The model concluded that their proposed facility would displace older, less efficient generation units based on the efficiency of a least cost dispatch process in a wholesale market. The model predicted lower overall emissions from power plants in New York and lower rates. While that facility was not constructed, other similar facilities throughout the state were constructed. The model predictions proved to be correct; based on recent data released by NYISO, air emissions from power plants in New York have been reduced since the introduction of the competitive wholesale electric market in New York. "The emissions reductions have occurred as over 7,000 MW of new, more efficient, less polluting generation has come into service in New York." Therefore, based on the MAPS analysis and the validation of the results by the NYISO's information, it is logical to conclude that the displacement concept is not mere speculation, but rather a reality of New York's wholesale electric market. See also response to Comment Number L-5-6 above from, Orange County Department of Planning.
		According to information cited in an April 21, 2009 news release from the New York Independent System Operator (NYISO) and available in an associated briefing paper (New York State Power Plant Emissions: 1999 – 2008), significant reductions in emissions from power plants in New York have occurred in the last decade. Over the last decade, power plant emissions in New York State have decreased by 77% for SO_2 , by 28% for CO_2 , and by 61% for NO_X . These emissions decreases have occurred as more than 7,000 MW of new, more efficient, and less polluting sources of electrical generation have come on line.
		Due to the relatively high efficiency and low heat rate associated with modern, combined cycle power plants, it is expected that facilities of this type (including the Project) will be dispatched in preference to older, less efficient, and more polluting generating sources and continue the trend in reducing overall emissions from power plants. Although displacement of emissions from other higher emitting electric generating facilities is expected to occur as a result of the Facility, the air quality impact modeling analyses conducted for CPV Valley Energy Center did not take any credit for any such displacement of emissions.

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9.0 Air Quality 13.0 Water Resources	L-6-38	With particulates from the project being added to various water resources, combined with those already present, what are the potential impacts to potable water resources in the schools and downstream from this site? Identify the future compounded impacts to biology, wetlands and wildlife. The impacts to the Goshen Reservoir, Glenmere Lake, other Town waterbodies and to the Goshen watershed, must be studied, including impacts stemming from runoff into their tributaries.
		Response:
		Maximum impacts of particulates from the Project are predicted to be insignificant in the areas mentioned in Goshen. For example, based upon a review of isopleth plots of Project impacts, maximum predicted annual particulate impacts from the Project in the vicinity of Goshen Reservoir and Glenmere Lake are well below 0.01 μg/m³. The significant annual impact level (SIL) for PM ₁₀ defined by USEPA is 1.0 μg/m³. Impacts below the SIL are considered to be insignificant or negligible. Maximum predicted annual particulate impacts from the Project are less than 1% of levels that are considered insignificant.
		Section 9.5.4.1 (Impacts to Soils and Vegetation) of the DEIS provides an analysis of impacts to sensitive vegetation based on US EPA's "Screening Procedure for Impacts of Air Pollution Sources on Plants, Soils, and Animals." The sum of the maximum predicted impacts from the Project plus background is well below the screening concentrations protective of the most sensitive vegetation.
9.0 Air Quality	L-6-39	Did the Applicant model for hot spots? Please identify any and all hot spots within a 5-mile radius, and what the impacts of the project operations are on those hot spots.
		Response:
		See response to Comment Number L-5-4 and H-1-1.
9.0 Air Quality	L-6-44	What is the area of fallout from the stack? Is there a testing procedure for contamination of stormwater on rooftops near the stack?
		Response:
		This is a not a coal-fired facility that might have ash or large particles emitted from the stack. Since the Facility will primarily burn clean natural gas, there will not be any particulate or ash fallout. Use of ultra-low distillate fuel oil will not generate any ash or fallout.

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DEIS Section	Comment Number	Comment/Response		
9.0 Air Quality	L-6-77	Why was the study area limited to five miles? There are numerous impacts that will not stop at five miles, for example, air and water quality impacts. School children are more susceptible to the harmful contaminates, and would be impacted in their formidable years. Additionally, senior citizens are highly susceptible to becoming ill. Orange Regional Medical Center is within the five mile radius studied, in fact, the DEIS notes that it is 2.7 miles away, but impacts on the hospital were mentioned nowhere in the document. What are the impacts to the facilities and operations of the hospitals in the area, and how are they being mitigated? How would these facilities be prepared in the event of a disaster situation?		
		Response: Project air quality impacts were examined well beyond the five mile distance mentioned above. The receptor grid used in the air quality modeling analyses extended out 30 km (approximately 18.6 miles) in all directions. Maximum predicted Project air quality impacts at the Orange Regional Medical Center are included in Table 9-31 (Maximum Impacts at Sensitive Receptors) of the DEIS. See also response to Comment Number L-6-11.		
9.0 Air Quality	L-6-78	The Applicant did not consider, in any of the studies performed, the impacts of this application in connection with surrounding plants, quarries and mines. For example, the Massada Plant is an ethanol plant that is proposed to be built in the near vicinity, and the Dutchess Quarry and Tetz Cement production (Middletown and Wallkill) are also within the 5-mile radius. How do these facilities impact this project in terms of potential impacts, different benchmarks for air and water quality, and electromagnetic electricity? What has the Applicant determined to be the ambient levels of, and the pollutants being emitted from, each nearby plant, stack, landfill and quarry? Each facility's levels were not included in the document.		
		Response: As described below, emissions from many off-site facilities were included in the cumulative impact modeling analyses conducted for PM ₁₀ . Maximum predicted impacts for the Project are below Significant Impact Levels (SILs) for CO, NO ₂ (annual average), and SO ₂ . As a result, those Project impacts are considered to be insignificant or negligible and no further ambient impact analyses are required for those pollutants (and the specified averaging period). Maximum Project impacts were predicted to exceed the 24-hour SIL for PM ₁₀ for scenarios involving the firing of ultra-low sulfur distillate only. Maximum predicted Project impacts were below the 24-hour SIL for PM ₁₀ for natural gas firing, and maximum annual PM ₁₀ impacts from the Project were predicted to be below the annual SIL for PM ₁₀ for both fuels.		

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DEIS Section	Comment Number	Comment/Response	
		Cumulative impact modeling analyses including emissions from other facilities were conducted only for PM ₁₀ as required by USEPA and NYSDEC guidance and consistent with the SEQRA Scoping Document. There was no need to conduct cumulative impact analyses for other criteria pollutants due to the small predicted impacts from the Project.	
		Cumulative impact modeling analyses were conducted for PM_{10} oil firing cases. The cumulative impact analyses for PM_{10} included an inventory of facilities with existing air permits and other large sources within a 55 km radius of the Project. The analysis demonstrated compliance with National Ambient Air Quality Standards (NAAQS) for PM_{10} .	
		Another separate cumulative impact modeling analysis for PM ₁₀ was conducted for the Project and local sources (within 10 km). The analysis also demonstrated compliance with NAAQS. Appendix 9-C (Cumulative PM-10 Emission Inventories – PSD/Major Sources and Local Sources) in Volume II of the DEIS provides lists of facilities that were included in the cumulative modeling analyses.	
		Table 2 and 3 of Appendix 9-C in Volume II of the DEIS include the PM ₁₀ emission rates that were modeled for off-site sources included in the cumulative impact modeling analyses.	
		The cumulative impact modeling for PM ₁₀ included emissions from the Orange Recycling & Ethanol Production Facility located at 159 Dolson Avenue in Middletown. A Title V permit for this facility was issued to Pencor Masada Oxynol LLC. The Applicant's understanding is that this facility is the same one that was referred to as "Masada" in the comment. This facility is listed as "Orange Recycling & Ethanol Prod Fac" in Table 1 and Table 2 of Appendix 9-C in Volume II of the DEIS.	
		There is no active air permit for Dutchess Quarry (or for Dutchess Quarry & Supply or for Goshen Quarry). Repeated attempts to obtain emissions and stack parameter data from NYSDEC and from various USEPA data bases for this facility were unsuccessful. Therefore, no information was available with which to model this facility.	
		The Applicant's obtained a copy of the air permit issued to Tetz Asphalt Plant in Wallkill. This plant was also listed in emission inventory data that NYSDEC provided. However, neither the air permit nor the information from NYSDEC provided any emission rates, stack parameters, or emission limits. Despite our best efforts, including inquiries to NYSDEC for additional information, there was no information available for modeling this facility.	

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		In addition, Section 17.0 (Cumulative Impacts) provides a cumulative impact assessment as required by the Project's Scoping Document. The analysis evaluates nine proposed developments that are planned or under construction in the immediate Project area that were identified by the Town of Wawayanda or Orange County Planning Department. The analysis addresses the applicable resource areas specified in the Scoping Document, including economic and fiscal impacts, traffic, and air quality.	
		The cumulative impact modeling analyses for PM_{10} included emissions and impacts from many other facilities (see response to Comment Number L-5-8).	
		Appendix 3B of the FEIS provides additional impact analysis demonstrating compliance with the new or revised NAAQS and PSD increments for NO_2 , SO_2 , Pb , and $PM_{2.5}$.	
9.0 Air Quality	L-6-79	Why were the two landfills in the Town of Goshen not included and analyzed with regard to the baseline study for air quality? The Applicant should analyze both locations. **Response:*	
		Two landfills in Goshen were considered during the process of compiling the PM ₁₀ emission inventory of off-site facilities. These landfills were the Al Turi Landfill and Landfill-Gas-to-Energy (LFGTE) Facility at 73 Hartley Road and the Orange County Sanitary Landfill at 21 Training Center Lane.	
		The AI Turi Landfill and LFGTE Facility was, in fact, included in cumulative impact modeling for PM ₁₀ . See Local Multisource PM ₁₀ Modeling Inventory in Appendix 9-C of the DEIS (Volume II of the DEIS).	
		In response to the Applicant's inquiries regarding the Orange County Sanitary Landfill, NYSDEC provided information indicating that:	
		This landfill was closed in 1995;	
		The landfill gas extraction/collection/gas-to-energy facility was shut down in 2004; and	
		 The only ongoing activity at this landfill is periodic testing of non-methane organic compound (NMOC) emissions as required by NYSDEC. NMOC emissions are not particulates. Therefore, there are no particulate emissions to model from the Orange County Sanitary Landfill. 	

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9.0 Air Quality	L-6-80	What are the long-term impacts of the increased lead and arsenic in the air and water?	
		Response:	
		Tables 12-6 and 12.7 of the DEIS list the materials used for operation. Lead and arsenic are not processed or produced. However, small amounts of lead and arsenic may be emitted due to fuel oil combustion. Maximum predicted annual air impacts of potential Project emissions of lead and arsenic are provided in the DEIS. Extreme upper bound estimates of maximum annual Project impacts of non-criteria pollutants were determined for each pollutant by summing the maximum predicted annual impacts from each individual Project source even though those maximum predicted impacts may not occur at the same location. The resulting upper bound estimates of potential annual Project impacts of lead and arsenic are included in Table 9-28A of the DEIS.	
		The maximum estimated annual Project impact of arsenic is $1.3 \times 10^{-5} \mu g/m^3$, and the associated annual guideline concentration (AGC) is $2.3 \times 10^{-4} \mu g/m^3$. The maximum predicted annual impact of arsenic is less than 6% of the AGC.	
		The maximum estimated annual Project impact of lead is $1.9 \times 10^{-5} \mu \text{g/m}^3$, and the associated AGC is $3.8 \times 10^{-1} \mu \text{g/m}^3$. The maximum predicted annual impact of arsenic is only 0.005% of the AGC. The maximum predicted impacts of arsenic and lead from the Project are small compared to the associated AGC values established by NYSDEC to protect the environment and public health from effects associated with long-term exposures to these substances. Therefore, these impacts are considered negligible.	
9.0 Air Quality	L-6-84	Is the Applicant required to have all recordkeeping, along with reporting requirements for any violations, made available online for the public to review, as well as all regulatory agencies?	
		Response: Recordkeeping is made available to the regulatory agencies; reports to the agencies generally are public documents.	

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DEIS Section	Comment Number	Comment/Response	
9.0 Air Quality	L-6-86	As technology improves, will upgrades be included in this facility to minimize environmental impacts? If not, why not? What happens when the SCRs breakdown? How is the Lead Agency requiring the applicant to keep up with pollution control technology?	
		Response:	
		The Project is required to meet emission control requirements or emission rates determined to represent Lowest Achievable Emission Rate (LAER) for NO_x and VOC and Best Available Control Technology (BACT) for PM_{10} , CO_x , SO_2 , and sulfuric acid (H_2SO_4). These control technology determinations are made at the time of initial permitting by USEPA and NYSDEC. There is no requirement under existing state and federal air permitting regulations to upgrade emission controls unless a facility subsequently undergoes a major modification. In the event of a major modification, emission controls and emission limits for modified emission units would need to be reassessed. The Lead Agency has no authority to require a permitted facility to upgrade emissions control technology.	
		It is conceivable that, over the life of the Facility, more stringent regulations may trigger an upgrade to pollution control or monitoring equipment.	
		In the event that the Selective Catalytic Reduction (SCR) system failed to reduce NO_x emissions to levels required by the air permit, the Continuous Emission Monitoring System (CEMS) would alert the facility personnel and the facility would need to notify NYSDEC and take corrective action to minimize the extent and duration of any excess emissions. For example, 6 NYCRR 201-1.4(b) requires notification of NYSDEC as soon as possible by telephone and, in any case, within two working days, after becoming aware of a malfunction that results in emissions exceeding an emission standard. NYSDEC also routinely imposes air permit conditions requiring reporting of excess emissions on this schedule.	
		Some components of emissions control systems will routinely be replaced as necessary to ensure continued compliance with emission limits. For example, the performance of the SCR will be monitored by taking samples of the catalyst to determine remaining life and to project future catalyst performance.	
9.0 Air Quality	L-6-88	Has the Applicant considered or proposed the planting of the requisite number of trees, not for landscaping or buffering purposes, but to offset the environmental impacts of the pollutants it would be introducing into the area?	
		<u>Response:</u>	
		The landscaping plan will be dictated by the Site Plan. The current draft plan calls for trees to be planted per	

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		Town code. The Project will more than fully offset its allowable emissions of NO_x and VOC by the purchase of certified emission reduction credits for these pollutants. In addition, the emissions of some pollutants (NO_x , SO_2 , and CO_2) from the combined cycle units will be subject to emissions cap-and-trade programs that require that emissions allowances be surrendered to account for their actual emissions during each associated control period.	
9.0 Air Quality	L-6-89	All charts measuring the temperature in Kelvin should be revised and the temperature converted into Fahrenheit for ease of understanding. **Response:*	
		Temperatures in degrees Kelvin (K) are used in many calculations because it is an absolute temperature scale. The air quality models require that some temperatures be input in degrees Kelvin. Therefore, some summary tables, especially those showing stack exit temperatures, list temperatures in degrees Kelvin.	
		Temperatures in Kelvin(K) can be easily converted to degrees Fahrenheit (o F) as follows: o F = (K x 1.8) - 459.67	
9.0 Air Quality	L-7-1	Particulate Matter The applicant has not conducted and does not plan to conduct any pre-construction ambient air quality monitoring at the site, despite the fact that the plant will contribute close to a hundred tons per year of PM _{2.5} emissions into the local environment. See DEIS at p. 9-18. Despite EPA requirements that such monitoring occur for potential PSD source emitters, CPV Valley is seeking a waiver from these requirements.	
		Response:	
		As discussed in the DEIS, the Project will be subject to requirements of the PSD program for several pollutants, including PM_{10} . PSD requirements include the possibility of preconstruction monitoring for subject pollutants. However, the PSD program allows for an exemption from preconstruction monitoring if certain conditions are satisfied. As described in Section 9.2.4.1 of the DEIS, maximum predicted Project impacts of PM_{10} are less than the PSD Significant Monitoring Concentrations for all pollutants, including PM_{10} . On this basis and pursuant to 40 CFR 52.21(i)(5)(i), the Project applied for a waiver from pre-construction monitoring.	
		Background ambient air quality values were selected based on a review of information compiled from air quality monitors operated by state environmental agencies such as NYSDEC and the NJDEP.	

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		For a number of the monitor locations selected, land uses are more urbanized and represent higher density development compared to the Project location. This imparts a conservatism given the higher expected background ambient concentrations measured at monitor locations compared to what would be expected at the Project location. EPA and NYSDEC have accepted the use of the selected monitoring sites in the air quality impact analyses.	
9.0 Air Quality	L-7-2	According to the EPA, Orange County is currently in non-attainment for fine particulate matter air pollutants (PM _{2.5}). As such, PM _{2.5} pollution is a serious and growing health risk for Orange County residents. EPA's own research highlights the danger to human health posed by PM _{2.5} specifically: "Particulate matter has been linked to a range of serious respiratory health problems The key health effects categories associated with ambient particulate matter include premature mortality, aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions and emergency room visits, school absences, work loss days, and restricted activity days), aggravated asthma, acute respiratory symptoms, included aggravated coughing and difficult or painful breathing, chronic bronchitis, and decrease lung function that can be experienced as shortness of breath." Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, 66 Fed. Reg 5002, 5018 (Jan 18, 2001). Indeed, in this preamble, EPA acknowledged that PM _{2.5} is more strongly associated with some health effects than PM ₁₀ .	
		Given these serious and growing human health impacts from PM _{2.5} , CPV Valley should at least be required to conduct on-site, pre-construction ambient air quality monitoring to determine actual baseline levels and seasonal fluctuations for PM _{2.5} in this area (the nearest monitoring station used for PM _{2.5} by the applicant is in Newburgh). See DEIS at 9-8. In order for you to determine the potential human health impacts of this project under SEQRA, such pre-construction air monitoring is essential.	
		Response:	
		Although the Project is located in an area (Orange County) designated as nonattainment with respect to $PM_{2.5}$, the only $PM_{2.5}$ monitor located in Orange County has never recorded a violation of either the short-term or annual NAAQS for $PM_{2.5}$ in its entire period of operation. This monitor began operation in February 2000 and continues to operate currently. The existing monitoring data from Newburgh are sufficient to estimate maximum existing ambient levels of $PM_{2.5}$ in the Project area. Newburgh is a more urbanized area compared to the Project site and would be expected to have higher ambient levels of $PM_{2.5}$. Newburgh is also closer than the Project site to those areas in the metropolitan New York City area which have higher ambient $PM_{2.5}$ concentrations.	

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9.0 Air Quality	L-7-3	We have other air quality concerns. The plant will be located in a federal air quality non-attainment area for ozone and certain particulate matter. DEIS page 9-7. It is proposed that the plant will purchase non-attainment emissions offsets for nitrogen oxides and volatile organic compounds. However, these may be traded across state lines. Page 9-20. The air quality in and around Wawayanda and Orange County likely will suffer from further deterioration unless it is ensured that offsets are available and purchased in a manner such that existing emissions from sources in the Wawayanda area are reduced in appropriate amounts. Similarly the plant will have to purchase allowances for its sulfur dioxide emissions. Page 9-24. Once again, unless corresponding local reduction of existing emissions of this irritating and acid rain contributing gas are achieved, the air quality in and around Wawayanda will deteriorate.	
		<u>Response:</u>	
		The specific sources of emission offsets for NO_x and VOC for the Project have not yet been determined. However, all emission offsets will satisfy requirements in 6 NYCRR Subpart 231-5 (New Major Facilities and Modifications to Existing Non-major Facilities in Nonattainment Areas, and Attainment Areas of the State within the Ozone Transport Region) and specifically those in 231-5.5 (Emission Offset Requirements). Emission offsets may come from the same ozone nonattainment area or from another ozone nonattainment area within the state of equal or higher classification if certain conditions are met. Emission offsets may also come from other ozone nonattainment areas of equal or higher classification in another state if certain conditions are met and if an interstate reciprocal emissions trading agreement is in place.	
		Potential NO_x and VOC emissions from the Project will be offset in at least a 1.15 ratio by actual emission reductions from other sources. This ensures that there will be an actual reduction of regional emissions of these pollutants. Ozone is formed in the atmosphere as a result of photochemical reactions involving precursor pollutants (NO_x and VOC). Ozone is created over a time scale of many hours to days and generally forms tens to hundreds of miles downwind of the sources of its precursors. Due to the nature of its formation, ozone is a regional scale pollutant and is regulated on a regional basis. Ozone nonattainment is a regional, not a local, issue. Regional reductions in ozone precursors will result from the required emission offsets and will lead to region-wide air quality benefits.	
		The Project combustion turbines will be subject to the federal Acid Rain Program and to Clean Air Interstate Rule (CAIR) or successor requirements for SO_2 . These programs require that subject unit's track and report their emissions of SO_2 and that they obtain, hold, and surrender sufficient SO_2 allowances to account for their actual SO_2 emissions in each control period. Acid rain is a regional scale problem, which is why a regional cap-and-trade program for SO_2 was implemented to address the issue.	

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9.0 Air Quality	L-7-4	It is noted on table 9-3 on page 9-17 that the plant will emit various gases, some in greater quantity than others. All of these gases, however, will have a cumulative effect over time on Wawayanda's air quality. With sources from new business development and/or increased transportation (ego more stores, and also more cars and trucks on the roads) that is likely to occur in the future in the Wawayanda area, the cumulative impact of these sources taken together likely will be significant for most if not all of the gases listed on table 9-3. This will be so even if no single source is considered significant. Therefore, all of the plants emissions even those that meet present standards, could very well have a role in causing air quality deterioration in the future. When this point is reached, it may be necessary for the area to curb further development, even of the type that otherwise would be considered very desirable. So, a decision now to allow this plant that requires a variance, may be deciding now the fate of future development.	
		Response: The Project will satisfy all requirements related to air impacts, including a demonstration that any predicted degradation of air quality due to the Project meets the requirements of the Prevention of Significant Deterioration (PSD) permitting program. The PSD permitting program limits the extent to which air quality can be degraded. Maximum predicted Project air quality impacts are insignificant for all pollutants except for PM ₁₀ . On oil firing, which will be limited to the equivalent of 720 hours per combustion turbine on an annual basis, the 24-hour SIL is exceeded at a small number of locations. For PM ₁₀ , cumulative impact analyses demonstrate that the NAAQS for PM ₁₀ will be met. Appendix 3B of the FEIS provides additional impact analysis demonstrating compliance with the new or revised NAAQS and PSD increments for NO ₂ , SO ₂ , Pb, and PM _{2.5} .	
9.0 Air Quality	L-7-5	The greenhouse gases that will be emitted thereby contributing to global warming are problematic. It is claimed that the plant will add .037% to the national emissions of carbon dioxide. Page 9-70. This seems large for a single source when you consider that there are millions of sources nationwide. Nevertheless, it is claimed that the plant is a step forward since it will displace energy sources that emit more carbon dioxide. The problem is that, even assuming that this is true now, will it remain true for years to come? The plant is projected to have a 30 year life. Page 9-69. With the ever accelerating development of green technology, it could be that this plant will be considered a dinosaur long before it is taken out of service. It would then be a liability with regard to global warming. The DEIS does not address this issue but it should be addressed.	

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		Response: The DEIS provides estimates of potential emissions of CO ₂ and compares them to estimates of existing CO ₂ emissions from within New York state, the United States, and the world to provide a relative context (see Sections 9.6.8.2 and 9.6.8.3 of the DEIS). The Project will be subject to 6 NYCRR Part 242 and, as such, will be subject to a cap-and-trade program for CO ₂ emissions from power plants. Since CO ₂ emissions from this source category will be capped within New York State pursuant to Part 242 and on a regional basis as well under the Regional Greenhouse Gas Initiative (RGGI) as described in Section 9.6.8.5, its emissions, as well as the emissions of other regional and national sources will be tightly controlled. The plant will primarily combust natural gas and will use a state-of-the art, highly efficient, combined cycle design. These factors help ensure that the Project will be a benefit for many years to come.	
9.0 Air Quality	L-7-6	Ammonia will be used to control some of the plants emissions. During this process some of the ammonia will slip into the air. Page 9-14. This should be of some concern. Perhaps of greater concern, however, is the storage of ammonia onsite in a 15,000 gallon tank. Page 9-57. When ammonia at a 20% concentration is stored, the Clean Air Act and federal regulations require that a catastrophic release model be developed. However, the plant will avoid this requirement by using a 19% concentration. Page 9-25. This smacks of attempting to "fly under the radar". If indeed this was the tactic, then it is disappointing and justifiably raises a concern whether safety was of the highest priority in project planning. Whether a catastrophic release model should be required needs to be examined since the concentration is borderline. Under a general duty imposed by federal regulation this may be required. Page 9-25. There is a discussion in the DEIS of some modeling regarding a release. Page 9-57. However, whether it would be sufficient to satisfy the modeling requirement under all of the federal laws and regulations mentioned above, is unclear. **Response:** Some ammonia ("ammonia slip") will be released due to the use of ammonia in the selective catalytic reduction (SCR) system that will be used to control emissions of NO _x . A certain amount of excess unreacted ammonia is needed in the SCR system to ensure that the reactions that control NO _x occur as intended and yield the required reductions in NO _x . The amount of ammonia slip will be limited to 5 parts per million (ppm) to satisfy NYSDEC guidelines by controlling the ammonia injection rate to the SCR and by employing good operating practices. We note that it is in the interest of the Project to minimize ammonia slip to the extent possible, since ammonia that is "lost" due to ammonia slip needs to be replaced at additional cost. The use of a 19% aqueous solution of ammonia by weight is standard industry practice for power plants	

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		equipped with SCR controls. The use of aqueous ammonia represents less of a risk compared to the alternative of using anhydrous ammonia.	
		Even though the use of a 19% aqueous solution of ammonia by weight exempts the Project from Risk Management Program requirements in 40 CFR Part 68, Section 9.6.4 of the DEIS provides the results of an analysis that predicted impacts resulting from a worst-case catastrophic failure of the ammonia storage tank. The analysis of this worst-case ammonia release shows that such a release would not cause any irreversible health effects or other serious health effects that would prevent an individual from taking protective action at any areas (including residences, schools, hospitals, other buildings, parks, and recreational areas) that would be inhabited or occupied by the public. See response to Comment Number L-6-22.	
9.0 Air Quality	L-8-6	While these questions are quintessential, I would be remiss if I did not ask whether the Wawayanda Town Supervisor, Board Members or Planning Board Appointees have or will require CPV to present a plan to ensure their proposed project achieve a "climate or carbon neutral" balance in the development of this project; and/or, to the extent that it will not be carbon neutral, that CPV be held accountable to provide mitigation, which benefits the Town of Wawayanda and its residents, to sufficiently offset any and all adverse impacts of the planned power plant on our town, its residents and greater environs? Further, and of particular importance, will Town Officials and CPV covenant that any "offsets" that might pertain to this project not involve any long distance trading or brokering, but apply solely to this local and/or region?	
		<u>Response:</u>	
		Emission offsets required for ozone precursor emissions (NO_x and VOC) for major new sources in the ozone nonattainment area and allowances required for CO_2 , NO_x , and SO_2 for power plants are intended to help address regional or larger scale air quality problems. The required offsets and allowances will satisfy all associated regulatory requirements that have been established to help ensure that there will be a regional air quality benefit, i.e., an improvement in air quality as a result of this project.	
		In addition to the regional emission reductions that will occur due to the required emission offsets, regional emissions would also be expected to decrease as a result of dispatch and operation of the Project due to the displacement of generation from older, less efficient, and more polluting power plants. Due to the relatively high efficiency and low heat rate associated with modern, combined cycle power plants, it is expected that facilities of this type (including the Project) will be dispatched in preference to older, less efficient, and more polluting generating sources and continue the trend in reducing overall emissions from power plants.	

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9.0 Air Quality	L-8-7 H-18-6	This would seem only fair and reasonable. In the OBIS, it is noted that, while the proposed power plant is one of the least polluting facilities of its kind, it will still generate approximately 95 tons of particulate matter, or the microscopic soot largely emitted by fossil fuel electric generating plants like the one proposed, annually, and this when added to Orange County's already toxic air quality will exacerbate the growing contamination of the air we all breath posing a increasing health hazard to the region. It will also add greenhouse gases that will accelerate the looming threat of catastrophe from global warming. The question then is not only <i>can</i> CPV offset this assault on our environment, but, <i>to what extent can they do so and how? And, are they willing to contract to do so?</i> Clearly it would require a group of people with specialized training in this area to consider the question fairly, but my wife and I gave this some thought and we would like to offer some suggestions that could at least be a starting place. For instance, could CPV pay for and/or work with state and federal government agencies to secure funds to provide solar heat, hot water and electricity for the Minisink school buildings, town facilities and museums to the extent feasible, thereby offsetting at least a portion of the annual carbon emissions from the proposed power plant? Could they basically take these facilities off the power grid and make them energy-wise, self sustaining? Could they convert the school buses so the buses have the capacity to run cleaner on bio-fuel? Could they subsidize local farms to produce bio-fuel? I realize these suggestions are not a solution to the harm this project threatens to bring to our community and beyond, but they are something; a place to start.	
		The Project design takes great strides in having a positive impact on air quality and the environment. Through the use of natural gas, the cleanest fossil fuel, in a combined-cycle application, the Project is serving our energy demand very efficiently. Through the use of additional equipment, such as SCR and a CO catalyst, the Project will be one of the cleanest power facilities in the State. These attributes of the Project will help New York reduce its greenhouse gas emissions as stated in the state's energy plan and demonstrated in the NYISO's press release regarding improved air quality in New York. The Project's air cooled design will minimize water consumption significantly to preserve water resources. All of these positive factors in assessing the Project's environmental impacts should be recognized. The Project will satisfy all requirements related to air quality impacts and emissions control. These requirements include emission offsets of nonattainment pollutants to help ensure a regional air quality benefit. Other requirements relate to the need to obtain and surrender emission allowances of pollutants (SO ₂ , NO _x , and CO ₂) as part of emission cap-and-trade programs that also are designed to improve air quality. Maximum predicted air quality impacts from the Project are below significant impact levels (SIL) established by	
		EPA except in some cases when firing oil in the combustion turbines when the 24-hour SIL for PM ₁₀ is exceeded at some locations. SILs represent impacts that are so small that they are considered to be insignificant or	

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		negligible. The SILs represent only a small fraction of the National Ambient Air Quality Standards (NAAQS) that have been established by EPA to protect human health, including the health of sensitive populations. For PM_{10} , additional modeling analyses including emissions from other facilities were conducted to predict total concentrations. The results demonstrate compliance with that NAAQS for PM_{10} . Additional modeling was also conducted to demonstrate that Project impacts of non-criteria pollutants will comply with guideline concentrations established by NYSDEC.
		Appendix 3B of the FEIS provides additional analysis demonstrating compliance with the new or revised NAAQS and PSD increments for NO_2 , SO_2 , Pb , and $PM_{2.5}$.
9.0 Air Quality	L-8-9 H-18-8	If acid rain develops to the extent that it damages landscapes and waterways across our region, will our town government be able to hold CPV liable for remediation? Would they, if they could? Is restoration even possible?
		<u>Response</u>
		Acid rain from man-made sources is mostly due to emissions of precursor pollutants (SO_2 and NO_x) that result from fuel combustion. Emissions of NO_x from the Project combined cycle units will be more than fully offset by permanent emission reductions from other sources. Emissions of SO_2 and NO_x from the Project combined cycle units will be subject to emissions cap-and-trade programs. Therefore, there will be no regional increase in emissions of acid rain precursors attributable to the Project.
9.0 Air Quality	L-8-15	This brings me back to the fundamental question of fairness to the people who live here, and whether CPV can and will be expected to be as "climate and/or carbon neutral" as possible? Stated plainly, will our elected officials, the Town of Wawayanda Supervisor, Board Members, and their appointees, the Planning Board and/or Zoning Board of Appeals, and CPV commit and contractually ensure the residents of this town that they will offset any and all adverse impacts of the proposed gas and diesel fueled electrical generating power plant on the people and environs of our township and neighboring communities not only during development but in the future? This is not about "compromise" and nothing our town officials decide now can legitimately give CPV or any other corporate enterprise the right to threaten or destroy our environment, our health, quality of life and our future. This is about determining what legacy you will leave as a testament to your character and your conduct as public servants and responsible corporate investors; it is about keeping the public trust; it is about "stewardship"; it is about the lives of our children, future generations and the our well being not only of our environment but this very planet. Please honor yourselves and our town; let the record show you chose the path of wisdom rather than greed; of service rather than misuse and abuse of the authority/power entrusted to you.

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	omment umber	Comment/Response		
		Response: The Project will be subject to 6 NYCRR Part 242 (CO ₂ Budget Trading Program). See response to Comment Number L-7-5 for a discussion of Part 242 and the Regional Greenhouse Gas Initiative (RGGI). Regional emissions are expected to decrease as a result of dispatch and operation of the Project due to the displacement of generation from older, less efficient, and more polluting power plants. Due to the relatively high efficiency and low heat rate associated with modern, combined cycle power plants, it is expected that facilities of this type (including the Project) will be dispatched in preference to older, less efficient, and more polluting generating sources and continue the trend in reducing overall emissions from power plants. Therefore, the regional air quality is expected to improve. This effect of reducing regional emissions through displacement of older, dirtier facilities with new clean more efficient facilities was substantiated in the April 2009 NYISO press release and was supported by emissions data available from EPA. The Project design takes great strides in having a positive impact on air and the environment. Through the use of natural gas, the cleanest fossil fuel, in a combined-cycle application, the Project is serving the energy demand efficiently. Through the use of additional equipment, such as SCR and a CO catalyst, the Project will be one of the cleanest power facilities in the State: These attributes of the Project will help New York reduce its greenhouse gas emissions as stated in the state's energy plan and demonstrated in the NYISO's press release regarding improved air quality in New York. The Project's air cooled design will minimize water consumption significantly to preserve water resources. All of these positive factors in assessing the Project's environmental impacts should be recognized. In addition to the real environmental benefits of the Project, the economic benefits from the PILOT and Host Community Benefits Pagreement can be considered a vehicle by which the To		

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9.0 Air Quality	L-9-5	In the end, for me and for all those others with whom I have spoken, it comes down to the tremendous pollution that this place will spew out. 95 ton annually (190,000 lbs) of a lot of chemicals that will take away from our children's brain capacities and take away from our health. All the people representing this project will not live here, we must live here. We will have even greater air pollution that we already do as the 10 th most polluted county in the United States of America. Who wants to live here if this and other egregious projects continue to be let into this town? What are you creating? Will this be your legacy?			
		Response:			
		The assertion that Orange County is the 10 th most polluted county in the United States is not accurate. Orange County contains air quality monitors for PM _{2.5} , ozone, and lead. County-level air quality from 2008 from the EPA AIRDATA website were obtained and sorted (high to low concentrations) to obtain a ranking for Orange County.			
		For 24-hour PM _{2.5} concentrations, Orange County ranked #463 (tied) out of 610 counties with monitors. For annual PM _{2.5} concentrations, Orange County ranked #424 (tied) out of 610 counties with monitors.			
		For 1-hour ozone concentrations, Orange County ranked #627 (tied) out of 725 counties with monitors. For 8-hour ozone concentrations, Orange County ranked #88 (tied) out of 725 counties with monitors.			
		For lead, Orange County ranked #14 out of 69 counties with monitors. The relatively high ranking for the County is attributable to the elevated lead values that are measured by monitors located near Revere Smelting and Refining. These levels are not representative of the county as a whole as demonstrated by comparing the levels at the Industrial Drive monitor in Middletown (maximum quarterly average of 0.01 µg/m³) to the much higher levels at the Ballard Road monitors in Wallkill (maximum quarterly average of 0.09 µg/m³). The ranking for Orange County is referenced to the highest value measured in the county (i.e., the value from the Ballard Road monitors in Wallkill). The Ballard Road monitors were sited to determine maximum impacts from Revere Smelting and Refining, not to characterize general ambient levels. The monitor on Industrial Drive was sited to determine population exposure and is more representative of ambient levels in Orange County.			
9.0 Air Quality	L-10-1	The plant will be located in a federal air quality non-attainment area for ozone and certain particulate matter. DEIS page 9-7. It is proposed that the plant will purchase non-attainment emissions offsets for nitrogen oxides and volatile organic compounds. However, these may be traded across state lines. Page 9-20. The air quality in and around Wawayanda and Orange County likely will suffer from further deterioration unless it is ensured that offsets are available and purchased in a manner such that existing emissions from sources in the Wawayanda area are reduced in appropriate amounts.			

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		Similarly the plant will have to purchase allowances for its sulfur dioxide emissions. Page 9-24. Once again, unless corresponding local reduction of existing emissions of this irritating and acid rain contributing gas are achieved, the air quality in and around Wawayanda will deteriorate.			
		It is noted on table 9-3 on page 9-17 that the plant will emit various gases, some in greater quantity than others. All of these gases, however, will have a cumulative effect over time on Wawayanda's air quality. With sources from new business development and/or increased transportation (ego more stores, and also more cars and trucks on the roads) that is likely to occur in the future in the Wawayanda area, the cumulative impact of these sources taken together likely will be significant for most if not all of the gases listed on table 9-3. This will be so even if o single source is considered significant. Therefore, all of the plants emissions, even those that meet present standards, could very well have a role in causing air quality deterioration in the future. When this point is reached, it may be necessary for the area to curb further development, even of the type that otherwise would be considered very desirable. So, a decision now to allow this plant that requires a variance, may be deciding now the fate of future development.			
		Response:			
		Emission offsets for NO_x and VOC are required by applicable NYSDEC new source review permitting regulations due to the Project's location in an ozone nonattainment area and its potential to emit for NO_x and VOC . The emission offsets are required to offset regional emissions of ozone precursors and are not intended to (or required to) address local impacts. SO_2 allowances are required under regional emission cap-and-trade programs for power plants and are not related to local air quality impacts.			
		Another air quality regulatory program, the Prevention of Significant Deterioration (PSD) permitting program, is designed to limit the degradation of air quality due to new major sources. Air quality modeling conducted for the Project demonstrates that any increases in impacts are in compliance with PSD air quality increments. Therefore, there will be no significant deterioration in local air quality.			
		See also response to Comment Numbers L-7-3 and L-7-4.			
9.0 Air Quality	L-10-3	Ammonia will be used to control some of the plants emissions. During this process some of the ammonia will slip into the air. Page -14. This should be of some concern. Perhaps of greater concern, however, is the storage of ammonia onsite in a 15,000 gallon tank. Page 9-57. When ammonia at a 20% concentration is stored, the Clean Air Act and federal regulations require that a catastrophic release model be developed. However, the plant will avoid this			

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		requirement by using a 19% concentration. Page 9-25. This smacks of attempting to "fly under the radar". If indeed this was the tactic, then it is disappointing and justifiably raises a concern whether safety was of the highest priority in project planning. Whether a catastrophic release model should be required needs to be examined since the concentration is borderline. Under a general duty imposed by federal regulation this may be required. Page 9-25. There is a discussion in the DEIS of some modeling regarding a release. Page 9-57. However, whether it would be sufficient to satisfy the modeling requirement under all of the federal laws and regulations mentioned above, is unclear.				
		<u>Response:</u>				
		See response to <u>Comment Number L-6-22 and L-7-6</u> . Modeling of the impacts of a hypothetical worst-case failure of the ammonia storage tank was conducted and results were presented in the DEIS even though this analysis was not required.				
9.0 Air Quality L-10-5		As illustrated by the DEIS itself, this proposed project is massive and will impact Wawayanda and Orange County. It is imposing with big stacks, big buildings, and big impact on the environment. There is no entitlement here. It will need a variance because it will significantly exceed the height limitations that are allowable. Page 1-11. Although it is asserted in the DEIS that the project meets minimum federal and state standards in many regards and compensates for falling short on others, this still does not create an entitlement. This Board and the Town has the obligation to consider this project from the perspective of its impact on the residents of the area and with the general public interest in the forefront of its concerns.				
		Response:				
		The DEIS shows that all potential air impacts are well below the National Ambient Air Quality Standards (NAAQS) that have been implemented to protect public health. The use of stack heights not requiring a variance would have resulted in unacceptably high impacts on the local area. The proposed stack height for the combustion turbine stacks is designed to limit local air quality impacts and does not exceed Good Engineering Practice stack height as defined by EPA.				
		The DEIS and the SEQRA process is the mechanism for comprehensively assessing the potential impacts of a project. The DEIS assesses the proposed Project and its potential impacts from a variety of aspects, including land use and zoning, cultural resources, visual resources and aesthetics, community facilities, socioeconomics and environmental justice, traffic and transportation, air quality, noise, soils, infrastructure, water resources, and ecology.				

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9.0 Air Quality	L-11-4	The applicant admits to the emission of 95 tons of particulate matter per year. This is 95 tons too many. It admits to having to purchase N02 and Ozone credits because the quantity of these chemicals that will be belched into the air by this plant would not be within acceptable Federal limits. With Orange County one of the top ten counties in the nation for filthy air, we cannot afford a project that will contribute more of these health-destroying substances to the air we breathe.					
		Response:					
		The actual emissions of particulate matter from the Project will be limited to no greater than 95 tons per year. The actual emissions of particulate matter may be below this level. The purchase of emission offsets for NO _x and VOC is required of any new major source for these pollutants located within an ozone nonattainment area. The purchase of offsets to more than fully offset the potential Project emissions of these pollutants is a basic requirement of obtaining the required air permit. The required offsets will lead to a regional improvement in air quality.					
		The description of Orange County as "one of the top ten counties in the nation for filthy air" is not accurate. See response to Comment Number L-9-5 for additional information.					
9.0 Air Quality	L-11-6	The project will require a 965,000 gallon oil tank and a 15,000 gallon ammonium tank. Since the site impinges on the second largest wetland in Wawayanda and is an area close to recent seismic activity, the residents will have to fear for the quality of their water and for their safety should either of these tanks rupture or even leak.					
		Response:					
		CPV Valley is committed to operating the Facility in a safe manner, with systems in place for spill prevention and spill control. As stated in Section 12.5.1 of the DEIS, the oil and hazardous materials required to support facility operation would include materials (e.g., natural gas, fuel oil, aqueous ammonia) that 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. Section 12.5 of the DEIS (pages 12-25 through 12-32) provides an overview of the techniques that would be used to minimize the potential for pollutants in stormwater runoff from the site during Facility operation. It addresses chemical storage areas, product delivery, plant maintenance, waste handling activities, vehicle maintenance, and stormwater pollution prevention (SWPP) and monitoring requirements. The complete Draft Operational SWPP Plan is contained in Appendix 12-A.					

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		Secondary containment, that is, a second layer of engineering defense, is a key component of the Facility design. If a release were to occur, secondary containment features capture a release and prevent migration to soil, surface water, or groundwater.		
		Regarding aqueous ammonia, the tank is designed with secondary containment in the event of a release. The containment basin will be designed to contain 110% of the tank contents in the event of a tank failure. The storage tank and containment design will include provisions for overfill detection and prevention, and provision for tightness-testing before use and inspections on a regular basis. In addition, the tank would be equipped with automated level monitoring gages, intermediate level warning indicators, as well as visual and audible high-level alarms.		
		Aqueous ammonia is not flammable or reactive and is not a risk to surface water or groundwater. If released into the containment basin, evaporation occurs. Though not required by regulation or manufacturer operating procedures, the containment basin will be filled with two layers of closely packed plastic spheres. In the unlikely event of an accidental release, they would float on top of the spilled liquid reducing its surface area. Reducing the surface area of the aqueous ammonia release reduces the evaporation rate, a safety precaution for responders.		
		Section 12.7 of the DEIS outlines the Spill Prevention and Control Plan that will be implemented for the Facility. As part of final design and in accordance with New York State regulations, a detailed Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) will be prepared and strictly enforced by the Facility. Elements of the plan include for example: emergency response training requirements of Facility staff; routine daily and monthly inspections of the tanks, containment structures, unloading areas, and other chemical storage areas; periodic integrity testing of the tanks; spill response procedures; and emergency response procedures.		
		Public and private water supplies in the area utilize deep bedrock wells. The Project site is located on an overburden aquifer, located between the ground surface and the bedrock aquifer. In addition, the Facility is designed with secondary containment features. Safety features designed to prevent a release from impacting the environment. In the event of a spill, the Facility must promptly respond to and report the incident to the State. For this site, the Facility will be responsible for the response, reporting, and any mitigation measures that may result. The site is not located over a USEPA designated Sole Source Aquifer; as a result, the site is not in the recharge zone (water that directly recharges to the aquifer) or the stream-flow source zone (the area that drains to the recharge zone) for the Sole Source aquifer that runs into New Jersey.		
		The Facility is designed with secondary contaminant systems and mitigation plans. No impacts to the Wallkill River, including its aquatic life flora and fauna, have been identified based on planned Facility operations.		

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9.0 Air Quality	L-12-4	Under what circumstances would diesel be utilized? And at what cost? Will wind direction, N, NE, and NW be considered? If diesel is utilized the "agreed" approximate 720 hours per year -what is the environmental impact during that time?			
		Response:			
		Ultra-low sulfur distillate oil would typically be used during periods when natural gas was unavailable. The air quality impacts of operating on oil for a maximum of 720 hours per year per combustion turbine are considered in the DEIS (Sections 5.5, 5.6, and 6.2) and are described in other responses. The air quality modeling analyses made use of a five-year data base of representative hourly meteorological data (including measured wind directions and speeds). The results of the modeling analyses are presented in the DEIS and are the basis for the conclusions presented therein.			
9.0 Air Quality	L-14-3	Other questions I have are how this will impact our air and towns around us? Will in 20 years we hear that you didn't think this was a health issue, but were wrong.			
		Response:			
		Potential air quality impacts of the Project are provided in Sections 9.5 and 9.6 of the DEIS. Given the compliance with the National Ambient Air Quality Standards, New York Ambient Air Quality Standards, and New York State Guideline Concentrations, no health issues have been identified. If ambient air quality standards are revised in the future, the facility will be required to comply with the revised standards.			
9.0 Air Quality	L-15-2	I work from home and have asthma. The pollution from this plant could easily put me in the hospital. So essentially, you're saying I have to move.			
		Response:			
		The Project's air emissions will be well below the National Ambient Air Quality Standards, for all constituents. The National Ambient Air Quality Standards are established to be protective of the most sensitive individuals, including children, the elderly and asthmatics. Measures of asthma frequency in Orange County show that rates of emergency visits and hospital discharges due to asthma in Orange County are below average rates for New York State.			

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9.0 Air Quality	H-1-1	First, at the open house, Mr. Glenn Harkness, who is a senior vice-president from TRC, when asked about the hot spots for air quality, tried to explain it away by saying that "hot spots" is a bad phrase because all of the area will be under the SIL, or significant impact level. We do not dispute that it will under the significant impact levels. But there are hot spots. There is no doubt about it. The applicant can, should have and probably has identified the hot spots. I also believe they should be readily available to the public so they can comment on that. If you were told that the hot spot contained the spot where your child or grand-child attended school, or your parents in a senior housing, or that it is in site of the new hospital being built in the Town of Wallkill, would probably want to revisit those impacts. Even if this is such that the hot spots are twice as impacted as the area in general and that is below the SIL, it's still important to look at. **Response:** The term "hot spot" in an air quality context has a specific regulatory meaning with respect to quantitative or qualitative analyses required for certain transportation projects under the National Environmental Protection Act (NEPA) or under Transportation Conformity regulations. The Project is not a transportation project and is not subject to these requirements. The term "hot spot" also is used at times in a more general sense to refer to locations at which emissions from sources may cause impacts significantly higher than those in surrounding areas. The associated concern is that individuals exposed at such locations may be subject to increased risks of adverse health effects. Therefore, the concept of a "hot spot" incorporates two factors — significantly higher concentrations and adverse health effects. Predicted impacts from the Project are greater at some locations than at others. Predicted impacts will vary based on meteorology (wind speed, wind direction, atmospheric stability, temperature, wind persistence, etc.), terrain, and o				

Response to Comments on Section 9.0 – Air Quality								
DEIS Section	Comment Number	Comment/Response						
		Section 9.6.7 of the inursing homes, and of impacts of NO ₂ , CO, Project. All predicted EPA. The SILs represented The NAAQS were estable populations. Impacts may be higher at sor always below the NA impacts due to the Parallel impacts for which in predicted impacts frow term guideline concerned the NAAQS evented below the NAAQS evented the NAAQS event	other locations of of SO ₂ , and PM ₁₀ from SO ₂ , and PM ₁₀ from Impacts at these sent small fraction ablished by EPA at a below the SILs and locations than of AOS and, therefore coject at the sensition NAAOS has been the Project were not rations (SGC) estor criteria pollutary erywhere (not just rovides a summary meters) and directine stacks. Reception of Rocal Police Stacks. Reception impacts and Police Stacks. Police Stacks. Reception impacts and Police Stacks. Pol	concern. Table of the Project at sensitive recept is of the corresponding to the considered in others, the predict, do not represent tive receptors are stablished). The well below all stablished by NY at the identified of the location (in degrees).	9-31 of the DE all identified stars are below conding National that it human healt is ignificant or ricted impacts are below the National in the annual is potential Project to protein aximum pred sensitive records of maximum pred of maximum pred of maximum protein are provided.	IS presents mensitive receptions it is presented in a consideration of the constant in the identified alth. To clara AAOS all the test impacts on Section 9.6. In guideline constant advantagement impacts of the constant advantagement impacts of the constant impacts of th	naximum predictors within 5 pact levels (S Quality Standard Pealth of some health of some health of some health of some health meanime, not just fron-criteria 3.2 of the DE pentrations (A perse health riss of criteria posect impacts. The point midward point midward pacts with the pacts w	licted air quality miles of the ILs) defined by dards (NAAQS) ensitive though impactored average." pollutants (i.e., is, maximum GC) and shortsks. Finally, collutants were between the isy between the isy between the isy defined air in the isy between the isy defined air in the isy between the isy defined air in the isy between the isy defined in the isy between the isy defined in the isy between the isy defined in the isy defined air in the isy defined a
		Polluta	Averaging Period	Maximum Project Impact (Overall) (µg/m³)	Distance (meters)	Direction (degrees)	Comment	
		NO_2	Annual	0.85	64	6	Fence line	
		CO	1-hour	563	2300	320		
		SO ₂	3-hour	3.3	2600	320		
			24-hour	0.6	2600	320		
		-	Annual	0.04	800	30		
		- - PM ₁₀				30 320 30		_ - -

		Response to Comments on Section 9.0 – Air Quality
DEIS Section	Comment Number	Comment/Response
9.0 Air Quality	Н-7-2	This project also the particulate matter. 95 tons of particulate matter -just under the border. We don't need any extra particulate matter here. We are in the top ten in the country for asthma and the American Lung Association is really worried about us.
		<u>Response:</u>
		Allowable emissions of particulate matter from the Project will be capped at 95 tons per year. Actual annual emissions may be below this level.
		The statement that "we are in the top ten in the country for asthma" is not accurate. The New York State Department of Health has published detailed statistics concerning asthma in the October 2007 "New York State Asthma Surveillance Summary Report" (http://www.health.state.ny.us/statistics/ny_asthma/pdf/2007_asthma_surveillance_summary_report.pdf).
		The data in that report show that for various measures of asthma frequency, Orange County ranks below the average frequency for New York State. For example, for asthma emergency department visit rates in 2005 (per 10,000 residents), Orange County's rate of 58.0 ranked fifteenth among 62 counties in New York, well below the state average of 73.0 and even farther below the highest rate of 212.8 for the Bronx. For asthma hospital discharge rate per 10,000 residents for (2003-2005), Orange County's rate of 17.6 was below the state average of 22.1 and well below the peak rate of 67.5 for the Bronx. More recent adjusted average asthma hospital discharge rates per 10,000 residents for the period (2005-2007) are available from the New York Department of Health website: http://www.health.state.ny.us/statistics/ny_asthma/hosp/asthma6.htm . These more recent data show that the rate for Orange County (14.8 per 10,000 residents) places it twelfth among 62 counties in New York, below the state average of 20.5 and well below the peak level of 63.9 in the Bronx. By all these measures of asthma frequency, asthma rates in Orange County are below the average rates for the State of New York. Predicted particulate matter concentrations are below the National Ambient Air Quality Standards, designed to be protective of sensitive populations, including asthmatics.

	Response to Comments on Section 9.0 – Air Quality				
DEIS Section	Comment Number	Comment/Response			
9.0 Air Quality H-10-1		I am also on the Environmental Review Board Town of Goshen. Everybody is speaking about this is going to be one of the cleanest projects out there, but as you know, energy choices generally change with time, and right now there is a lot of green initiatives and it does appear that this plant is going to be built with some of the best technology in terms of gas. However, I do believe that the impact statement should probably be done with a worst case scenario -all the modeling and figures and tables it should take into account that they may be burning oil versus gas because it may become economically unfeasible to burn gas in say five years. And this is a PILOT project in sorts and we may find that in five years that it is definitely not be feasible to burn gas.			
		Response:			
		The air quality modeling was conducted for worst-case conditions, i.e., for those combustion turbine operating conditions that had the highest emissions for each fuel and for those operating conditions that had the highest predicted impacts from the combustion turbines for each fuel. Modeling to determine maximum predicted short-term impacts for oil firing assumed that oil was fired for every hour of each year that was modeled. However, modeling to determine maximum annual impacts appropriately accounted for the proposed limit of 720 hours per year of oil firing per combustion turbine. The Project could not legally exceed the proposed level of oil firing without modifying its permit and without performing additional modeling analyses to demonstrate that all applicable standards would be satisfied. Such a permit modification would be subject to SEQRA and regulatory review, with full public disclosure, as the original application has been.			
9.0 Air Quality	H-16-4	Here is another one -clean air credits. They want to pay clean air credits to someone else while we get to live in the pollution. What's wrong with this picture?			
		<u>Response:</u>			
		Offsets of potential NOx and VOC emissions from major new sources of these pollutants are required in ozone nonattainment areas. Potential emissions of these pollutants must be offset in at least a 1.15 to 1 ratio, thus ensuring that there will be an actual reduction of regional emissions of these pollutants. Ozone is formed in the atmosphere as a result of photochemical reactions among NOx and VOC precursor pollutants. Ozone is created over a time scale of many hours to days and generally forms tens to hundreds of miles downwind of the sources of its precursors. Due to the nature of its formation, ozone is a regional scale pollutant and is appropriately regulated on a regional basis. The required emission offsets of ozone precursors are designed to produce regional air quality benefits. The regulatory constraints relative to the location of potential offset sources ensure that the required emission offsets will have a regional benefit on air quality.			

	Response to Comments on Section 9.0 – Air Quality				
DEIS Section	Comment Number	Comment/Response			
		The DEIS presents the results of air quality impact analyses demonstrating that the Project: (1) will not cause any violations of National Ambient Air Quality Standards or New York Ambient Air Quality Standards, (2) will not exceed Prevention of Significant Deterioration (PSD) limits designed to limit the extent to which air quality can be degraded, (3) will not exceed NYSDEC Air Guideline Concentrations for non-criteria pollutants, and (4) will have impacts so small for most pollutants (below Significant Impact Levels) that they are considered negligible.			
9.0 Air Quality	H-18-4	While these questions are quintessential, I would remiss if I did not ask whether the Wawayanda Town Supervisor, board members and Planning Board appointees have or will require CPV to present a plan to ensure that this proposed project achieve a quote unquote "climate or carbon neutral" balance in the development of this project and operation. And/or to the extent that it will not be carbon neutral, that CPV be held accountable to provide mitigation which benefits the Town of Wawayanda and its residents to sufficiently off-set any and all adverse impacts of the planned power plant to our town, its residents and the greater environs.			
		Response:			
		See response to <u>Comment Number L-8-15</u> .			
9.0 Air Quality	H-18-5	Further, will the town officials and CPV covenant that any off-sets that might pertain to this project not involve any long distance trading or brokering, but apply solely to this locale and to this region?			
		This would seem only fair and reasonable. In the Draft Environmental Impact Statement it is noted while the proposed power plant is one of the least polluting facilities of its kind, it will still generate approximately 95 tons of particulate matter, or the microscopic soot largely emitted by fossil fuel electric generating plants like the one proposed, on an annual basis. And this, when added to Orange County's already toxic air hazard quality will exacerbate a growing contamination of the air we all breathe causing an increasing health hazard to our region. It also adds greenhouse gases that will accelerate the looming threat of catastrophe from global warming. The question then is not can CPV off-set this assault on our environment, but to what extent can they do so, and how?			
		Response:			
		The required emission offsets of NO_x and VOC will satisfy all applicable regulatory requirements. See response to Comment Number L-7-3 and L-8-7 for more information.			

	Response to Comments on Section 9.0 – Air Quality								
DEIS Section	Comment Number	Comment/Response							
		Allowable particulate emissions from the Project will be capped at 95 tons per year. Actual annual emissions may be below this level. Air quality modeling conducted for the Project demonstrates that Project impacts will be below all limits established to protect human health.							

Table 9-31 Maximum Impacts at Sensitive Receptors

(Response to Comment # L-6-13)

			X	Y	NO_x	C	О		SO_2		Pl	M_{10}
Category	Name	City	UTM	UTM	annual	1-hour	8-hour	3-hour	24-hour	annual	24-hour	annual
			km	km	$\mu g/m^3$	μg/m ³	μg/m ³	$\mu g/m^3$	μg/m ³	$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$
Historic Park	Horton, Webb, House	Middletown	547.974	4587.602	7.9E-02	55.00	12.75	3.1E-01	8.1E-02	1.2E-02	1.33	3.9E-02
Historic Park	Hillside Cemetery	Middletown	547.625	4588.065	6.3E-02	52.65	5.90	2.6E-01	7.9E-02	8.7E-03	0.75	2.7E-02
Historic Park	Dunning House	Wawayanda	545.426	4581.618	7.4E-02	42.42	8.34	5.0E-01	8.3E-02	8.1E-03	1.28	2.6E-02
Historic Park	Primitive Baptist Church of Brookfield	Slate Hill	544.054	4582.211	2.6E-02	33.74	1.68	1.5E-01	5.3E-02	3.6E-03	0.37	1.1E-02
Historic Park	Paramount Theatre	Middletown	548.378	4588.221	6.5E-02	38.39	10.01	2.8E-01	7.0E-02	1.0E-02	1.15	3.2E-02
Historic Park	Oliver Avenue Bridge	Middletown	547.373	4589.291	4.7E-02	46.22	5.87	1.8E-01	7.0E-02	5.8E-03	0.56	1.8E-02
Historic Park	Sawyer Farmhouse	Goshen vicinity	551.917	4580.575	2.2E-02	26.68	3.19	1.9E-01	3.5E-02	4.1E-03	0.51	1.2E-02
Historic Park	District School No. 9	Goshen	554.414	4580.742	2.2E-02	18.00	4.43	9.3E-02	3.2E-02	3.3E-03	0.55	9.8E-03
Historic Park	Pine Hill Cemetery	Wawayanda	547.418	4585.351	2.5E-01	165.61	29.04	7.0E-01	3.7E-01	3.5E-02	3.28	1.4E-01
Historic Park	Potential NRHP Property	Wawayanda	546.724	4584.212	3.0E-01	57.05	16.07	4.4E-01	1.9E-01	1.1E-02	1.59	4.3E-02
Historic Park	Potential NRHP Property	Wawayanda	548.256	4584.646	1.3E-01	53.87	7.66	4.5E-01	1.7E-01	1.7E-02	1.76	5.8E-02
Historic Park	Potential NRHP Property	Wawayanda	548.286	4584.668	1.2E-01	52.18	6.99	4.5E-01	1.6E-01	1.7E-02	1.59	5.6E-02
Historic Park	Potential NRHP Property	Wawayanda	548.322	4584.697	1.2E-01	48.56	6.38	4.5E-01	1.6E-01	1.6E-02	1.39	5.4E-02
Historic Park	Potential NRHP Property	Wawayanda	548.346	4584.728	1.1E-01	43.22	5.78	4.5E-01	1.5E-01	1.6E-02	1.35	5.2E-02
Historic Park	Potential NRHP Property	Wawayanda	548.289	4584.608	1.2E-01	49.92	8.81	4.3E-01	1.6E-01	1.7E-02	1.94	5.9E-02
Historic Park	Potential NRHP Property	Wawayanda	548.313	4584.629	1.2E-01	50.90	7.75	4.2E-01	1.6E-01	1.7E-02	1.81	5.7E-02
Historic Park	Potential NRHP Property	Wawayanda	548.334	4584.647	1.2E-01	50.76	7.28	4.2E-01	1.6E-01	1.7E-02	1.69	5.6E-02
Historic Park	Potential NRHP Property	Wawayanda	547.245	4584.024	5.4E-02	8.04	2.59	4.7E-01	8.7E-02	6.8E-03	1.32	2.4E-02
Historic Park	Potential NRHP Property	Wawayanda	547.148	4583.818	4.8E-02	9.85	2.29	3.7E-01	7.2E-02	5.5E-03	1.13	1.9E-02
Historic Park	Potential NRHP Property	Wawayanda	548.215	4584.610	1.3E-01	52.78	9.81	4.5E-01	1.7E-01	1.8E-02	2.01	6.1E-02
Historic Park	Potential NRHP Property	Wawayanda	548.275	4584.595	1.3E-01	48.53	9.32	4.3E-01	1.7E-01	1.8E-02	2.02	6.0E-02
Park	Ben and Paula Amchir Park	Middletown	546.801	4586.297	7.7E-02	22.95	13.10	4.0E-01	1.2E-01	9.2E-03	2.51	3.0E-02
Park	Heritage Trail - Proposed	Wawayanda	549.255	4586.196	5.8E-02	30.57	4.44	2.6E-01	9.1E-02	7.6E-03	0.64	2.3E-02
Park	Maple Hill Park	Middletown	546.695	4588.246	4.6E-02	25.65	6.46	1.8E-01	5.4E-02	5.1E-03	1.13	1.6E-02
Park	Shannen Park	Slate Hill/Wawayanda	543.642	4581.349	2.9E-02	30.87	2.81	1.5E-01	5.8E-02	4.0E-03	0.35	1.2E-02
Park	City Park	Wallkill	550.322	4587.754	3.9E-02	27.02	3.26	2.4E-01	5.0E-02	5.5E-03	0.56	1.6E-02
Park	Francher-Davidge Park	Middletown	547.375	4589.981	4.1E-02	53.78	6.75	1.6E-01	6.2E-02	5.3E-03	0.52	1.7E-02
Park	Watts-Memorial Park	Middletown	548.740	4590.224	4.9E-02	21.15	11.45	2.5E-01	4.5E-02	7.1E-03	1.10	2.2E-02
Park	City Park	Middletown	549.068	4591.149	4.4E-02	19.66	11.42	2.3E-01	4.2E-02	6.4E-03	1.05	1.9E-02
Golf Course	Orange County Golf Club	Middletown	552.324	4586.966	1.9E-02	19.31	2.40	8.5E-02	3.4E-02	3.1E-03	0.24	8.8E-03
Public Nature												
Preserve	Hunter Farm Preserve	Wawayanda	542.925	4583.158	1.4E-02	26.10	0.81	2.3E-01	6.4E-02	1.8E-03	0.48	5.3E-03
Conservation												
Easement	Mt Orange Easement	Wawayanda	542.643	4583.484	1.3E-02	25.11	1.44	2.9E-01	6.8E-02	1.7E-03	0.52	4.8E-03

			X	Y	NO_x	C	O		SO_2		Pl	M_{10}
Category	Name	City	UTM	UTM	annual	1-hour	8-hour	3-hour	24-hour	annual	24-hour	annual
		·	km	km	μg/m ³	μg/m ³	$\mu g/m^3$	μg/m ³	μg/m ³	$\mu g/m^3$	μg/m ³	μg/m ³
Public Nature												
Preserve	Orange County Audubon Sanctuary	Goshen	554.273	4583.825	1.9E-02	20.45	2.26	9.4E-02	3.3E-02	3.4E-03	0.48	1.0E-02
Conservation												
Easement	Orange County Farmland	Goshen	553.304	4580.198	2.0E-02	18.67	3.55	1.7E-01	3.1E-02	3.6E-03	0.39	1.1E-02
Recreation	NYS Rt 17 Bike Trail	Wawayanda	546.738	4584.739	1.4E-01	29.65	11.68	1.5E-01	7.0E-02	2.1E-03	0.41	8.3E-03
Cemetery	Pine Hill Cemetery	Wawayanda	547.475	4585.371	2.5E-01	134.94	27.65	5.8E-01	3.5E-01	3.3E-02	3.01	1.2E-01
Cemetery	Grace Hill Methodist Church	Slate Hill	545.667	4582.007	8.3E-02	49.48	10.28	4.9E-01	9.0E-02	8.8E-03	1.57	2.8E-02
Cemetery	Primitive Baptist Church of Brookfield	Slate Hill	544.070	4582.232	2.6E-02	33.59	1.66	1.5E-01	5.3E-02	3.6E-03	0.37	1.1E-02
Cemetery	Hillside Cemetery	Middletown	548.040	4588.082	6.3E-02	27.09	8.50	3.1E-01	6.8E-02	1.0E-02	1.11	3.1E-02
Cemetery	Wallkill Cemetery	Middletown	553.285	4587.376	1.7E-02	16.65	2.55	7.6E-02	3.0E-02	2.7E-03	0.20	7.8E-03
Church	Mt Carmel Church	Wallkill	547.178	4586.651	8.8E-02	63.45	11.20	2.7E-01	1.4E-01	1.2E-02	1.19	4.0E-02
Church	Middletown Alliance	Wallkill	546.784	4586.704	6.5E-02	19.43	10.91	3.2E-01	9.5E-02	7.8E-03	2.08	2.5E-02
Church	Kingdom Hall	Wallkill	545.410	4587.829	2.6E-02	35.51	9.10	3.1E-01	5.4E-02	3.4E-03	1.19	1.1E-02
Church	St. Johns Lutheran Church	Wallkill	546.132	4588.115	3.2E-02	65.75	13.34	2.1E-01	7.5E-02	4.2E-03	1.19	1.3E-02
Church	Cornerstone Baptist	Wallkill	550.188	4586.927	3.9E-02	29.35	2.63	2.3E-01	6.8E-02	5.1E-03	0.53	1.5E-02
Fire Station	New Hampton Fire Dept.	Wawayanda	548.862	4584.447	9.2E-02	45.31	8.06	2.9E-01	1.2E-01	1.4E-02	1.68	4.3E-02
Fire Station	Pocatello Fire Dept.	Middletown	545.651	4587.966	2.9E-02	77.14	16.30	2.1E-01	7.3E-02	3.6E-03	1.25	1.1E-02
Fire Station	Slate Hill Fire Dept.	Wawayanda	543.561	4581.973	2.3E-02	25.89	1.62	1.5E-01	5.4E-02	3.1E-03	0.34	9.0E-03
Fire Station	Middletown Fire Dept.	Middletown	548.824	4588.435	6.0E-02	36.99	7.90	2.2E-01	5.6E-02	9.7E-03	0.92	2.9E-02
Fire Station	Mechanicstown Engine & Fire Co.	Middletown	550.086	4588.096	4.2E-02	26.41	4.95	2.1E-01	4.2E-02	6.4E-03	0.53	1.9E-02
Fire Station	Silver Lake Fire District	Middletown	550.764	4589.644	3.4E-02	20.02	2.96	1.5E-01	3.8E-02	6.0E-03	0.38	1.8E-02
Hospital	Mid-Hudson Forensic Psych Ctr	New Hampton	548.838	4584.414	9.6E-02	49.89	8.41	3.1E-01	1.2E-01	1.4E-02	1.70	4.5E-02
Hospital	Middletown Psychiatric Center	Middletown	546.722	4588.840	4.3E-02	43.77	9.17	1.6E-01	4.9E-02	4.8E-03	0.88	1.5E-02
Hospital	Horton Hospital	Middletown	549.298	4588.079	5.9E-02	56.24	11.47	1.8E-01	6.6E-02	9.3E-03	0.65	2.9E-02
Hospital	Orange Regional Medical Center	Middletown	549.298	4588.079	5.9E-02	56.24	11.47	1.8E-01	6.6E-02	9.3E-03	0.65	2.9E-02
Hospital	Valley Columbia Heart Center	Middletown	550.723	4588.300	3.4E-02	25.02	2.89	2.1E-01	4.6E-02	5.1E-03	0.51	1.5E-02
Hospital	The Workplace of St. Francis Hospital	Middletown	552.516	4587.771	2.0E-02	15.20	2.31	1.2E-01	3.2E-02	2.9E-03	0.26	8.4E-03
Nursing Home	Southwinds Retirement Home	Middletown	548.400	4587.865	6.9E-02	38.72	8.03	2.6E-01	7.4E-02	1.1E-02	1.02	3.5E-02
Nursing Home	Elant at Erie Station	Middletown	548.476	4588.700	5.8E-02	29.47	11.13	2.9E-01	5.8E-02	9.1E-03	1.19	2.8E-02
Nursing Home	Park Manor Rehab. & Health Care	Middletown	551.508	4589.048	2.7E-02	23.40	2.80	1.9E-01	4.2E-02	4.3E-03	0.45	1.2E-02
Police Station	Middletown Police Dept.	Middletown	548.309	4588.398	6.2E-02	28.79	10.42	3.0E-01	6.0E-02	9.7E-03	1.19	3.0E-02
Police Station	New York State Highway Patrol	Middletown	553.176	4588.630	1.8E-02	18.28	2.63	1.5E-01	3.1E-02	2.7E-03	0.30	7.7E-03
Police Station	Wallkill Police Dept.	Middletown	552.125	4590.699	3.0E-02	18.26	2.50	1.4E-01	2.7E-02	4.6E-03	0.34	1.3E-02
Preschool	Peter Pan Nursery School	Middletown	546.047	4586.794	4.1E-02	37.12	8.85	2.7E-01	1.1E-01	4.6E-03	1.60	1.5E-02
Preschool	George Robin Preschool	Middletown	546.302	4588.157	3.5E-02	68.95	12.52	2.1E-01	6.3E-02	4.4E-03	1.32	1.3E-02
Preschool	Field of Dreams Preschool	Slate Hill	545.805	4580.845	6.2E-02	31.82	8.00	5.3E-01	8.0E-02	7.6E-03	1.37	2.4E-02
Preschool	Hilltop Childrens Center	Middletown	546.670	4588.962	4.1E-02	27.28	6.79	1.5E-01	4.6E-02	4.6E-03	0.88	1.4E-02
Preschool	Gymboree Play & Music	Middletown	548.368	4588.996	6.1E-02	24.94	11.55	2.9E-01	5.6E-02	8.8E-03	1.20	2.8E-02

			X	Y	NO_x	C	O		SO_2		P	M_{10}
Category	Name	City	UTM	UTM	annual	1-hour	8-hour	3-hour	24-hour	annual	24-hour	annual
			km	km	$\mu g/m^3$	μg/m ³	μg/m ³	$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$	μg/m ³	$\mu g/m^3$
School	Our Lady or Mount Carmel School	Wallkill	547.159	4586.802	8.1E-02	54.50	8.36	2.4E-01	1.3E-01	1.1E-02	1.07	3.6E-02
School	Truman Moon Elementary School	Middletown	548.058	4587.362	8.3E-02	44.35	11.34	2.8E-01	9.7E-02	1.3E-02	1.11	4.2E-02
School	Orange County Community College	Middletown	547.959	4587.486	8.2E-02	56.12	13.29	3.0E-01	8.4E-02	1.3E-02	1.36	4.1E-02
School	Orange County Community College	Middletown	547.775	4587.509	7.8E-02	52.84	10.34	3.1E-01	8.3E-02	1.2E-02	1.05	3.8E-02
School	Orange County Community College	Middletown	547.880	4587.548	7.9E-02	58.52	11.94	3.1E-01	8.3E-02	1.2E-02	1.26	3.9E-02
School	Orange County Community College	Middletown	547.948	4587.606	7.8E-02	56.43	12.30	3.1E-01	8.1E-02	1.2E-02	1.31	3.9E-02
School	Orange County Community College	Middletown	548.046	4587.691	7.7E-02	46.12	12.39	3.0E-01	7.9E-02	1.2E-02	1.24	3.8E-02
School	Maple Hill Elementary	Wallkill	545.838	4588.661	2.7E-02	11.50	10.36	1.8E-01	6.4E-02	3.6E-03	0.85	1.1E-02
School	Monhagen Middle School	Wallkill	546.108	4588.936	2.9E-02	18.00	10.20	2.0E-01	4.9E-02	3.7E-03	1.05	1.1E-02
School	Boces Site	Middletown	548.226	4588.844	6.1E-02	23.61	10.66	3.0E-01	5.8E-02	8.8E-03	1.16	2.8E-02
School	Middletown Christian School	Middletown	548.335	4589.144	5.8E-02	21.52	11.14	2.9E-01	5.5E-02	8.5E-03	1.16	2.7E-02
School	Memorial Elementary School	Middletown	548.683	4589.116	6.0E-02	45.44	11.74	2.7E-01	5.7E-02	8.6E-03	1.17	2.7E-02
School	Montessori New Beginnings	Middletown	549.342	4588.891	5.5E-02	27.13	6.58	1.9E-01	5.1E-02	8.5E-03	0.67	2.6E-02
School	St Joseph's School	Middletown	549.214	4589.214	5.2E-02	34.44	8.34	2.0E-01	4.8E-02	8.3E-03	0.87	2.5E-02
School	Twin Towers Middle School	Middletown	549.731	4589.036	4.7E-02	29.66	5.19	1.7E-01	4.9E-02	7.8E-03	0.45	2.4E-02
School	Chorley Elementary School	Middletown	548.240	4589.890	5.0E-02	30.78	7.64	2.5E-01	5.5E-02	6.8E-03	0.88	2.1E-02
School	Mechanicstown Elementary School	Middletown	550.836	4588.363	3.2E-02	25.57	2.86	2.1E-01	4.6E-02	4.9E-03	0.51	1.4E-02
School	Middletown Senior High School	Middletown	550.416	4589.163	3.8E-02	22.93	3.59	1.6E-01	4.2E-02	6.4E-03	0.41	1.9E-02
School	Minisink High School	Slate Hill/Wawayanda	540.846	4581.523	1.2E-02	15.67	0.57	1.1E-01	4.6E-02	1.6E-03	0.35	4.4E-03
School	Minisink Intermediate School	Slate Hill/Wawayanda	540.461	4581.473	1.2E-02	18.91	0.70	9.9E-02	4.1E-02	1.5E-03	0.34	4.1E-03
School	Minisink Elementary School	Slate Hill/Wawayanda	540.371	4581.442	1.2E-02	18.93	0.64	9.8E-02	4.1E-02	1.5E-03	0.34	4.1E-03
School	Minisink Middle School	Slate Hill/Wawayanda	540.303	4581.132	1.2E-02	14.81	0.55	1.1E-01	4.5E-02	1.5E-03	0.33	4.1E-03
School	BOCES	Goshen	554.170	4581.580	2.3E-02	21.90	3.53	1.2E-01	3.6E-02	3.5E-03	0.52	1.1E-02
School	BOCES	Goshen	554.009	4581.798	2.4E-02	23.14	3.95	1.2E-01	3.7E-02	3.6E-03	0.50	1.1E-02
School	John S. Burke Catholic High School	Goshen	555.021	4584.469	1.6E-02	16.00	2.54	8.4E-02	2.2E-02	3.0E-03	0.43	9.1E-03
School	Goshen Annex Training School	Goshen	551.360	4579.474	1.3E-02	21.73	2.12	1.2E-01	2.9E-02	3.1E-03	0.39	8.8E-03

Location of Ambient Air Monitors for Non-Criteria Pollutants (New York and New Jersey) in 2008

													mment #				, ,															
Town/County/State	/	',3-Butadiene	r Dichlorobenzene(p)	Acetaldehyde	Acrolein	Arson	Benz	Carl	Cabron	Chlora	Chlos	oloform	Chromium	Cilromium VI	Linylbenzene	Linylene dichloride	Hexane	Lead (PM2.5)	Lead (TSP)	Manganese	Mercin	Methyland	Nacc	Sprithalene	Nickel +	l'etrachloroethylo	Tolyper	Trichloroca	Vinu	Vinylidens	o-x	Yylene
Albany / Albany / NY						Χ		Х				Х					X			Х	Χ			Х								1
New York / Bronx / NY	Х	Х	Х		Χ	Χ	Х	Х	Х	Х	Х	Χ	Х	Х	Х	Х	Х			Χ	Χ	Х	Х	Х	Х	(Χ	Χ	Х	Х	Х	l
Buffalo / Erie / NY						Χ		Х				Х					Х			Χ	Χ			Х								1
Lackawanna / Erie / NY	Х	Х					Х		Х	Х	Х			Х	Х							Χ			Х	(Χ	Х	Х	Х	Х	
Tonawanda / Erie / NY	Х	Х	Х		Χ		Х		Х	Х	Х			Х	Х							Х	Х		Х	(Χ	Χ	Х	Х	Х	l
Grand Island / Erie / NY	Х	Х	Х		X		Х		Х	Х	Х			Х	Х							Χ			Х	(Χ	Χ	Х	Х	Х	1
Wilmington / Essex / NY	Х	Х	Х			Χ	Х	Х	Х	Х	Х	Х		Х	Х		Х			Χ	Χ	Χ		Х	Х	(Χ	Χ	Х	Х	Х	1
New York / Kings / NY	Х	Х					Х		Х	Х	Х			Х	Х			Х				Х			Х	(Χ	Χ	Х	X	X	l
Rochester / Monroe / NY	Х	Х	Х		X	Χ	Х	Х	Х	Х	X	Х	Х	X	Х		Х			X	Χ	Х	Х	Х	Х	(Χ	Χ	Х	Х	Х	1
New York / New York / NY	Х	Х	X			Χ	Х	Х	Х	Х	X	Х		X	Х		Х			X	Χ	Х		Х	Х	(Χ	Χ	Х	Х	Х	1
Niagara Falls / Niagara / NY	Х	Х					Х		Х	Х	Х			X	Х							Х			X	(Χ	Χ	X	Х	Х	1
Walkill / Orange / NY																		Х														1
Middletown / Orange / NY																		Х														1
New York / Queens / NY	Х	Х	Х			Χ	X	X	X	Х	X	Х		X	Х	Х	Х			Χ	Χ	X		Х	Х	(Χ	Χ	Х	Χ	X	1
Troy / Rensselaer / NY	Х	Х					Х		Х	Х	Х			Х	Х							Х			X	(Χ	Χ	Х	Х	Х	1
New York / Richmond / NY	Х	Х	X				Х		Х	Х	Х			Х	Х							Х			X	(Χ	Χ	Х	Х	Х	1
Addison / Steuben / NY						Χ		Х				Х					Х			X	Χ			Х								1
Camden / Camden / NJ	Х	Х	Х		X	Χ	Χ	X	Х	Х	Х	Х		Х	Х		Х			X	Χ	Χ		Х	Х	(Χ	Χ	Х	Χ	Х]
North Brunswick Township / Middlesex / NJ	Х	Х	X		X	Χ	Χ	X	Х	Х	Х	Х		Х	Х		Х			X	Χ	Χ		Х	Х	(Χ	Χ	Х	Χ	Х	1
Chester / Morris / NJ	Х	Х	Х		X	Χ	Х	Χ	Χ	Х	Х	Х		Х	Х		Х			Χ	Χ	Χ		Х	Х	(Χ	Χ	Χ	Х	X	j
Elizabeth / Union / NJ	Χ	Χ	Х		Χ	Χ	Χ	X	X	Х	Х	Х		X	Х		Х			Χ	Χ	Χ		Х	Х	(Χ	Χ	X	Χ	X	j

Notes:

- 1. Summary table based on information concerning ambient air monitoring for hazardous air pollutants in 2008.
- 2. Information extracted from EPA AirData website.
- 3. Some counties contain multiple monitors for certain pollutants.
- 4. Table only includes those non-criteria pollutants that may be emitted by CPV Valley Energy Center.

		Response to Comments on Section 10.0 – Noise
DEIS Section	Comment Number	Comment/Response
10.0 Noise	PB1-52	It is our understanding Allegiance Resources is providing comments on this section.
		Response:
		Allegiance Resources is serving as the Planning Board's technical consultant for the DEIS noise analysis.
10. 0 Noise	L-2-7	The DEIS indicates that a noise assessment was conducted of the proposed facility to establish a baseline of the existing noise levels, and that a computer noise modeling/impact evaluation of construction and operation of the proposed facility was performed. The applicant states that the noise analysis (Section 1.78 page 1-16) shows there are no noise increases caused by the proposed construction or operation of the generating facility except for the Uhlig Road area. This area would see a 4 dB(A) increase which is below the NYS Department of Environmental Conservation impact criterion of 6 dB(A) that would require analysis and mitigation. Also the Town of Wawayanda noise standard will be met.
		There is no presentation of any noise modeling that shows that sound levels were evaluated at 1/3 octave bands to identify the presence of pure tones-the tones most likely to result in noise complaints in the relevant settings. Pure tones are commonly related to the operation of high-voltage transformers. This information should be evaluated at the facility design stage and not at the operational stage when building and equipment retrofitting is difficult at best. Additionally, the applicant should prepare and present a protocol for post construction noise measurements and provisions for addressing noise complaints to the Town Planning Board for incorporation into a conditional approval process.
		<u>Response:</u>
		One-third octave band data are usually not available from potential equipment vendors during the licensing phase of a project. The Applicant acknowledges that transformers, by their nature, do have the potential to generate tonal noises, particularly at the 120 Hertz (Hz) frequency. This tonal component is present in the 125 Hz 1/1 octave band. The main and steam turbine transformers will be minimal contributors to the total noise level generated by the facility. As an example, the total facility noise level calculated for Uhlig Road was 42 dBA. The three transformers only contribute 21 dBA, 14 dBA, and 4 dBA at Uhlig Road. As such, any tonal noises are anticipated to be unnoticeable.
		There is no practical mitigation measure to remove the tonal components from transformer noise, although through design, the overall dBA level can be reduced. Based on the results above, no additional mitigation

		Response to Comments on Section 10.0 – Noise
DEIS Section	Comment Number	Comment/Response
		would be required since transformer noise is so low.
		No other sources at the facility are anticipated to have significant tonal components.
		A protocol for post construction testing as noted above is included as Appendix 8 in the FEIS. Communication procedures will be established enabling residents to convey any complaints associated with Facility related noise.
10.0 Noise	L-6-34	The Applicant states that it will comply with the local laws of the Town of Wawayanda regarding noise. If there are such local laws, the Applicant should set forth what the laws require and how they propose to comply with them. *Response:*
		As stated in Section 10.2.2 (Town of Wawayanda Noise Ordinance) of the DEIS, the Town of Wawayanda has adopted noise performance standard in Article 4.5 of the Town Zoning Code. The performance standard limits facility generated noise levels to no greater than 65 decibels (dB) at a distance of 100 feet from the project lot line. Although not specified in the ordinance, it is assumed for the purposes of this analysis that the 65 dB level is A-weighted (e.g., 65 dBA).
		Based on the noise assessment conducted for the Project, the Facility will comply with the Town of Wawayanda noise standard. Figure 10-4 of the DEIS provides a close-up view of the Project with the modeling noise levels. A review of this figure 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, Project noise levels would be in compliance with the Town of Wawayanda noise standard.
10.0 Noise	L-6-35	Noise should be monitored at the edges of, and just outside of, the Project site, rather than in distant occupied areas. This site is located nearby land that is developable, and that is closer to the Project site than those occupied locations tested.
		Response:
		The noise monitoring locations were located at the closest noise sensitive areas surrounding the Project site. The analysis therefore assesses the impacts to occupied as well as developable land. Section 10.3 of the DEIS provides a description of each location. The locations were selected in accordance with the approved Scoping Document. These locations provide representative coverage in all directions surrounding the Project site. Noise

		Response to Comments on Section 10.0 – Noise
DEIS Section	Comment Number	Comment/Response
		levels were modeled area wide and noise levels are shown on Figure 10-3 of the DEIS. The existing noise environment at the undeveloped land adjacent to the Project site is largely affected by vehicular traffic noise from Route 6, Route 17M, and I-84. Noise monitoring was conducted at the Pine Hill Cemetery location on Route 6. The noise environment at this location is very similar to that along the entire Route 6 stretch between Route 17M and I-84. Ambient noise monitoring is conducted at a single location, but is used to represent conditions in an area. In this case the Pine Hill Cemetery data are considered representative of ambient conditions along Route 6. As such, the ambient data from the Pine Hill Cemetery location were applied to the area along Route 6. Noise modeling of the Facility was then conducted for the entire area, and the results presented for existing and known proposed noise sensitive areas. Additionally, a noise contour map of the entire area was prepared, from which the Facility's noise contribution can be determined for any location, and compared to the ambient conditions. Additionally, the DEIS results indicate that the Project would be in compliance with the Town of Wawayanda noise standard. This standards limits noise from the Project to no greater than 65 dBA at 100 feet from the lot There will be no significant noise impacts from the Project.
10.0 Noise	L-6-36	What are the maximum noise levels permitted? What are the maximum noise levels created by the plant? **Response:* A description of the NYSDEC noise criteria and Town of Wawayanda noise limits is provided in Section 10.2.1 and 10.2.2 of the DEIS. NYSDEC issued a program guidance document entitled "Assessing and Mitigating Noise Impacts" on October 6, 2000. The guidance recommends that, for non-industrial settings, the A-weighted Sound Pressure Level (SPL) should probably not exceed ambient noise levels by more than 6 dBA at a given receptor. The guidance also recommends that the addition of any noise source, in a non-industrial setting, should not raise the total future ambient noise level above a maximum of 65 dBA. Noise levels in industrial or commercial areas should not exceed 79 dBA. The NYSDEC guidance explicitly states that the 6 dBA increase is to be used as a general guideline. There are other factors that should also be considered. For example, in settings with very low ambient sound levels, a greater increase may be acceptable since sound levels are so low. For purposes of evaluating impacts for the CPV Valley Energy Center, the NYSDEC guidance of an increase in noise levels of 6 dBA or more is considered to be an appropriate level for determining whether an adverse noise impact may be significant. The Town of Wawayanda Zoning Law limits Facility generated noise levels to no greater than 65 dB at a distance

		Response to Comments on Section 10.0 – Noise
DEIS Section	Comment Number	Comment/Response
		of 100 feet from the project lot line. Although not specified in the Zoning Law, it is assumed for the purposes of the CPV Valley noise analysis that the 65 dB level is A-weighted (e.g., 65 dBA).
		Page 10-8 of the DEIS summarizes the projected noise levels with the Facility in operation. This analysis concluded that no increases in noise 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. As discussed above in the response to Comment Number L-6-34, Project noise levels would be below 65 dBA even at the Project lot line, and are well below 65 dBA 100 feet from the lot line.
		See Sections 10.2.1 and 10.2.2 of the DEIS for a description of NYSDEC and Town of Wawayanda noise limits.
10.0 Noise	L-12-6	There are 42 large cooling fans -at what decibel level and from what distance will these fans be heard? (Tree frogs would be preferred). **Response:*
		The ACC cooling fans are not anticipated to be the predominant noise source at the Facility. Sound levels generated by the fans will be a function of distance from the Facility. As an example of the decibel level, at the Apple Lane Drive location, the noise level from the air cooled condenser fans would be 37 dBA, while the balance of Facility sources would be about 44 dBA. Similar differences would occur at all locations. The large fan blades on the ACC rotate much more slowly than for example, fans on a central air conditioning unit. Also, the noise is broadband in nature, much like the existing highway traffic noise, and no tonal sounds would be expected, so the fan noise would not "stand out" in the environment. Noise from the entire Facility may be noticeable at times, and the level of noise is diminished by distance from the Facility.
10.0 Noise	L-13-3	We are concerned that plant operation will generate perceptible background noise during operation. The DEIS appears to focus the discussion on sound intensity, while ignoring the potential introduction of a frequency or group of frequencies that do not exist today (<i>i.e.</i> , instituting a persistent high-pitched whine (however faint) analogous to an aircraft engine when that sound is not heard today). An analysis of existing predominant frequency bands (<i>i.e.</i> , highway noise, generally in the range of 250 Hz to 4000 Hz) versus their proposed counterparts should be addressed. A discussion should also provide addressing the noise associated with the various operational modes of the plant. Consideration should be given to post-construction testing to ensure compliance with final thresholds and provide the opportunity for retrofit to meet the set standard prior to full operational status.

		Response to Comments on Section 10.0 – Noise
DEIS Section	Comment Number	Comment/Response
		Response: The noise levels calculated for Facility operation were shown in the DEIS to be lower than late night ambient conditions at all locations except at Uhlig Road. Facility noise, while it will be audible at times, will not be significant at any of the sensitive receptors tested. The existing noise environment in the area features vehicular traffic noise during all hours of the day and night from the local and major roadways in the area. Noise generated by electric power generation facilities is predominantly broadband in nature, which means that perceptible sharp tonal sounds or "whine" type noises do not occur. Traffic noise is also mainly broadband in nature. As such, any noise audible from the facility would be characterized in the same category as the existing traffic noise in the area. The transformers have a potential to generate tonal sounds. However, the noise contribution from the transformers is very low in comparison to both the total facility noise and the existing ambient noise levels. As such, it is not expected that transformer noise will be a noticeable feature in the noise environment. See Comment Number L-2-7 regarding post construction monitoring.
10.0 Noise	L-13-5	Alternative equipment, ducting, and baffling should be discussed with respect to providing improved noise attenuation at the facility. It appears that power plants of this nature can be constructed with much less sound pressure impact than the proposed configuration. **Response:** Noise mitigation measures were included in the analysis in order to reduce offsite noise levels because the Facility will not have any significant impact. The noise levels calculated for Facility operation were shown in the DEIS to be lower than late night ambient conditions at all locations except at Uhlig Road. At Uhlig Road, the
		absolute sound level of the plant is low (42 dBA), comparable to a quiet office. Although facility noise will be audible at times, it will not be significant at any sensitive receptor, and further reductions in noise should not be required.

		Response to Comments on Section 11.0 – Soil, Geology, and Seismology
DEIS Section	Comment Number	Comment/Response
11.0 Soil, Geology, and Seismology	PB1-53	GREENPLAN is providing comments on soils only. These comments will be forthcoming once the ecological studies have been provided by the applicant.
		Response:
		As agreed with GREENPLAN, its sub-consultant, and the Planning Board prior to the DEIS completeness determination, the results of the seasonally dependent ecological studies are provided in the FEIS. Section 3.2 of the FEIS provides a summary of the studies and Appendix 2A provides the Ecological Field Survey Report.
11.0 Soil, Geology, and Seismology	PB4-7A	11-11. Point of clarification regarding Appendix 11-D: analysis of site soil samples shows that none of these samples contained any amount of the contaminants analyzed?
		Response:
		Yes that statement is correct. Environmental field testing and laboratory analysis conducted on the site indicated no presence of contaminated soils or groundwater.
11.0 Soil, Geology, and Seismology	L-2-8	The DEIS (Section 11.6.1.1 Page 11-13) states there is soil on the site that is unsuitable to support the proposed generating facility. The FEIS should include information about the location and amount of such material, proposed methods for its replacement, the location and amount of material that will be drawn as replacement, the delivery method and placement, and the plans for recycling the unsuitable material.
		Response:
		The majority of the soils at the site can be used for fill purposes after excavation. The relatively high water table will likely leave some of the excavated soils on the wet side of optimum moisture content. Environmental field testing and laboratory analysis indicated no presence of contaminated soils or groundwater.
		As noted in Section 5.1.2 of the geotechnical report (Appendix 11-B, Volume III of the DEIS), a portion of the excavated soils will be fine grained soils and susceptible to disturbance in wet conditions. Therefore, the most likely source of "unsuitable" material will be soils containing excess moisture due to loosening during the construction process. It is anticipated that this material would be stockpiled on site and then re-used on site once dry. This will likely be a construction decision for the Contractor based on consideration of available stock-

		Response to Comments on Section 11.0 – Soil, Geology, and Seismology
DEIS Section	Comment Number	Comment/Response
		pile space, schedule time to dry soil, and overall construction expediency.
		There is an overall net need of fill to construct the Project. It is estimated that approximately 185,000 cubic yards (cy) of fill will be required (reference Section 11.6 of the DEIS). As stated on Page 8-22 of the DEIS, during the site preparation phase, truck trips will include vehicles hauling fill materials to the Project site. The fill activity will be concentrated in a 4 month period early in the construction period. The primary transport requirements will be met through use of 25 cy tractor trailer trucks. Alternative sized trucks will be used if limited use of secondary access roadway alignments is required that have roadway or bridge weight restrictions.
		Potential suppliers of fill material may include facilities located in Wawayanda, Minisink, Hamburg (NJ), Wallkill, Mamakating, and Thompson. Based on the location of those potential borrow facilities, the fill trucks might arrive as follows:
		• I-84 from east: 50%
		• I-84 from west: 40%
		• Route 284/Route 6 from west: 10%
11.0 Soil, Geology and Seismology	L-6-37	Has the Applicant studied or considered the buffering ability of soils, with regard to the soil's ability to absorb toxins and the impacts of soil slowly releasing them over time?
		Response:
		Laboratory testing of on-site soils and groundwater indicated no pre-existing contamination onsite. The Facility's design incorporates pollution prevention plan measures that will prevent release of chemicals or process wastes to the environment.
11.0 Soil, Geology and Seismology	H-1-3	It's a question really; are there any fault lines near the site that may have an impact on the plant or on the proposed infrastructures that serve it? And the fuels and the chemicals stored on the site such as ammonia?
		Within the past 5 to 10 years there has been at least one earthquake in the Goshen/Orange County area.

	Response to Comments on Section 11.0 – Soil, Geology, and Seismology		
DEIS Section	Comment Number	Comment/Response	
		Response: There are fault lines in New York and fault line systems that are associated with regional structural bedrock features. These may or may not be associated with the earthquakes common to New York. During the geotechnical investigation, a seismic analysis was completed. The structures at the Facility will be designed to meet or exceed the seismic hazard, which includes regional seismicity and site-specific conditions related to the geologic formations present. Backup ultra-low sulfur distillate fuel and chemical storage will be in containment areas designed to prevent leakage or overflow to the site environment in case of a seismic event.	
11.0 Soil, Geology and Seismology	H-1-4	Are there any fracture traces under or near the proposed site? If so, what would be the impact of even a small leak of 0.05% from the oil tank, which is about 500 gallons? What is the relationship of this site to the private and public water supply, groundwater sources? Who would bear the cost of connecting neighboring parcels to a non-contaminated water source if it was to happen? What is the relationship of this site to the sole source aquifer that goes into New Jersey and serves for drinking water purposed for over one million people? **Response:*	
		The oil storage tank will be designed with consideration of the seismic setting and with secondary containment. Public and private water supplies in the area utilize deep bedrock wells. The Project site is located on an overburden aquifer, which lies between the ground surface and the bedrock aquifer. In the event of a spill, those responsible are required to promptly respond and to report the incident to the State. For this site, the Facility would be responsible for the response, reporting, and any mitigation measures that may result. The site is not located over a USEPA designated Sole Source Aquifer; as a result, the site is not in the recharge zone (water that directly recharges to the aquifer) or the stream-flow source zone (the area that drains to the recharge zone) for the Sole Source aquifer that runs into New Jersey. The tank is designed with a secondary containment device, which will be capable of holding 110% of the tanks capacity in the case of a leak. Should a leak occur, the contents of the tank are contained in the secondary containment device, which would then be emptied according to state approved procedures.	

	Response to Comments on Section 12.0 – Infrastructure		
DEIS Section	Comment Number	Comment/Response	
12.0 Infrastructure	PB1-54	It is our understanding Pat Hines is providing comments on this section.	
		Response:	
		McGoey-Hauser and Edsall is serving as the Planning Board's lead consultant for both the SEQRA EIS and Site Plan reviews.	
12.0 Infrastructure	PB5-7	Similarly, a Planning Board decision will also be needed for how best to present <u>other</u> new/additional environmental impact information if the applicant's final design changes. For example, "grey water" is currently described as the preferred alternative for cooling purposes. Local groundwater supply is identified as an alternative.	
		If the use of "grey water" was no longer viable because of unforeseen technical, business, or other reasons; and the use of local groundwater selected for final design and construction, ARC believes a more rigorous hydrogeological analysis would be required for EIS purposes (e.g., more comprehensive evaluation of lowering of the groundwater table from pumping, vicinity and regional impacts, etc.). A recommendation to require a more rigorous analysis has not been made at this time because the current application is for "grey water" reuse.	
		Response:	
		The Project is pursuing the use of the grey water from the City of Middletown Sewage Treatment Plant. As a result, the City commissioned a study to determine the technical viability of the City's treatment facility providing its effluent to the Project for its needs. The study concluded that there is significant volume of water available and that the City can provide the Project with its required water needs. A copy of the study has been provided to the Town of Wawayanda Planning Board. The negotiation with the City for both supply of grey water and receipt of discharge water is in an advanced stage. If for some reason an alternate water supply is required, then the Project would need to perform the necessary studies.	
		Section 12.0, Infrastructure, of the DEIS discussed the potential redevelopment of an existing on site groundwater well to satisfy all or a portion of the Facility's process make up water requirements as an alternative to the use of tertiary treated effluent from the Middletown Sewage Treatment Plant. This option was discussed as an alternative. This source is not CPV's preferred option. Any proposed use of groundwater for water supply would require supplemental environmental review and approval by the Planning Board.	

	Response to Comments on Section 12.0 – Infrastructure		
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12.0 Infrastructure	PB5-8	Also, once the pipeline routing of "grey water" and routing of other utilities are finalized, the provision of new environmental impact data may be needed depending on final route selections. To this end, ARC recommends upfront concurrence by the Planning Board and applicant on the need for, and presentation format of, additional environmental impact information; and how best to coordinate this need with potential design changes. In this way, unexpected delays can be avoided by preventing future misunderstandings relative to the EIS process.	
		Response:	
		Section 2.0 of the FEIS provides an environmental assessment of the alternative process water supply/return routes.	
12.0 Infrastructure	L-2-3	The DEIS (Section 1.7.10 page 1-17) states the proposed facility will be supplied with potable water by the City of Middletown's municipal water distribution system for initial charging of the cooling system. Air-cooled condensers will dissipate excess heat, eliminating the need for large volumes of cooling water. The applicant proposes to use tertiary-treated effluent from the City of Middletown's STP for process makeup water, minimizing the water withdrawal from the city's water distribution system. As an alternative, the applicant proposes to investigate the development of an existing on-site water well.	
		The applicant states that the preferred solution is the use of the treated effluent for process makeup water. If negotiations for the preferred solution are not completed at the deadline for submittal of the FEIS, the applicant should complete an advantage-disadvantage analysis with a cost estimate and an environmental analysis for each process makeup water solution. The on-site well solution should indicate the effects of a draw-down of the maximum amount of water needed for the proposed facility's process makeup water and the impacts (if any) on other wells in the area that draw water from the same groundwater geological formation.	
		Response:	
		The preferred alternative for process makeup water is treated effluent from the City of Middletown's Sewage Treatment Plant. Discussions are underway with the City of Middletown to finalize the terms of the agreement for the grey water supply from the City's Sewage Treatment Plant. Please refer to response to	

	Response to Comments on Section 12.0 – Infrastructure		
DEIS Section	Comment Number	Comment/Response	
12.0 Infrastructure	L-2-4	The applicant proposes to dispose of the spent process water at the City of Middletown STP, or circumvent the STP by delivering process water directly to the STP's outfall pipe. The applicant indicates its intent to apply for a separate State Pollution Discharge Elimination System (SPDES) Permit. The FEIS should state the agency's preferred solution. Again the same recommendations should apply for spent process water disposal (direct disposal at the STP or direct disposal at the SIP outfall) as for process makeup water acquisition as stated above, namely an advantage-disadvantage analysis, cost estimate and an environmental analysis for each solution.	
		Response:	
		See Section 2.5 of the FEIS for a summary of this topic. Recent discussions with the City of Middletown indicate an interest for the Project to discharge to the headworks of the City's treatment plant. The final decision on the preferred option will be determined by the City of Middletown.	
		The Project has commenced the SPDES Permit application process with NYSDEC in the event that the City ultimately prefers that the Project's process water be discharged directly to the outfall pipe. The Project can pursue either discharge option based on the City's final decision. Since it will be the City's decision on how the process water will be handled, a cost estimate analysis is not applicable.	
		Prior to filing the SPDES Permit Application, a pre-application meeting was held with NYSDEC in August 2009 to discuss the proposed discharge and NYSDEC was supportive of the Project's proposed use of grey water and discharge back to the Middletown Sewage Treatment Plant outfall.	
12.0 Infrastructure	L-5-24	We understand that the applicant is in negotiations with the City of Middletown to gain access to grey water from the City's wastewater treatment plant. If these negotiations fail, the applicant states that they will make use of the existing onsite well for its water needs. Preliminary pump tests reveal that this well could provide up to 360,000 gpd, which is inadequate for serving the maximum needs of the proposed facility (page 12-1 sites 613,440 gpd water demand for just the process makeup water). The applicant would therefore need to tap another water source to meet its water (both process and potable) demands. We recommend that the issue of water supply and wastewater disposal be thoroughly analyzed in supplemental documentation should the applicant be unable to secure access to the grey water from the City.	
		Response:	
		As stated above in response to Comment Number PB5-7 , the Project is pursuing the use of the grey water	

		Response to Comments on Section 12.0 – Infrastructure
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		from the City of Middletown Sewage Treatment Plant. Regarding the ground water alternative, the maximum 600,000 gallons per day (gpd) usage was based on the backup fuel using ultra-low sulfur distillate oil fired case, which is limited to 720 hours of operation on an annual
		basis. Under expected operating conditions, the Project would utilize 150,000 gpd, which is within the operating capacity of the on-site well. However, in the unlikely scenario that ground water would need to used for an oil fired scenario, the on-site storage of 500,000 gallons could be supplemented with the on-site well. It is also important to note that the Project has 965,000 gallons of oil which will sustain oil-fired operation of approximately 12 hours per day for 3 days. The water tank would provide enough water to allow the facility to operate for 20 hours under oil fired conditions.
12.0 Infrastructure	L-6-40	If the Applicant is using 600 gpd of water, is it exiting the system as steam? The related impacts should be studied. **Response:*
		Process water would be required for several functions associated with the operation of the proposed Facility. Water is used for steam cycle makeup, plant maintenance, inlet air-cooling, turbine injection for nitrous oxides (NOx) control (limited to oil-fired operation), compressor cleaning, etc. Some water is consumed in the process and therefore not discharged under the SPDES Permit. This water is lost due to sampling, venting, and boiler blowdown, which is normal for the operation of this type of facility. (Please refer to the water balance description, tables and figures provided in Section 12.2.2 Water Supply Requirements of the DEIS.). Specifically, Tables 12-1 and 12-2 of the DEIS present preliminary water balance information for the Facility over the projected range of operating conditions. Figure 12-1 of the DEIS, a water balance diagram, schematically illustrates the primary water supply and wastewater pathways through the Facility. Table 12-1 identifies process makeup requirements and wastewater generation rates for each pathway shown.
		The proposed Facility would be one of the most water-efficient combined-cycle electric generation facilities statewide. This is primarily attributable to the selection of an air-cooled condenser for heat dissipation rather than relying on once-through or evaporative cooling technologies. No steam or water vapor is produced by the air-cooled condenser. In addition, water supply and wastewater discharge requirements would be minimized through installation of finfan coolers to manage the Facility's auxiliary cooling loop.
		Process makeup requirements for the Facility would be met by using reclaimed tertiary-treated effluent from the City of Middletown Sewage Treatment Plant. The municipal water distribution system is available in the project vicinity and is the preferred source of supply for satisfying the Facility's potable water demands of approximately 2,880 gpd.

	Response to Comments on Section 12.0 – Infrastructure		
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12.0 Infrastructure	L-6-41	Section 1.7.10 includes as an option, using one of the outfall pipes of the Middletown STP, which is in the Town of Goshen. The Applicant is not permitted to increase the ambient water supply temperature of a water body (<i>e.g.</i> , the Wallkill River). What are the impacts on the Wallkill River and the Middletown STP? What are the impacts on the fish and wildlife in and around the Wallkill River? Please clarify which option the Applicant is most likely to use – page 7-27 seems to indicate that the Applicant will be discharging back to the Middletown STP and does not consider discharging into the Wallkill River.	
		<u>Response:</u>	
		Please refer to Section 2.5 of the FEIS for a discussion of the process water discharge options. Under both options the discharge would comply with applicable temperature standards that are designed to be protective of the Wallkill River. If the outfall option is selected, the discharge will be permitted by the NYSDEC through a SPDES Permit.	
		The SPDES Permit to be issued by NYSDEC must satisfy all applicable provisions of the Clean Water Act and be protective of applicable water quality criteria. The SPDES Permit for the CPV Valley Energy Center's discharge to the City of Middletown's Sewage Treatment Plant's outfall pipe would likely be limited to a maximum temperature of 90°F, which will be protective of the Wallkill River. This limit is the New York State discharge criteria for Class B warm water fishery waters, which is the classification of the river.	
		If the Facility process water discharge goes to the headworks of the Middletown Sewage Treatment Plant, the Facility's discharge will be in compliance with the City of Middletown's sewer use limits, including temperature limits. Table 12-6 of the DEIS lists the City's Sewage Discharge Limits and the Facility's projected discharge concentrations.	
		The impact assessment is presented in Section 12.3.3 (Discharge to the City of Middletown Headworks) and 12.3.4 (Discharge to City of Middletown Sewage Treatment Plant Outfall) of the DEIS.	
		Process wastewater requiring discharge would typically range from approximately 35 gpm to 65 gpm during the primary gas-fired operation. This discharge at the 65 gpm rate represents approximately 1.1% of the current permitted flow of 8.5 mgpd from the City of Middletown's Sewage Treatment Plant.	

		Response to Comments on Section 12.0 – Infrastructure
DEIS Section	Comment Number	Comment/Response
12.0 Infrastructure	L-6-42	Please explain why the Applicant cannot burn off the excess water instead of piping it into the Wallkill River? Response: Returning effluent to the Wallkill River in accordance with the terms and conditions of a State Pollutant Discharge
		Elimination System permit or to the headworks of the City of Middletown's Sewage Treatment Plant will ensure that water quality in the Wallkill River will not be adversely impacted by the proposed discharge. Although it is technically feasible to evaporate process wastewater, operation of evaporative systems would result in increased energy consumption as well as an increase in consumptive water loss from the basin. Because process makeup water for the Facility will be obtained from the Middletown Sewage Treatment Plant outfall and provided with additional treatment prior to reuse, the net environmental benefits of returning water to the river outweigh the environmental costs of operating an evaporative treatment system at this location.
12.0 Infrastructure	L-6-43	If the Applicant is using wells on the property, what are the impacts on the aquifer, including but not limited to draw down and long-term effects.
		Response:
		The Applicant intends to obtain its process water from the City of Middletown's Sewage Treatment Plant. The ground water well option is presented solely as only an alternative option.
		The 72 hour continuous pumping test at the Project site indicates that the test production well(s) are capable of producing continuous flows well in excess of 250 gpm for sustained periods of time. Under normal rainfall conditions of 40 to 50 inches of rain per year, recharge should be routinely available to the formation such that the normal radius of influence around the proposed well field would remain between 400 and 1,000 feet. During dry periods exceeding 4 weeks, the radius of influence may expand to as much as 1,000 feet with measurable impacts of several feet in the monitoring wells on site. If a production well were to be installed (which CPV Valley does not intend to do), the use of such well by CPV Valley would not be expected to decrease yields in any nearby wells.
		The testing and monitoring program carried out in the Groundwater Study (DEIS Appendix 13-A) for the Facility demonstrates that withdrawal of up to 360,000 gpd would not have an adverse impact on adjoining well water supplies, or the aquifer in the vicinity of the Project site.

	Response to Comments on Section 12.0 – Infrastructure		
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12.0 Infrastructure	L-6-63	A 10% increase in the size of the storage tank does not necessarily adequately protect the surroundings from spills. How does the design of the tank take into account and protect from leaks, splashing and gravity?	
		<u>Response:</u>	
		The tank will be surrounded by a containment basin that has the capacity to hold the full content of the tank plus an additional 10% (therefore, 110% containment). The basin will be constructed such that any materials contained cannot permeate the structure.	
		Section 12.5.1.1 (Ultra-Low Sulfur Distillate Oil Tank) of the DEIS provides a description of the tank and spill control and leak detection equipment:	
		"The above ground storage tank would store a total of 965,000 gallons of ultra-low sulfur oil and would be provided with an impervious containment basin. The containment basin, capable of holding 110% of the storage volume of the tank, would be constructed using concrete with appropriate additives to ensure that it is impervious to ultra-low sulfur oil. The secondary containment would not have manholes with gaskets, which may be subject to degradation. The tank would be tightness-tested before use and inspected on a regular schedule. Automated level monitoring and leak detection equipment would also be installed. This system would include an audible alarm in the control room as well as overfill detection and prevention devices.	
		The fuel unloading area for delivery trucks would be located just west of the tank containment area. The off-loading area would be paved and curbed with an impervious material, and drained into the containment area.	
		All fuel pipelines outside of the containment basin would be of double wall construction. The double walled pipe would be equipped with cathodic protection and product sensors would be installed at key locations within the interstitial space between the inner and outer walls to detect a release. That is, if a release from the piping occurs, the leak would be contained between the first and second walls and an alarm would be triggered."	
12.0 Infrastructure	L-6-69	What are the chemicals necessary to operate the plant? An identification of the likely route and method of transportation must be identified as to these chemicals. Also, please identify the location and manner of on-site storage of these chemicals.	

	Response to Comments on Section 12.0 – Infrastructure		
DEIS Section	Comment Number	Comment/Response	
		<u>Response:</u>	
		As stated in Section 12.5.1 of the DEIS, the oil and hazardous materials required to support Facility operation would include materials (e.g., natural gas, fuel oil, aqueous ammonia) that 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 materials required to support operations would be consumed in the electrical generation process (e.g., fuel, aqueous ammonia) or recycled offsite (e.g., lube oils).	
		Table 12-7 in the DEIS lists projected bulk oil and bulk chemical storage volumes, storage locations, and provisions for secondary containment and related best management practices. Table 12-8 in the DEIS lists water treatment chemicals, identifies storage locations, and provisions for secondary containment. Storage locations for oil and chemicals are referenced to the General Arrangement Site Plan, (See Figure 2-7A and B of the DEIS). As noted in Tables 12-7 and 12-8 of the DEIS, outdoor bulk oil and bulk chemical storage tanks and major oil bearing equipment would be located within concrete containment berms capable of storing the entire tank contents plus an additional 10% (110%) of the tank contents.	
		Whenever practicable, the potential exposure of oil or hazardous materials storage and handling areas has been limited. Outdoor storage of oil and hazardous materials has been effectively limited by locating major processing equipment indoors. In addition, indoor storage areas would be installed for water treatment chemicals in the water treatment buildings. By positioning the gas turbines, gas turbine generators and steam turbine within buildings, covered storage areas have been provided for hydraulic and lubricating oils contained within the referenced equipment.	
		Chemicals, used oils and other lubricants would be located in designated storage enclosures within the gas turbine building, the maintenance warehouse and the water demineralization building. The enclosures would be constructed with a chemically resistant pad on which to place portable containers. The pad would be impervious to the materials being stored and would provide sufficient storage volume to contain at least 30% of the total volume within the enclosure with capacity to contain 110% of the contents of any individual container.	
		The portable containers within the storage enclosures would not be stacked more than two high without using a properly designed storage rack for that purpose. In addition, portable containers would not be stacked without adequate equipment. The storage of portable containers would also provide for all sides of the containers to be available for inspection.	
		All drums would be arranged on pallets to allow for easy access by forklifts. Employees responsible for the handling, storage and management of oil or chemicals would be thoroughly familiar with proper drum handling	

		Response to Comments on Section 12.0 – Infrastructure
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		methods and procedures in order to prevent spills or leaks from oil or chemical storage drums when in use outside of containment areas. All employees would receive training in the management of toxic and hazardous materials according to Occupational Safety and Health Act (OSHA) requirements and the respective manufacturer's recommendations.
		Transportation of materials to the site will be via trucks, which is typical. Figure 12-2 of the DEIS identifies the location of where the materials will be stored at the Facility. All materials with the exception of fuel oil, ammonia, and water treatment will be located within the vicinity of the main power block.
12.0 Infrastructure	L-6-75	The impacts of discharging water are not adequately studied. For example, there is no discussion of the untreated water, the temperature of the water, the erosion impacts of waters of different temperatures combining, the impacts of the temperature of the water on biodiversity or the impacts on the Wallkill River.
		Response:
		The impact assessment of the CPV Valley discharge is presented in Section 12.3.4 (Discharge to City of Middletown Sewage Treatment Plant Outfall) of the DEIS. See response to <u>Comment Number L-6-41</u> above further discussing this topic.
12.0 Infrastructure	L-7-7	With regard to Section 1.7, there are two possible options for the plant's water waste discharge. One to the Middletown Sewage Treatment Plant or into the Wallkill River. If this project is built, what will the water temperature be leaving the plant, is there a chance it will be elevated and impact local waterways, including the Wallkill River? What are the impacts of returning this water to the Middletown STP, where does the Middletown STP drain to? Or will this water be cooled prior to leaving the plant? These options need to be studied and clarified and the applicant needs to specify which option is more likely. If there are any permit issues or contract issues with the Middletown STP which would prove it difficult to discharge water from the plant to this location that needs to be discussed as well. Additionally, if there are any NY State permit requirements for the discharge into the Wallkill River due to elevated temperature levels or other turbidity/gray water issues, that needs to be addressed as well. These options need to be studied and clarified and the applicant needs to specify which option is more likely.
		Response:
		The impact assessment is presented in Section 12.3.3 (Discharge to the City of Middletown Headworks) and

		Response to Comments on Section 12.0 – Infrastructure
DEIS Section	Comment Number	Comment/Response
		12.3.4 (Discharge to City of Middletown Sewage Treatment Plant Outfall) of the DEIS.
		See Section 2.5 of this FEIS and response to <u>Comment Number L-6-41</u> on this same topic.
12.0 Infrastructure	L-7-8	There was no real discussion and/or examination of impacts to local ground water resources or potable water sources in and around the applicant's property if there is ever a contaminant leak from the diesel, ammonia or other specified contaminants planned to be stored on the property and used in the day to day or quarterly/bi-annual use of power plant operations. Additionally, what will be the impacts to the Wallkill River, its aquatic life, flora and fauna?
		<u>Response:</u>
		CPV Valley is committed to operating the Facility in a safe manner, with systems in place for spill prevention and spill control. As stated in Section 12.5.1 of the DEIS, the oil and hazardous materials required to support facility operation would include materials (e.g., natural gas, fuel oil, aqueous ammonia) that 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. See response to Comment Number L-6-69 . Section 12.5 of the DEIS (pages 12-25 through 12-32) provides an overview of the techniques that would be used to minimize the potential for pollutants in stormwater runoff from the site during Facility operation. It addresses chemical storage areas, product delivery, plant maintenance, waste handling activities, vehicle maintenance, and stormwater pollution prevention (SWPP) and monitoring requirements. The complete Draft Operational SWPP Plan is contained in Appendix 12-A.
		Secondary containment, that is, a second layer of engineering defense, is a key component of the Facility design. If a release were to occur, secondary containment features capture a release and prevent migration to soil, surface water, or groundwater.
		Regarding aqueous ammonia, the tank is designed with secondary containment in the event of a release. The containment basin will be designed to contain 110% of the tank contents in the event of a tank failure. The storage tank and containment design will include provisions for overfill detection and prevention, and provision for tightness-testing before use and inspections on a regular basis. In addition, the tank would be equipped with automated level monitoring gages, intermediate level warning indicators, as well as visual and audible high-level alarms.
		Aqueous ammonia is not flammable or reactive and is not a risk to surface water or groundwater. If released into the containment basin, evaporation occurs. Though not required by regulation or manufacturer operating procedures, the containment basin will be filled with two layers of closely packed plastic spheres. In the unlikely

	Response to Comments on Section 12.0 – Infrastructure		
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		event of an accidental release, they would float on top of the spilled liquid reducing its surface area. Reducing the surface area of the aqueous ammonia release reduces the evaporation rate, a safety precaution for responders.	
		Section 12.7 of the DEIS outlines the Spill Prevention and Control Plan that will be implemented for the Facility. As part of final design and in accordance with New York State regulations, a detailed Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) will be prepared and strictly enforced by the Facility. Elements of the plan include for example: emergency response training requirements of Facility staff; routine daily and monthly inspections of the tanks, containment structures, unloading areas, and other chemical storage areas; periodic integrity testing of the tanks; spill response procedures; and emergency response procedures.	
		Public and private water supplies in the area utilize deep bedrock wells. The Project site is located on an overburden aquifer, located between the ground surface and the bedrock aquifer. In addition, the Facility is designed with secondary containment features. Safety features designed to prevent a release from impacting the environment. In the event of a spill, the Facility must promptly respond to and report the incident to the State. For this site, the Facility will be responsible for the response, reporting, and any mitigation measures that may result. The site is not located over a USEPA designated Sole Source Aquifer; as a result, the site is not in the recharge zone (water that directly recharges to the aquifer) or the stream-flow source zone (the area that drains to the recharge zone) for the Sole Source aquifer that runs into New Jersey.	
		The Facility is designed with secondary contaminant systems and mitigation plans. No impacts to the Wallkill River, including its aquatic life flora and fauna, have been identified based on planned Facility operations.	
12.0 Infrastructur	e L-7-9	There was no real examination of existing local water resources, nearby private wells, the local aquifer, Wallkill River tributaries, Town of Wawayanda public wells, wetlands, vernal ponds and any wells being used on the applicant's property. We are concerned with preventing contamination to these significant resources and feel the applicant has not adequately addressed resource protection and mitigating possible contamination if the problem arises.	
		Response: Resources are protected from potential contamination as a result of spill prevention and control measures that will be integrated into the Facility design and operations as discussed in the response above in Comment Number L-7-8.	

	Response to Comments on Section 12.0 – Infrastructure		
DEIS Section	Comment Number	Comment/Response	
12.0 Infrastructure	L-8-10 H-18-9	According to the DEIS, CPV plans to build a 1 million gallon oil tank sited between Rt. 84 and Rt. 6 to provide back-up fuel alternative to the natural gas pipeline. What will be the visual impact of this tank and what security measures will be taken to protect town residents in case of an accident or other catastrophe? What measures will be in place if the tank leaks into Middletown's aquifer, which I understand is in close proximity? Likewise, with the 15,000 gallon tank for ammonia, what assurances can CPV offer not just to the people of our town but our neighbors in Middletown and elsewhere that they will be safe? And, if that assurance cannot be given, what can CPV offer to offset the anxiety that will further stress an already anxious population? Reflecting back on my earlier question; are these tanks and diesel back-up absolutely necessary in the first place?	
		<u>Response:</u>	
		Please refer to Figures 5-12A and 5-12B of the DEIS for an existing conditions photograph and photosimulation of the Facility from Route 6. The water tank can be seen from the photosimulation shown in Figure 5-12B. The oil tank cannot be seen from this view.	
		Figure 5-14A and 5-14B of the DEIS provide existing conditions and a photosimulation of the Facility from I-84. The oil tank cannot be seen from this view.	
		Section 9.6.4 (Assessment of Accidental Ammonia Release) of the DEIS provides the results of a modeling analysis of a worst-case hypothetical aqueous ammonia spill as represented by a complete failure of the ammonia storage tank. The analysis of this worst-case ammonia release shows that such a release would not cause any irreversible health effects or other serious health effects at any areas (including residences, schools, hospitals, other buildings, parks, and recreational areas) that would be inhabited or occupied by the public.	
		Section 12.7 (Spill Prevention and Control Plan) of the DEIS provides a summary of the spill prevention and control procedures to be implemented for the Facility. As part of final design and in accordance with New York State regulations, a Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) will be prepared for the Facility with as-built drawings. Elements of the plan are summarized in Section 12.7.2 (Spill Prevention, Control and Countermeasures Plan) of the DEIS. The plan will detail all emergency response training requirements, describe the Facility's spill prevention and control engineering systems and management practices, and provide detailed procedures in the event that there is an accidental spill or release of oil or hazardous materials at the Facility.	
		Ultra-low sulfur distillate oil is needed so the Facility can reliably support the electrical system in the event that natural gas supplies are needed to meet residential heating or other demands. The use of the fuel oil will be restricted by EPA and NYSDEC through permit conditions to no more than 720 hours per year. The ultra-low sulfur distillate oil is the cleanest fuel oil available.	

	Response to Comments on Section 12.0 – Infrastructure		
DEIS Section	Comment Number	Comment/Response	
12.0 Infrastructure	L-8-12 H-18-11	As regards the grey water from the sewage plant that will be used for power plant cooling purposes, will the water ultimately discharged into the Wallkill River elevate the temperature and/or adversely affect it or the fish and wildlife that depend upon it? If so, what will be done to mitigate the problem? What can CPV do to offset any damage or harm their power plant causes to our waterways, habitats and ecosystems? What will the Town Board or Planning Board require and how will oversight be provided?	
		Response: See response to Comment Number L-6-41.	
12.0 Infrastructure	L-11-7	There will be a release of water from the plant at such high temperatures that it will effect the ecosystem in the bodies of water into which it is emptied. **Response:*	
		This comment is incorrect. Please see response to <u>Comment Number L-8-12</u> .	
12.0 Infrastructure	H-1-2	Also at the open house, Mr. Harkness at first attempted to side step the question of the temperature of the waste water to be discharged at the Middletown Sewer Treatment Plant or at the Wallkill River. Then he conceded that they hoped to get the temperature to less than 100 degrees Fahrenheit. The water would not work at that temperature at the sewer treatment plant because it would probably kill off all of the organisms required to treat the sewage. That temperature at the Wallkill River would, under most circumstances, be a violation because the discharges cannot raise the temperature of the receiving water body by more than five degrees.	
		Response: See response to Comment Number L-8-12.	

Response to Comments on Section 13.0 – Water Resources		
DEIS Section	Comment Number	Comment/Response
13.0 Water Resources	PB4-7B	13-3. The EIS does not provide sufficient information about thermal discharges and their potential impact on stream and/or wetland biota. What is the temperature of the discharge?
		Response: See response to Section 12.0 Infrastructure Comment Number L-6-41.
13.0 Water Resources	PB4-8	13-8. Potential impacts from increased impervious cover in the watersheds/subwatersheds of the streams and the CDAs (contributing drainage areas) of the wetlands onsite are potentially significant. These pre- and post-construction percentages need to be included in the DEIS for each wetland/stream's entire (onsite and offsite) CDA or subwatershed. This is a cumulative impact issue. As this percentage approaches 10 it becomes a significant indicator of likely impaired water quality- as well as changes in wetland hydroperiod and stream flow as water is redistributed on the site by stormwater management facilities. Sheet ES-16 does not sufficiently illustrate this issue. Wetlands A and C have 50-110 feet of separation in places, and share portions of their contributing drainage areas.
		Response: The Project will not have any significant impacts on off-site watersheds/subwatersheds or the contributing drainage areas of any wetlands. The developed area of the Project site (25.5 acres), includes small portions of five different watersheds, including off-site areas to the top of each watershed. The "Vicinity Watershed Map" is included in Appendix 5B of the FEIS. This map details the pre and post development total impervious area for each watershed. The maximum predicted change will occur in the "Wetland A Watershed" which is immediately adjacent to the site, wherein the predicted change is 4.72%. In no case will implementation of the proposed action cause the total impervious area to exceed the 10% threshold. Recognizing that the stormwater from all new impervious area will be treated to prevailing standards, impacts related to this discharge are expected to be insignificant.
13.0 Water Resources	PB4-9	13-9. How can the project generated runoff 'closely replicate the pre-development condition' if it is creating a point source discharge to receiving waters? **Response:*
		The site, in its pre-developed condition, has been subjected to significant ditching and channelization efforts for agricultural purposes. Runoff from these agricultural lands has been developed into point discharges in the

DEIS Section	Comment Number	Comment/Response		
		existing condition; therefore no significar point discharge. Post development storn points currently existing and at peak rate nature of the on site wetlands provides for development drainage patterns will be mindicated on the appropriate figures in the site under post development conditions, the 1, 10, and 100 year return frequency the total developed area contributing was ODP was compared to its respective existion an increased peak rate of discharge. Peak discharge rates will be somewhat reareas due to the gradient and direction of treatment and detention basins, sized to as to accommodate sediment loads. By a low-intensity, high-frequency rainfalls, the will improve runoff quality by allowing set surface at the beginning of a rainfall ever the downgradient stream and off-site land mitigation section. Specifically, both the will be reduced as a result of the design of development stormwater discharge rates are presented in the table below. CPV Valley Energy Center Pre-development Storm Event	nwater discharge from the site es significantly less than those was significantly less than those was rinternal balancing of stormwhat aintained. The pre- and post-de SWPPP. With respect to the rathe post development off-site of y storm events (per TR-55, Typetershed basins. The post develoting peak rate discharge value. Seduced by the re-direction of ruft the proposed site development compensate for the storage volunture of its design, the basins pereby acting effectively as a "findiment and other undesirable part to settle out, prior to the stormwhater of soil erosion and volume of the stormwater management for the affected watersheds under the stormwater management of the stormwater management.	will be maintained in the off-site drainage which currently exist. The interconnected which currently exist. The interconnected which currently exist. The interconnected water flows. In this manner, predevelopment watershed areas are rate of stormwater runoff generated ondischarge point (ODP) was analyzed for be III synthesized, 24 hour rainfall) using lopment peak rate discharge value for the The proposed site plan will not result in unoff away from the pre-development as we will also store runoff volumes for the will also store runoff volumes for the collutants that are picked up from the promote that are picked in the proposed in the expression will be further addressed in the expression of sediment transported downgradient at system. Pre-development and post order the 100 year return frequency storm
		Watershed	A. Pre-Development	B. Post-Development
	1		•	<u>'</u>

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13.0 Water Resources	PB4-10	13-9. Wetlands: a definition of hydroperiod is provided on this page, but it is not discussed in terms of the wetlands present on the site. What are the impacts to hydroperiod?	
		Response:	
		The wetland hydroperiod is defined as the annual cycle of inundation, flooding, and saturation within a wetland or wetland complex. Site walkovers conducted during the months of January through October 2007-2008 and April through September 2009 indicate that inundation, flooding, and saturation in the wetlands in and adjacent to the proposed development area is exhibited primarily during periods outside the agricultural growing season. Evidence of bank overflow during two storm events over one inch during the summer of 2008 suggests that the wetlands within 50 feet of Carpenter Creek in the eastern portion of the site do exhibit several inundation events annually. Similar leaf staining and drift lines were not observed on the western half of the site. The wetland areas proposed to be filled are prior converted agricultural lands and the period of inundation, flooding, and saturation in the proposed impact areas has not been of sufficient duration to prevent their use for row crop production.	
		The wetlands in and adjacent to the proposed development area are croplands and are rarely inundated, and exhibited no ponding following the December 12, 2008 rainfall event totaling 4.3 inches of precipitation. Considering that Project generated runoff will closely replicate the pre-development condition, changes/impacts to existing wetland conditions, water levels, and hydroperiod related to the construction and operation of the site are expected to be insignificant. Site investigations indicate that the wetland hydroperiod over the downgradient wetlands, on the eastern portion of the site, are closely related to rainfall events greater than one inch in a 24 hour period. A small area of wetlands adjacent to the stream, approximately 1,000 feet downstream from the Project site proper, was briefly inundated following storm events in October and December of 2008. The period of inundation was not observed, as it occurred overnight. Evidence of inundation was evident, however, through fine sediment deposition on the wetland vegetation and drift lines along the stream banks.	
		In the far western part of the site, the narrow portion of forested swamp contained up to several inches of standing water in the spring and early summer. Standing water in this area dissipates during the season. This area is hydrologically connected to the swale system along I-84, and likely drains through highway culverts and to some degree is retained within the swale itself.	
ı		Observations made over the same time period within the eastern marsh/wet meadow and along Carpenter Creek and its tributary revealed very little sustained ponding beyond the creek and tributary itself. Based on these observations, interior portions of the eastern forested swamp, which are relatively isolated from local stream drainage, appear to retain varying amounts of standing water throughout the growing season, which dissipate	

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		during the season. Along Carpenter Creek and its tributary, marsh and wet meadow areas tend to drain out to the streams either over land or through the system of drainage ditches placed within the agricultural fields.	
13.0 Water Resources	PB4-11	13-9. The discussion of 'internal balancing' on this page is vague and unsubstantiated. Peak discharge rates that will be 'somewhat reduced by the re-direction of runoff' away from the pre-development areas: what does this mean for onsite wetlands and streams? Is water to be diverted from them? Other sections of the EIS state that there will be no impact. Which is it? And how much water would be diverted?	
		Response: Please see the Response to Comment Number PB4-9. Stormwater captured on the developed areas of the site takes a circuitous route to the discharge point. This travel includes a time delay as water makes its way through the system of catch basins, piping, and the detention basin. This factor is the design element behind the "reduced by the re-direction of runoff" statement set forth in the DEIS. Although a small area of the site will re-direct flow to the north, from Wetland Watershed B, this change will not create a significant adverse impact. This is because the Wetland B Watershed is 103.5 acres in size, and the on-site portion being re-directed is only 2.0 acres in size. This small change is further mitigated by the fact that the two wetland watersheds merge downgradient from the developed portion of the site.	
13.0 Water Resources	PB4-12	13-10. This is a SWPPP engineering discussion. Where is the ecological information regarding watersheds?	

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13.0 Water Resources	PB4-13	13-11. If the site has been previously subjected to 'heavy applications of biosolids' how will the disruption of soils during construction expose these contaminants to erosion/runoff? Will they all be concentrated in the stormwater basin and then discharged into wetlands? This is a potentially significant water quality issue, and can affect all downstream areas.		
		<u>Response:</u>		
		Manure solids spread on the site's agricultural fields will not represent a significant potential for contamination of surface waters as a result of site development. This is due to the natural function of the soil's "carbon cycle". When the topsoil is stripped from the site and stockpiled, the vegetation on the soil surface that is submerged in the pile begins to decompose. The fibrous fraction of these plants contains a high volume of carbon; this carbon reacts with the nutrients in the soil, effectively sequestering them and preventing rapid discharge. These nutrients are then bound on the soil colloid fraction and rendered insoluble. This phenomena is also the root of a centuries old agricultural practice called "green manuring"; defined as plowing down a living crop in order to sequester nutrients for the following season.		
13.0 Water Resources	PB4-14	13-11. Last sentence mentions wetland impacts from the point discharge of pollutant loadings but these impacts are not described. What are they?		
		The compaction of soils in laydown areas and in areas along the 'interconnect' ROW has not been addressed in terms of impacts on wetland hydrology.		
		<u>Response:</u>		
		Stormwater discharged from the developed site will principally be through the detention basin outlet structure, a point discharge is shown on Figures 2-7A and 2-7B of the FEIS.		
		The stormwater generated on site will be treated in accordance with the SPDES Discharge Permit to be issued by the NYSDEC. The SPDES discharge permit will satisfy all applicable provisions of the Clean Water Act and applicable water quality criteria. A copy of the SPDES Application Permit to Discharge Industrial Wastewater which was submitted to NYSDEC in September 2009 is included in Appendix 6 of the FEIS.		
		Laydown area 1 is presently compacted due to historical placement of dense fill material; therefore, no changes to wetland hydrology (e.g., changes in overland runoff to wetlands) are anticipated. In Laydown area 2, to be used for parking, vegetation, and topsoil will be temporarily removed and stockpiled. Runoff from this area will be directed to a temporary basin where water will be discharged to the ground, mimicking current conditions of		

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		the open field. No new adverse impacts to wetland or stream hydrology will occur. Use of or potential ground compaction of the remainder of the laydown areas will not result in changes in hydrology to any adjacent or nearby wetlands. The volume of stormwater discharging to the ground and/or overland will remain the same as the current condition.	
13.0 Water Resources	PB4-15	13-12. Several different scenarios for water supply are discussed in the EIS. Which will be used? Impacts cannot be fully understood until this information is clarified.	
		The temperature and volume of water to be discharged into onsite streams and ultimately the Wallkill River pose potential impacts. How will these be mitigated?	
		<u>Response:</u>	
		See response to Section 12.0 Infrastructure Comment Number L-6-41 .	
13.0 Water Resources	PB4-16	13-12. Maintenance of the "electrical interconnect" is not adequately described to allow a full determination of impacts. What machinery will be used, and will it involve compaction of wetland soils? **Response:	
		Maintenance of the electrical interconnect corridor will include periodic vegetation control by mechanical or chemical means. Given that undeveloped areas and wetlands must be crossed, Low Ground Pressure (LGP) equipment will be used if mechanical control methods are selected. Typical machines used for this work do not cause excessive soil compaction. As an example, two typical machines used in right-of-way maintenance are the Caterpillar D5K LGP crawler tractor and the John Deere 643 Feller Buncher with chain flail attachment. These machines exert 4.5 pounds per square inch (psi) and 7.9 psi of ground pressure, respectively. A human being walking exerts approximately 16 psi for comparison. Potential use of chemical means of vegetation control, i.e., herbicides, is discussed below.	

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13.0 Water Resources	PB4-17	13-12. Herbicides pose a potential significant risk to wetland plants, notwithstanding their possible 'short term persistence'. This refers back to plants of conservation concern that are found in wetlands. How will this risk be avoided or mitigated?		
		Response:		
		Only one plant species of greatest conservation need was identified within the upland and/or wetland portions of the main Facility footprint and electric transmission line right-of-way areas:		
		 Georgia Bulrush (Scirpus georgianus) – a State-Endangered Species (State Rank S1), inhabits wetland meadow and upland buffer zones within the transmission right-of-way and Facility footprint. 		
		Prior to construction, the identified plants found will be transplanted into the wetlands mitigation area. Herbicides will not be used in the wetland mitigation area. The sod of the Georgia bulrush clumps and adjacent native wetland plants will be excavated, transported on pallets to the mitigation wetland creation area, and replanted within that wetland to supplement the planting of seed and nursery stock of native wetland plant species obtained from commercial suppliers.		
		Within the electrical transmission line right-of-way, tree clearing will occur in late fall and winter. Prior to line construction, plants will be re-identified and marked in the field by a botanist using the Global Positioning System (GPS) mapping data collected during the 2009 field surveys as a guide for locating. These areas will be fenced off with temporary construction fencing and the construction access road will be routed around the area as necessary. If possible, the bulk of the electrical line construction will occur in the fall and winter, thereby avoiding disturbance of the plants during the growing season. Since the plants are herbaceous (grass-like) and perennial, no impacts to the plants are anticipated if the stalks become matted down due to ground disturbance outside of the growing season. However, if any access by construction vehicles to any portion of the area containing the plants is unavoidable, at any time of year, swamp mats or other removable (non-granular), temporary ground covering will be used to cover the area so that the roots and basal area of the plants are preserved. All of this work will be monitored by a qualified wetland scientist or botanist.		
		Once the transmission line is constructed, no impacts are anticipated to the Georgia bulrush. Regular maintenance cutting and use of herbicides within the right-of-way target tree species, and any incidental cutting of the grass-like herbaceous community will not result in damage to community by virtue of its basal growth pattern and resistance to ground traffic. In fact, maintenance of an herbaceous community by cutting of trees will be beneficial to the survival and thriving of the plant within an open, meadow community.		

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13.0 Water Resources	PB4-18	13-13. Stormwater basin maintenance. Removal of accumulated sediments will be performed "as needed". Please provide a schedule for maintenance, and note who will be responsible for this. As sediments accumulate, the basin's effectiveness is decreased. Need more information here.		
		Response:		
		Operation, inspection, maintenance, and repair of all stormwater management and erosion and sediment control measures during construction will be the responsibility of CPV Valley. To ensure the stability and effectiveness of all protective measures and practices, inspections by a knowledgeable and qualified representative (i.e., project engineer or representative) will be performed at least once per week and after every significant storm event until site stabilization is complete. Routine inspections will include a visual check of all erosion and sediment control measures, detention basin and outlet, and areas downgradient of outlets. Necessary repairs will be made immediately to maintain all erosion and sediment control practices as designed.		
		Additionally, all areas affected by construction activities and areas in the process of being revegetated will be inspected and repaired as required.		
		During site inspections, the inspector will also take note of the quantity of sediments accumulated within all sediment traps, check dams, basins, and along silt stabilization fencing. Detention basins will be dredged of accumulated sediment when their capacity has been reduced by approximately 50%. Temporary sediment traps will be cleaned at roughly the same schedule. Structural measures will be replaced and accumulated deposits removed as deemed necessary by the inspector.		
		Accumulated sediments removed from the control measures will be placed in such a manner that they will not erode from the site. Specifically, the sediments removed from the basins will either be exported from the site as general fill, stockpiled for use in revegetation, or used immediately for revegetation purposes. Should stockpiling be necessary, material will be stored in a flat topped, conical pile(s) surrounded by a silt fence or hay bale barrier. The pile(s) will be located upgradient of the basins from which the sediments are to be dredged such that any escaped fines will be returned to the basins. The piles will immediately be covered with topsoil and seeded. Should the spoils be used for more immediate revegetation purposes, the fines will be spread over the area to be reclaimed, covered with topsoil and seeded immediately. For a period of three years following the completion of site stabilization, inspection of the site will be performed monthly. This post-development inspection will ensure that soil protection is maintained throughout the site and that the stormwater management system is functioning properly. Deficiencies in the area of stormwater protection noted during these inspections will be addressed and repaired immediately.		
		Permanent sediment control measures include the catch basin sediment traps and wet pond shown on the site plans. For the life of the facility, the sediment traps will be inspected monthly and the wet pond annually. These		

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		structures will be cleaned when they reach 50% of capacity. Records of inspections and maintenance activities will be kept on site. Additionally, the capacity of the wet pond on-site exceeds the volume required by the regulations, and will serve as a back-up to regular maintenance.	
13.0 Water Resources	PB4-19	TABLE 13-4. This table needs to show post development discharge both with and without stormwater management. **Response:	
		Development of a project such as the CPV Valley Energy Center without the appropriate stormwater controls would contravene Federal and State stormwater regulations. Table 13-4 of the DEIS addresses the post-development discharge with stormwater management; because the applicable regulations will not allow development without stormwater controls, there is no need to revise the table to address conditions in the absence of such controls.	
13.0 Water Resources	PB4-20	13-13 and 14. The preparation of a SWPPP, while meeting regulatory requirements for stormwater management, does not mean that impacts to wetlands and streams will automatically be mitigated. This section needs additional work to better describe the potential impacts, including indirect impacts, and to propose mitigation outside the SWPPP as well. A SWPPP is not intended to be a substitute for mitigation of impacts to wetlands and streams. A discussion of the ecological ramifications of this project is needed to complete this section. Currently, the discussion is almost entirely an engineering discussion, and thus is incomplete.	
		Watershed protection (water quality and supply) depends on adequate buffers along wetlands and streams, and protection of adequate forested cover. How will such watershed protection be ensured?	
		Response:	
		Several sections of the DEIS address a broad array of watershed impact avoidance and mitigation measures incorporated into the Project design. It is important to recognize that the measures built into the Project design to protect surface waters and wetlands far exceed the structural measures set forth in the SWPPP. These measures include the following:	
		 Preservation of the stream corridor along Carpenter Creek. After the site development is completed, and the temporary crossing removed, impacts to the Creek will be greatly reduced into the future. 	
		2. Implementation of a landscaping plan that complements the natural vegetation on site.	

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		 Construction of a wetland mitigation area that exceeds regulatory requirements of the Nationwide Permit (NWP) Program. 		
		 Streamside tree plantings meeting the requirements of the Conservation Reserve Program (CRP), are shown in the site plans. 		
		Taken together, the surface water mitigation and avoidance measures incorporated into the Project will satisfy or exceed all applicable provisions of the Clean Water Act and will be fully protective of the quality of all surface waters in the Project area.		
13.0 Water Resources	PB4-21	13-6. Please review all references to hayfields and other agricultural lands that exhibit wetland characteristics; these areas were likely wetlands before they were drained for agriculture. Their hydrologic/soil characteristics cannot be discounted because they have been farmed.		
		Response:		
		Areas of the agricultural fields, including hayfields and cropland, that were identified by the NYSDEC and/or U.S. Army Corps of Engineers as being jurisdictional wetland by virtue of the presence of hydrophytic vegetation, hydric soils and wetland hydrology have been re-mapped within the Edinger et al (2002) Ecological Community, "Shallow Emergent Marsh" (revised Figure 14-1). In general, these agricultural fields on site have been aggressively drained and graded for agricultural purposes for over 100 years. The fine texture of some of the soils on site would likely lead to the development of wetland characteristics, absent man's intervention many years ago. However, both impact analyses under SEQRA and agency jurisdictional authority must be based upon the current site conditions, not on a hypothetical state that does not currently exist.		
13.0 Water Resources	PB4-22	13-10. How will the reduction in peak rates affect stream flow and wetland water supply and depth?		
		Response:		
		The reduction of the peak rate of discharge from the developed site will have no effect on stream flow, wetland water supply, or water depth in the wetlands. Implementation of the Project will have no affect on the volume or frequency of rainfall. Precipitation will run off and infiltrate from the developed site much like it does from the existing condition and the total volume of discharge will be maintained. Variations in flow resulting from crop management decisions will be removed from the equation in the area proposed for development, and a more stable flow regime will result. Prevailing stormwater regulations have been developed in order to minimize the disruption of this natural cycle, whether from a quantity or quality perspective.		

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13.0 Water Resources	PB4-23	13-14 The text is confusing the concepts and definitions of groundwater and water table. Please provide depth to high water table information for this entire site, not just the construction area. This includes the "laydown" areas as they are likely to be subject to soil compaction. Note that the county soil survey defines high water table, which may be perched or apparent. Please use these definitions and provide the accompanying depth to high water table information. This is in addition to the groundwater information already provided. They are not the same thing.
		Response:
		Figure 2-3 Existing Conditions of the FEIS has been revised in accordance with this comment to more clearly illustrate the difference between groundwater elevations and perched, or high water table levels in the soil profile. Specifically, the map has been revised to show United States Department of Agriculture (USDA) Soil Survey map units, and anticipated annual high water table per USDA field observations.
13.0 Water Resources	PB4-24	13-16. The first paragraph refers to a watershed of 3.7 sq. mi. Which watershed is this, and how has it been described in the previous discussion of percent impervious surface per watershed?
		Response:
		As stated in the DEIS, this figure represents the entire Carpenter Creek watershed. Sub-watersheds that cover portions of the site are shown on the attached "Vicinity Watershed Map" included in Appendix 5B of the FEIS, included in the site plans. The Vicinity Watershed Map details the percentage of impervious area in only those sub-watersheds that occur on the site.
13.0 Water Resources	PB4-25	13-17. Please correct and describe the sentence fragment "one of two alternatives" in the 3 rd paragraph of this page.
		Response:
		The following clause was inadvertently stricken from the document, "Sewage generated by employee rest rooms and kitchen facilities will be treated by"
13.0 Water Resources	PB4-26	13-17/18. These pages describe the site as having no connection between the aquifer and surface waters, and also note that the town's aquifer protection ordinance mandates that no road de-icing compounds (it is assumed this includes road salt) or pesticides will be used onsite. This implies connection between surface water and aquifer. Please clarify this discussion. Are there any areas onsite where surface waters are in fact connected to aquifers? What is the source of water for the aquifer? Doesn't the source start at the ground surface and percolate through? Again, please clarify and

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		provide additional information.	
		Response:	
		The DEIS language pertaining to surface water and aquifer connectivity relates solely to the aquifer tested and the surface waters immediately adjoining. This is a standard NYSDOH test for drinking water that is useful in any situation where high quality water is desirable. It is beyond the scope of this SEQRA review to either confirm or disprove surface to aquifer connections over the site. Given that some coarse sediments were identified in the borings and test pits on site, it can reasonably be assumed that surface waters may be in direct communication with the groundwater aquifer in certain locations.	
		The statement in the DEIS indicating that de-icing chemicals will not be used on site does not imply that there is a direct connection to groundwater, but rather, that CPV Valley has incorporated into the Project measures to avoid or mitigate potential impacts related to the use of these chemicals to the maximum extent practicable. Considering the small number of staff, and the limited traffic generation, the need for de-icing does not outweigh these other concerns.	
13.0 Water Resources	PB4-27	13-19. Mitigation measures 3, 4 and 6 require additional work as follows:	
Resources		3. As stated in previous comments in this report, meeting stormwater management regulatory requirements does not ensure mitigation of impacts to wetlands and streams. More information is needed; since the discussion of impacts to these water resources is incomplete, and discussion of mitigation is therefore also incomplete. Please describe mitigation measures that are not part of the SWPPP.	
		4. What are these water quality inlets, and how do they work? Where will they be located onsite? How will they remove stormwater runoff sediments?	
		6. This page states that no herbicides will be used on the site. Previous text in this section states that herbicides will be used to maintain corridors. Which is true? Please clarify and eliminate the statement that is not true.	
		<u>Response:</u>	
		As noted in the response to <u>Comment Number PB4-20</u> , the stormwater generated on site will be treated in accordance with a SPDES Permit to be issued by the NYSDEC. The Permit conditions must satisfy all applicable	

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		provisions of the Clean Water Act and be protective of applicable water quality criteria.	
		It is important to recognize that the measures built into the Project design to protect surface waters and wetlands far exceed the structural measures set forth in the SWPPP. These measures include the following:	
		 Preservation of the stream corridor along Carpenter Creek. After the site development is completed, and the temporary crossing removed, impacts to the Creek will be greatly reduced into the future. 	
		2. Implementation of a landscaping plan that complements the natural vegetation on site.	
		3. Construction of a wetland mitigation area that exceeds regulatory requirements of the NWP Program.	
		4. Streamside tree plantings meeting the requirements of the Conservation Reserve Program (CRP) are shown in the site plans.	
		In lieu of water quality inlets, the site plans now incorporate catch basins with increased sump capacity in order to accommodate captured sediments. The operations manual for the Facility will incorporate the inspection criteria set forth in this FEIS for Facility operations.	
		The State-wide use of EPA-approved herbicides in power line rights-of-way has been evaluated from an environmental perspective and found to be an acceptable balance of risk versus benefit. Mechanical means of vegetation control typically employ much larger equipment making multiple passes over the right-of-way. These methods bring with them an attendant increase in fuel consumption, and labor/equipment costs.	
13.0 Water Resources	L-1-10	This section of the DEIS indicates the primary source of cooling water will be gray water from the City of Middletown Wastewater Treatment Plant. Section 13.4.2 indicates that groundwater could be used if gray water is "not available or the supply is interrupted". In either case, it appears from the groundwater study the maximum capacity of the groundwater system would be approximately 360,000 gpd. As indicated above, the maximum water supply requirements for the facility will be approximately 600,000 gpd. The DEIS should address where the balance of the water supply will be obtained if the groundwater option is needed either continually or temporarily. Any water withdrawal from a surface body of water will require additional analyses that are not currently included in the DEIS.	
		Response:	
		The Project will utilize treated grey water from the Middletown Sewage Treatment Plant as its process water	

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		supply source. See Section 2.5 of this FEIS and response to <u>Comment Number L-6-41</u> on this same topic. Section 13.4.2 of the DEIS incorrectly refers to using grey water for cooling. The grey water will not be used for cooling purposes.	
		Given CPV Valley's election to utilize grey water, the on-site well alternative is presented only as a back-up alternative. Under expected average operating conditions, the Project would utilize 150,000 gpd, which is within the operating capacity of the on-site well. The maximum 600,000 gpd usage was calculated based on the backup fuel ultra low sulfur distillate oil fired case, which is limited to 720 hours of operation on an annual basis. For the on-site well scenario (which, as noted above, is no longer being pursued as an alternative), the production of the on-site well would have been supplemented with the 500,000 gallons of water stored in the water tank on-site. The well and stored supply would have provided sufficient water for a few days of oil-fired operation. It is also important to note that the Project has 965,000 gallons of oil which will sustain oil-fired operation for only approximately 12 hours per day for 3 days without refilling the oil tank.	
13.0 Water Resources	L-1-11	Further, it appears from the DEIS that if grey water from the WWTP is not an option then potentially an onsite treatment system and surface discharge may be an option. As indicated, this will require the need for an individual SPDES Permit from the Department. This level of change the proposed project may also necessitate a supplemental environmental review.	
		Response:	
		See Section 2.5 of this FEIS and response to <u>Comment Number L-6-41</u> on this same topic. No individual SPDES Permit for discharge of process water to an onsite treatment plant is being pursued.	
13.0 Water Resources	L-5-12	The site plan proposes to create a total of eight (8) acres of impervious surface. We commend the inclusion of gravel instead of pavement for much of the ground surface, acknowledging that the impervious acreage subsequently lower with the use of gravel. But these eight acres will nonetheless have negative impacts to the site's hydrology. We therefore recommend that stormwater controls for this project be redesigned to include more low impact development (LID) design techniques. Designs that encourage onsite infiltration of stormwater should be explored and incorporated. One measure to encourage infiltration could be the replacement of the proposed stormwater pond with a bioretention basin. Orange County Soil and Water Conservation District (OCSWCD) would be a great technical resource for formulating such designs,	

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		<u>Response:</u>	
		The site plans for the Project have been refined to more clearly show the areas within the development footprint that are proposed to be covered with pervious materials to promote infiltration. Specifically, both the area under the ACC and the switchyard, totaling approximately 4.47 acres will be covered with coarse crushed stone. The site plans, which are included in Appendix 5B of the FEIS have been shaded to highlight both these and the landscaped, pervious areas on the site.	
		The "Vicinity Watershed Map" included in Appendix 5B of the FEIS details the pre and post development total impervious area for each watershed. The maximum predicted change will occur in the "Wetland A Watershed" which is immediately adjacent to the site, wherein the predicted change is 4.72%. In no case will implementation of the proposed action cause the total impervious area in any of the watersheds to exceed 10% coverage. Recognizing that the stormwater from all new impervious area will be treated to prevailing standards, impacts related to this discharge are expected to be insignificant.	
		The stormwater detention pond shown on the plan is, in fact, a "micro-pool extended detention pond" that provides for extended detention and biological treatment of the stormwater it receives. The stormwater management system will comply with the requirements of NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities dated January 2010 (Permit No. GP-0-10-001).	
13.0 Water Resources	L-5-13	Table 13-4 documents that Copper, Lead and Zinc will be discharged as stormwater pollution from a point source (page 13-12). We recommend that the EIS analyze the impacts of the release of the anticipated levels of these three compounds into the environment. Namely, what their potential impacts to surface water, ground water, soil, and wildlife? Amphibians, rare species of which may prove be onsite, are especially sensitive to water pollution because they spend critical portion of their life in water and depend it for reproduction.	
		Response:	
		As noted in the preceding response, the stormwater generated on site will be treated in accordance with a SPDES Permit to be issued by the NYSDEC. The Permit conditions must satisfy all applicable provisions of the Clean Water Act and be protective of applicable water quality criteria.	
		Copper, lead, and zinc, among other pollutants, were required to be estimated under the NYSDEC Phase 1 stormwater regulations, using a standard model for developed areas. This requirement has been superseded by the Phase 2 regulations currently in effect. Recognizing that the CPV Valley site will not experience heavy	

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		vehicular traffic, and will have a low number of employees, the actual loadings will be significantly lower than the former DEC model predicts. The current stormwater regulations have been developed on a practice-based model, directed toward choosing appropriate treatment methods for a particular development scenario and environmental setting. Given the site's proximity to the wetlands, the proposed micro-pool extended detention pond will provide a superior level of capture and treatment of these pollutants. Impacts to the site's flora, fauna, and water quality are, therefore, expected to be minimal. Current stormwater regulations do not require treatment for copper, lead, or zinc because impacts associated with these pollutants are considered to be deminimis.	
13.0 Water Resources	L-5-14	We recommend that the Stormwater Pollution Prevention Plan (SWPPP) be strictly enforced so as to minimize disturbance, including potential sedimentation of wetlands and streams to the site. Carpenter Creek a tributary of the Monhagen Brook which has been documented by the Orange County Water Authority's Stream Biomonitoring Project as being both moderately impacted and slightly impacted. This impacted state heightens the need for meticulous management of stormwater at this site. **Response:*	
		CPV Valley will comply with the permit conditions of the New York State Department of Environmental Conservation's (NYSDEC's) SPDES Discharge Permit for Stormwater. The permit will require implementation of a SWPP Plan. In addition, the Project will follow all the requirements of the Wetland Permits that will be issued by NYSDEC and U.S. Army Corps of Engineers, and the site plan approval issued by the Planning Board. The Stormwater Pollution Prevention Plan and all the applicable sediment and erosion control measures will be strictly enforced throughout the construction of the Project.	
13.0 Water Resources	L-5-16	A Countywide groundwater study by the Orange County Water Authority identified the presence of a fracture trace at this site. We recommend that the DEIS confirm or deny the presence of such fracture and include analysis of impacts to groundwater that could result from the presence of this fracture trace.	
		Response: Confirming or denying the presence of a significant bedrock fracture on site is beyond the scope of this SEQRA review. Such an investigation would require the drilling and testing of many wells, wells that are unnecessary to evaluate the potential environmental impacts of the Project. The potential fracture trace is located in the southwest corner of the site, while the well tested is in the northeast corner of the site, approximately 2/3 of a mile away. Given that no groundwater extraction is proposed in the vicinity of the potential fracture trace, and	

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		that the project will not generate any bedrock geology impacts, no impacts to groundwater resources in the vicinity of the fracture trace are anticipated.	
13.0 Water Resources	L-6-48	What will the impact of the contaminated stormwater be on the wetlands and vegetation in the area?	
		Response:	
		The stormwater discharge will be permitted by the NYSDEC through a State Pollutant Discharge Elimination System (SPDES) Permit. The SPDES Permit to be issued by NYSDEC must satisfy all applicable provisions of the Clean Water Act and be protective of applicable water quality criteria.	
		All stormwater generated by the completed Project will be treated for quality enhancement in accordance with NYSDEC requirements and guidance. Agricultural related contaminants such as total suspended solids, total phosphorus, and total nitrogen will significantly decrease once the Project is constructed compared to existing conditions.	
13.0 Water Resources	L-6-71	What are the emissions and surface water releases that are in the Toxic Release inventory?	
		Response:	
		There are no toxic releases or emissions to surface water. The Facility would not be subject to EPCRA Section 313 Toxics Release Inventory reporting requirements for surface water discharges.	
13.0 Water Resources	L-12-7	When running diesel – 381,000 gallons of water will be used, who has the wastewater contract and will wells ever be a possibility? What will the impact of wells being the primary water source is to all of us using well water?	
		Response:	
		See response to <u>Comment Number L-1-10</u> .	
13.0 Water Resources	H-23-2	The water problem I see for me, I live right past Apple Lane, if anybody knows where that is on Kirbytown Road, there was a well sunk a number of years ago and we went dry. Now, I am hoping that the water problem that you are supposed to be getting the water, this company is supposed to be getting the water from Middletown. If that falls through, and I was here at that presentation that this company had, I have to comment that there was more suits than	

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		guys like me or like you guys like you guys in your construction field, and they couldn't answer that question for me. What happens? Are you guys going to drop a well for me if they don't get the water from Middletown, or if something happens and they have to drop a couple of wells, what happens to the people around us? Around that? Are you going tois there something in that binder of yours that says, hey, you are going to buy my house, drill a new well? Take care of my family? I don't know.	
		Response:	
		CPV Valley intends to obtain its process water from the City of Middletown's Sewage Treatment Plant. The ground water well option is presented solely as only an alternative option.	
		The 72 hour continuous pumping test at the Project site indicates that the test production well(s) are capable of producing continuous flows well in excess of 250 gpm for sustained periods of time. Under normal rainfall conditions of 40 to 50 inches of rain per year, recharge should be routinely available to the formation such that the normal radius of influence around the proposed well field would remain between 400 and 1,000 feet. During dry periods exceeding 4 weeks, the radius of influence may expand to as much as 1,000 feet with measurable impacts of several feet in the monitoring wells on site. If CPV Valley were to install a production well (which CPV Valley does not intend to do), the use of such well by CPV Valley would not be expected to decrease yields in any nearby wells.	
		The testing and monitoring program carried out in the Groundwater Study (Appendix 13-A of the DEIS) for the Facility demonstrates that withdrawal of up to 360,000 gpd would not have an adverse impact on adjoining well water supplies, or the aquifer in the vicinity of the Project site.	

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14.0 Ecology	PB1-2	The DEIS states that ecological studies will be conducted and in fact, we were contacted by CPV who indicated the studies were underway. These studies are important information and we recommend the Planning Board consider having them submitted as a Supplemental EIS (SEIS). This provides both the public and involved and interested agencies an opportunity to review and comment on them. If these are only provided in the FEIS, the opportunity for public review will be extremely limited. Further, we recommend you hold the public comment period on the DEIS open and once a submission has been made and circulated, select an appropriate date to close the comment period. The Planning Board has the option of holding a public hearing on the SEIS if it so chooses.	
		<u>Response:</u>	
		As stated on page 14-65 of the DEIS and as recommended by the GREENPLAN and its subconsultant during review of the preliminary drafts of the DEIS, the results of the seasonally dependent ecological field studies were to be included in the FEIS. Specifically, the DEIS states the following:	
		"Additional field studies to be conducted in the winter/spring 2009 with results provided in the Final Environmental Impact Report include:	
		 Additional site observations regarding wetland hydroperiod; Potential vernal pool characteristics and species present; Potential summer roosting habitat for Indiana bat and other bats; Stream habitat assessment based on the EPA stream biomonitoring protocols; Plant species surveys for plant species of conservation concern; Additional discussion of potential turtle habitat complexes, if present." 	
		The surveys for the vernal pools, summer roosting habitat for bats, and stream habitat assessment were conducted in April 2009, and a report summarizing the results was issued to the Patrick Hines, Planning Board consultant, on June 22, 2009. The results are included in Appendix 2A of the FEIS. The plant surveys and bog turtle and general turtle habitat surveys were conducted in late July and September of 2009 and the results are included in the updated Ecological Field Survey Report, included in Appendix 2A of the FEIS. Additional site observations regarding wetland hydroperiod were conducted during each of the other surveys. Section 3.2 of the FEIS provides a summary of the report. In order to provide an opportunity for public review of the new studies, the report was made available for Public Comment prior to the FEIS being issued.	
		The comment also misapprehends the circumstances under which an SEIS may be required under SEQRA as set forth in 6 NYCRR § 617.9 (a)(7). Under that section, an SEIS may only be required to address specific	

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		significant adverse environmental impacts not addressed or inadequately addressed in a DEIS that arise from:
		(a) changes proposed for the project; or
		(b) newly discovered information; or
		(c) a change in circumstances related to the project.
		None of the enumerated circumstances exist in this case because the new studies do not identify a reasonable potential for any no significant adverse environmental impacts that were not addressed or were inadequately addressed in the DEIS.
14.0 Ecology	PB1-55	These comments will be forthcoming once the ecological studies have been provided by the applicant.
		Response: As agreed with GREENPLAN and its sub-consultant prior to the DEIS completeness determination, the results of the seasonally dependent ecological studies are provided in this FEIS.
14.0 Ecology	PB4-1	Several overall concerns regarding the DEIS are as follows:
		The completeness review process for the DEIS was rushed in order to allow the applicant to meet certain deadlines. Subsequently some issues were put off to the current technical review process. Some information is still missing, and it is now appropriate to slow down enough to finish outstanding studies, provide additional needed information, and allow for a complete review of the project, its impacts, and mitigation for those impacts.
		Response:
		The Planning Board, as Lead Agency, conducted a thorough and timely review of the DEIS prior to determining the document to be complete. The overall process of developing the DEIS was thorough and comprehensive, and many accommodations were made for technical review periods, issuance and response to comments, and telephone and/or face to face discussions were conducted throughout the DEIS preparation and review process. The studies and assessment that went into developing the document, and specifically the ecology section of the DEIS, took over a year to complete.

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		The Lead Agency, Town of Wawayanda Planning Board, hired several independent consultants/professionals to direct the Scope and analyze the DEIS for completeness. The consultants were significantly involved in the content of the Scoping Document. In fact, the consultants required additional and very extensive studies for several topics, including visual, ecology, and socioeconomics, which were far more extensive than what are normally required by other lead agencies (e.g., NYSDEC, LIPA) on similar projects.	
		In addition, the consultants exercised extensive oversight over CPV Valley and its environmental consultants and engineers throughout the development of the DEIS before it was issued to the public. There were multiple iterations of the DEIS incorporating the consultants' comments.	
		For example, the preliminary DEIS was submitted to the Planning Board on November 18, 2008. The Planning Board's consultants reviewed and provided numerous comments on nearly all topics of the DEIS. CPV Valley then provided detailed responses to each comment, and also met with the consultants to review and obtain concurrence on how each comment would be addressed in the DEIS. Throughout this time, there were several working sessions and conference calls among the Planning Board's consultants and CPV Valley. CPV Valley further revised the DEIS to reflect the comments and agreed upon responses. A second draft was issued on January 27, 2009. The consultants and Planning Board members provided additional comments on that version. CPV Valley then issued each section of the DEIS to the consultants for final review, before filing the final DEIS on February 19, 2009.	
		Specific to Section 14.0, Ecology, of the DEIS, it should be noted that many of the Planning Board's then ecological consultant's requirements and review comments were open ended and not clearly defined, and many also imposed an unusually high level of research and analysis not usually required under SEQRA. A significant level of effort was required by CPV Valley to address the comments on the ecology section. CPV Valley was required by the Board's then consultants to refine the DEIS and underlying studies through several iterations – each time CPV Valley provided additional information to respond to the comments, yet more information was requested. As incorporated into the accepted DEIS, Section 13.0, Water Resources and Section 14.0, Ecology, fully complied with the Scoping Document and presented a level of detail, and quantum of information, beyond that of most DEIS's prepared under SEQRA.	
		See response to Comment Number PB1-2 .	
14.0 Ecology	PB4-2	Some information is missing from the EIS. This information is needed in order to provide a professional review of the project's significant impacts and evaluate effective mitigation for those impacts. The order is a)information; b)impacts; c)mitigation—not the reverse, with mitigation described before all the information on impacts has been evaluated, as is the case in the DEIS sections on natural resources.	

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		Response: As determined by the Lead Agency, the DEIS fully complied with the approved Scoping Document. As stated on page 14-65 of the DEIS and as recommended by the GREENPLAN and its subconsultant during review of the preliminary drafts of the DEIS, the results of certain seasonally dependent ecological field studies were to be included in the FEIS. See response to Comment Numbers PB1-2 and PB4-1.	
14.0 Ecology	PB4-3	Some of the information presented in the DEIS is inadequate (in terms of scope and/or detail) to allow for a professional evaluation of impacts and mitigation. **Response:* Section 14.0, Ecology, of the DEIS complied with the Scoping Document requirements, and presented a level of detail, and quantum of information, beyond that of most DEIS's prepared under SEQRA. Please see the response to **Comment Number PB4-1**. Based on the recommendations of the Lead Agency's consultants, the DEIS was found to be adequate for public review. The technical review alluded to in the comment above is most appropriately performed in the context of the FEIS; a course which is being followed by the Lead Agency for this SEQRA review.	

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14.0 Ecology	PB4-4	The project and its impacts have been presented in segments, rather than as a whole. To allow for a reasonable review, the total area of disturbance (for all project segments, onsite and offsite) and the total impacts (construction site, operations, laydown areas, electrical interconnect and other onsite and offsite utility lines) need to be presented in the EIS. For a specific example, see comments pertaining to Section 14.4 below.	
		Response:	
		The DEIS set forth the cumulative impacts of the Project for all disciplines, including off-site impacts, in accordance with the Scoping Document. Specifically, the structure of Section 14.0, Ecology, of the DEIS was revised to accommodate previous formatting requests made by the Planning Board's former ecological consultants, GREENPLAN. The general outline, dividing the discussion between major project components (e.g., Energy Facility, Electrical Interconnect, Laydown Areas, etc.), is consistent with typical practices under SEQRA. The format fully complied with the Scoping Document and SEQRA, and allowed for full and adequate review by the public. This section was reviewed multiple times by GREENPLAN and accepted as complete.	
14.0 Ecology	PB4-5	Total area of disturbance (including electrical interconnect and offsite utilities) inconsistently depicted/missing from maps	
		Response:	
		The electrical interconnect right-of-way on the Project site is shown on the on the revised Figures 2-7A and 2-7B included in the FEIS.	
		Wetland Impacts are expected to be minimal, based on trench restoration requirements set forth by DOT and the U.S. Army Corps of Engineers wetlands permit program. Mapping of the offsite utilities and wetland resources has been completed and is included in Appendix 5B of the FEIS.	
14.0 Ecology 13.0 Water Resources	PB4-6	All of my comments pertaining to water resources, wetlands, ecology, plants and wildlife fall into two major categories that provide the context for evaluating impacts and mitigation: watersheds and biodiversity. The DEC and other federal and state agencies and organizations-as well as local governments- have become increasingly concerned with these two subjects; new research documents the pertinent issues.	
		Response:	
		Responses to specific comments have been addressed herein.	

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14.0 Ecology	PB4-28	The following information, to be provided by the applicant, is missing from the DEIS:
		Wet meadow areas to be described and mapped in conjunction with plant surveys Vernal pool study Plant survey during 2009 growing season (for species of conservation concern) Instream habitat survey data/biomonitoring (four locations) Phase 1 bog turtle survey Evaluation of perimeter fence design/location to allow passage of small animals Specific invasive species potential in areas of both temporary and permanent disturbance/revegetation A survey of potential bat roosting areas Impacts of converting one wetland type to another Description of turtle habitat complexes (also valid for snakes and amphibians) **Response** As stated in the DEIS on page 14-64 and 14-65 and as recommended by and agreed to by the Planning Board's former consultant, GREENPLAN, the following additional field studies were conducted in the Spring and Summer 2009 with the results provided as a stand-alone Ecological Field Survey Report in Appendix 2A of the FEIS: **Additional field studies to be conducted in the winter/spring 2009 with results provided in the Final Environmental Impact Report include: • Additional site observations regarding wetland hydroperiod; • Potential vernal pool characteristics and species present: • Potential summer roosting habitat for Indiana bat and other bats; • Stream habitat assessment based on the EPA stream biomonitoring protocols; • Plant species surveys for plant species of conservation concern; • Additional discussion of potential turtle habitat complexes, if present.*

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		conducted in April 2009, and a report summarizing the results was issued to the Patrick Hines, Planning Board consultant, on June 22, 2009. The plant species surveys were conducted in July and September of 2009. The Spring and Summer 2009 Ecology Field Survey Report was submitted to the Planning Board on November 4, 2009.	
		Appendix 2A contains the results of the surveys.	
14.0 Ecology	PB4-29	Plant survey during 2009 growing season (for species of conservation concern)	
		Response:	
		The rare plant survey was conducted in July and September 2009. These time periods were selected to capture the fruiting and flowering period of the target rare plants to facilitate identification. The results are provided in Appendix 2A, and summarized here.	
		Only one of the target species was identified within the upland and/or wetland portions of the main Facility footprint and electric transmission line right-of-way areas: Georgia Bulrush (Scirpus georgianus), a State-Endangered Species (State Rank S1), inhabits wetland meadow and upland buffer zones within the transmission right-of-way and Facility footprint. These plants are unlikely to be adversely affected during transmission line construction or the long-term maintenance of the new right-of-way as a treeless wetland and upland meadow habitat. Since timber mats will be used in these wetlands during construction and the existing hydrology, soil features, and plant communities of these wet meadows will be preserved during/after transmission line construction, the Project poses no significant risk of adverse impact to SGCN plants within the electric transmission line right-of-way.	
		Numerous scattered clumps of Georgia bulrush inhabit the Jurisdictional Wetland meadows and/or adjacent upland meadow buffer zones within areas to be cleared, filled, and re-graded for construction of the Facility. Prior to construction, these plants will be replanted within the proposed onsite mitigation wetland area. The sod of the Georgia bulrush clumps and adjacent native wetland plants will be excavated, transported on pallets to the mitigation wetland creation area, and replanted within that wetland to supplement the planting of seed and nursery stock of native wetland plant species obtained from commercial suppliers. This will benefit the wetland mitigation effort by preserving genetic material such as the seed bank, culms and rhizomes of plant populations already acclimated to the site, while reducing the cost of purchasing wetland seed and plants from commercial sources to populate the mitigation wetland.	

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14.0 Ecology	PB4-30	Instream habitat survey data/biomonitoring (four locations)	
		Response: As a result of an on-site determination regarding the minimal diversity of stream habitat and the cumulative	
		stream length required for the analysis, the survey included two locations, not four. The protocol was reviewed and approved by Greenplan. The stream monitoring was conducted in the Spring 2009. Results are provided in Appendix 2A of the FEIS and summarized here.	
		In general, the Rapid Bioassessment Protocol (RBP) sampling results indicate that the stream supports an abundance and diversity of macroinvertebrates that generally range from pollution-tolerant to somewhat sensitive. However, Ephemeroptera and Trichoptera, considered pollution sensitive taxa, were identified in greater numbers at the upstream sampling site. In addition, Ephemeroptera was not observed downstream at RBP-1. The low abundance/absence of these taxa is generally indicative of poor stream quality or a lack of stable habitat. Overall, tolerant species (e.g., Oligochaeta, Chironomidae) were observed at both locations which, as described above, may suggest impairment due to habitat and/or water quality degradation due to upstream historic and current land uses such as agriculture, roadway runoff, etc.	
		With respect to impacts to aquatic habitat, direct impacts to the stream will be avoided to the maximum extent practicable. A temporary crossing (overhead bridge span) of Carpenter Creek is proposed to access a construction laydown area. This span will avoid any direct discharge of fill materials to the stream or destabilization of the banks, and will be removed at the end of Project construction. Where Carpenter Creek is proposed to be crossed for the construction of the underground portion of the electrical line, this impact will be temporary and limited to the far eastern end of the creek along Route 17M where a natural gas pipeline has recently crossed the stream. Construction of the electrical line through the central and eastern part of the site will avoid direct crossing of the streams with equipment, and installation of utility structures within wetlands will include use of swamp mats for vehicle access and installation of erosion and sedimentation controls within work areas. Accordingly, direct impacts to Carpenter Creek are expected to be negligible.	
14.0 Ecology	PB4-31	Phase 1 bog turtle survey	
		Response:	
		A bog turtle survey was conducted for the DEIS. An extensive assessment of the habitats on the site determined that it is highly unlikely that bog turtles inhabit the site due to a lack of emergent wetlands dominated by tussock sedge (see Section 14.2.5.3 and Appendix 14-E Phase I Bog Turtle Assessment Form).	

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		The results of the follow up assessment conducted for the FEIS are provided in Appendix 2A.	
14.0 Ecology	PB4-32	Evaluation of perimeter fence design/location to allow passage of small animals Specific invasive species potential in areas of both temporary and permanent disturbance/revegetation	
		Response:	
		CPV Valley has reviewed the suggestion of creating small holes in the fence bottom on regular intervals to allow passage of turtles and small mammals from an engineering and site management perspective. Such an approach was found to be incompatible with both safe operation of the generating Facility and protection of animals occupying the site. Given the relatively large portion of the site to remain outside of perimeter fencing, the movement of animals within all key habitats including the streams will not be impacted when the Project is constructed. The fencing will not cross Carpenter Creek and will cross only narrow portions of the wetlands that are currently hayfields. Allowing passage of animals into the main Facility will potentially result in harm to both the animals and equipment. Therefore, it is not practicable to modify the perimeter fencing to allow passage of animals.	
		Perimeter fencing will be erected around the main energy Facility as shown on Sheets 4 through 8, 14, and 15 of the revised Site Plans (see Appendix 5B of the FEIS). A detail of the fencing is shown on Sheet 20 of the Site Plans.	
		The site contains numerous invasive species in both wetland and upland communities, and is adjacent to highways and other lands that promote spread of invasive species. CPV Valley will endeavor to control spread of invasive species on-site by revegetating disturbed land as soon as possible following final grading and topsoil placement with native plant species. It is anticipated that all topsoil used for landscaped or restored areas will be from on-site stockpiles. For control of invasive species within the generating facility site and ecologically sensitive areas such as the wetland mitigation area and wetland/riparian buffers, CPV Valley will employ a multitiered invasive species control methodology that includes mechanical, chemical, and biological components as developed and approved by the EPA and NYSDEC.	
		With regard the on-going operational impacts associated with the transmission corridor, routine maintenance will likely include vegetation control by a combination of mechanical cutting and use of herbicides. Depending on the vegetative conditions of the particular right-of-way, mechanical cutting and use of herbicides each have benefits, including overall effectiveness and ecological sensitivity, when used in combination over a several year cycle that off-sets the potential drawbacks of either method used alone. Mechanical controls physically cut woody vegetation without chemical interaction, but can cause some disturbance to the ground where animals may be traversing, nesting, or otherwise occupying. Mechanical cutting can also encourage vigorous regrowth of tall	

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		tree species that most need to be controlled due to physiological responses to cutting. Herbicides cause much less physical disturbance to the ground and non-woody plant community and target specific plant species, but use around water and wetlands must be carefully controlled using EPA-approved materials and methods. For maintenance of the transmission corridor around the vernal pool area, employment only of vegetation control methods suitable for wetlands communities and accepted by the EPA and the NYSDEC through an approved vegetative management plan will be used. Part of the management plan would likely include performance of vegetative maintenance during the winter. Further, CPV Valley will include the placement of permanent placards/markers on either side of the vernal pool, indicating to maintenance crews than an ecologically sensitive area is located within the right-of-way and to avoid traversing or disturbing the area outside of the approved maintenance plan or between the early spring and summer. Such a placard is typical and effective in alerting mowing crews along highway rights-of-ways to avoid sensitive areas.	
14.0 Ecology	PB4-33	A survey of potential bat roosting areas	
		<u>Response:</u>	
		This survey was conducted in the Spring of 2009, and the results are provided in Appendix 2A and summarized as follows.	
		The survey of potential Indiana bat roosting trees within the main forested area found a total of 18 trees of the requisite size and "structural" characteristics containing loose, peeling bark. Trees identified included several different species. Based on the forest acreage and the requisite tree count, the area contains at least one potential roosting tree per 2.5 acres. The construction of the electrical interconnect line will result in the loss of two trees identified as potential summer roosting habitat. The remainder of the potential roosting trees both to the north and south of the proposed line will not be impacted. Furthermore, the loss of these trees still maintains a density of at least one roost tree per 2.5 acres.	
		Therefore, clearing of the Project's electrical interconnect route and the two potential roosting trees does not result in an impact to the potential summer roosting habitat for Indiana bat available on the site. In addition, in order to further eliminate any potential impacts to existing or future roosting habitat, clearing the right-of-way corridor will occur between November 15 to March 31 as recommended by the U.S. Fish and Wildlife Service's Draft Indiana Bat Revised Recovery Plan.	

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14.0 Ecology	PB4-34	Impacts of converting one wetland type to another	
		Response: As stated in Section 14.4.2 of the DEIS, 0.92 acres of Red maple-hardwood swamp (wetland) would be	
		converted to maintained Shrub swamp wetland and/or Shallow emergent marsh communities within a 130 foot wide permanent right-of-way for the above ground option. For the underground option, the amount of converted wetlands would be 0.46 acres, due to the reduced right-of-way width. Since the proposed right-of-way traverses a transitional area between forested upland and wetland, the effects of this conversion to forested wetland are minimal. The edge of this small forest patch is currently along the I-84 right-of-way located immediately to the south, and agricultural fields and open meadow located to the west and east, respectively. Therefore, with a 75 foot wide construction corridor and ultimately only a permanent 20 foot wide corridor, no significant shift in species using these "edge" communities will occur. The proposed right-of-way itself will have more direct sunlight and therefore experience greater daily temperature changes on sunny days. The forested upland and wetland will remain adjacent to both sides of the right-of-way to provide shade as deciduous forest cover. With the maintenance of the right-of-way and additional direct sunlight, the relatively open forest understory will change to a non-forested community consisting of shrubs, as well as grasses and other herbaceous species like the adjacent community to the east. The narrow wetland communities will likely become more densely vegetated with herbaceous and shrub species. No changes to the wetland hydroperiod within the right-of-way relative to the adjacent wetlands are anticipated since the wetlands are narrow extensions of larger wetlands outside of the proposed right-of-way, which will continue to drive the seasonal hydrology. With only a 20 foot wide maintained corridor, it is possible that the adjacent upland and wetland forested community will eventually be reestablished around the corridor to create a nearly contiguous canopy.	
		Mitigation proposed under state and federal wetland permitting requirements for conversion of forested wetland to non-forested includes planting of trees within a 35 foot riparian "buffer" corridor along Carpenter Creek, and cessation of agricultural activities within the riparian corridor. This will enhance the existing riparian buffer and promote natural revegetation of the riparian community.	
14.0 Ecology	PB4-35	Description of turtle habitat complexes (also valid for snakes and amphibians)	
		Response:	
		The site currently provides a variety of habitats that are utilized by common aquatic turtles, such as perennial streams, shallow emergent marsh, shrub swamp, forested wetland, forested upland and non-forested uplands including sloped fields (highway shoulders, crop fields and hayfields). Aquatic turtles will remain mostly within streams and adjacent banks during both active periods (spring, summer, and fall) for feeding, mating and	

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		basking, and will aestivate in the mud of the stream bed or under overhanging banks during winter. Occasionally turtles will enter other habitats away from the stream and banks to nest or mate. Nesting typically occurs within sloped uplands adjacent to or near the stream, as was noted for the site along the slope to Route 17M.	
		Because the Project construction will occur mostly within existing agricultural fields which are not a preferred turtle habitat, potential impacts to turtles and their habitats will be minimal. Additionally, large riparian and wetland buffer habitats within key turtle habitats will be retained, remain mostly undisturbed, and will be enhanced with buffer plantings.	
		Amphibian habitat includes primarily on-site vernal pools and surrounding uplands, which are described in the Ecological Field Survey report (Appendix 2A). Snakes utilize multiple habitats such as all areas present on the site for feeding, basking and nesting. Impacts of construction on primarily the agricultural portions of the site will not result in a significant loss of habitat for snakes, as the majority of site habitats will remain intact.	
14.0 Ecology	PB4-36	Table 14-2 Plant species that are listed under 'old field' and are FAC, FACW or OBL would indicate potential for wet meadow. This should be noted, and changes made in the text.	
		Response:	
		The US Fish and Wildlife Service (US FWS) Indicator Status listing of individual plants within a community does not necessarily determine the overall status or identity of the community in which they grow. The indicator status indicates the percentage of probability that a plant will occur in wetlands or uplands, with a range or continuum ranging from 100% upland to 100% wetland. The DEIS identified the proper ecological communities of the site, therefore, no change is needed.	
14.0 Ecology	PB4-37	14-11. The description of hayfields that contain hydric soils and wetland plants (first paragraph) would indicate that these are actually wetlands that have been farmed. They should be described as such. The USACOE wetland manual (1987) section on disturbed wetlands should be the reference for this description.	
		Response:	
		The designation of active cropland on-site that has been drained and converted from wetlands (as determined by the U.S. Army Corps of Engineers) was noted in Section 14.2.1 Ecological Communities of the DEIS and Section 14.2.2 Wetlands. The Ecological Communities map, Figure 14-1, has been modified to indicate the presence of mapped wetlands within the applicable hayfields and drainage ditches. This revised figure is included in the Figures section of the FEIS.	

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14.0 Ecology	PB4-38	14-12. First paragraph. How does the absence of a Flood Insurance Rate Map 100 year floodplain for onsite streams lead to the conclusion that the onsite wetlands do not function in a 'measurable flood storage capacity'? The capacity of the site's wetlands to function in flood attenuation/ storage needs to be fully described in the FEIS. 1. p. 14-12, 14-47. Flood attenuation function of wetlands incorrectly minimized, negating the need for protecting this function. There are very large difference in flow of water entering property and flow leaving the property (Carpenter Creek). More information is needed.	
		Response: The use of a Flood Insurance Rate Map (FIRM) to indicate the presence of floodplain and thus on-site flood storage capacity is a standard analytical approach and is based on local and regional studies within the specific watershed. Factors involved in identifying floodplains include direct observations during major, measurable storm events, knowledge of the watershed and its land uses, observations of local water level gauges, interpolation of indirect evidence of storm events such as water stain lines, wrack lines and eroded channels, and measurements of flow constrictions such as bridges and culverts. Therefore, the absence of a measured floodplain elevation on the FIRM within a marked stream, where other, nearby flood areas have been documented, indicates that the floodplain may not be a significant feature to the stream in question. It is noted that storm water is stored throughout the site within variably flooded forested/shrub swamp and the wet meadow/shallow emergent marsh communities. In addition, the very large, high capacity box culvert beneath Route 17M at the stream's outlet point from the site appears to minimize or prevent any constriction of flow at the outlet. Carpenter Creek and the unnamed tributary have also been extensively channelized in the past, with evidence of spoil piles along their banks. As evidenced by the many field ditches and swales throughout the site that connect to Carpenter Creek, drainage and minimization of flooding has been sought in order to effectively hay and plant row crops. This also indicates a significant amount of soil saturation that is being drained from the wetter areas (including some mapped as jurisdictional wetlands) being used as agricultural fields. Therefore, it is recognized that the extensive wetlands on the site do provide storage and slow release of precipitation entering the site, which can help to desynchronize flood events occurring regionally. However, the lack of observed flood storage associated with Carpenter Creek and its tributary,	

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14.0 Ecology	PB4-39	14-13. The stream and wetland buffer information provided in the FEIS is confusing and is not sufficient for describing the condition of the buffers in terms of stream and wetland protection. Nor does the map ES-17 provide this information. What is needed is a clear description of the type and condition of vegetation found within 100 feet of all wetlands and streams on the property, pre- and post-construction. This cannot be ascertained from the information currently provided, yet it is essential information for evaluating buffers in terms of water resource and habitat protection and mitigation of impacts. A buffer map should be provided, which depicts the condition of all vegetation/habitat within 100 feet of all wetlands and streams onsite, pre- and post- construction, regardless of jurisdictional status. This is not a regulatory issue; it is a watershed/ ecology issue.	
		Response:	
		Existing riparian/wetland buffers, and proposed impacts thereto, were described in Sections 14.2.2, 14.2.3, and 14.4.1 of the DEIS. Additional detail is provided in the 2009 Ecological Field Survey Report. In summary, the riparian buffer along Carpenter Creek, consisting of hayfields, thinly to densely forested areas, and emergent and shrub wetlands, will mostly remain undisturbed and in its current condition during and after Project construction. Two temporary crossings of the stream and its riparian buffer will occur within primarily an agricultural and non-forested area, and within a second non-forested, previously disturbed area at the far eastern end near Route 17M. In addition, as part of the mitigation required under state and federal permitting associated with conversion of forested wetland to non-forested along the electrical interconnect right-of-way, trees will be planted within the least vegetated portions of the riparian buffer. The 100 foot Adjacent Area wetland buffer to state regulated wetlands will remain in its current condition throughout most of the site, and will be restored in areas to be used as temporary construction laydown (e.g., areas currently in agricultural use). The two minor, temporary stream crossings are proposed across Carpenter Creek and its riparian buffer; one a bridge span for vehicle access and the second an underground electrical line crossing. Upon completion of project construction, all temporarily disturbed areas will be restored.	
		The Ecological Communities Map (Figure 14-1) has been modified to more clearly show the stream and riparian ecological communities present.	
14.0 Ecology	PB4-40	14-13. Carpenter Creek riparian areas and contributing swales are not described or mapped as a habitat feature.	
		Response: Habitats associated with Carpenter Creek and its main tributary were described extensively throughout the DEIS (e.g., see Aquatic Ecology subsection of Section 14.2.2, and Section 14.2.3 Wildlife). Minor, man-made swales located in the western part of the site that are intended to drain wet hayfields and cropland are shown on site	

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		mapping, Sheets 2, 3, and 4 of 26 (revision set dated 8/7/09) of the Site Plans (Appendix 5B of FEIS) and Figure 14-1. These swales are also described in the DEIS, but due to their intermittent flow and relatively small dimensions are not considered to represent a significant type of habitat unto themselves. They may provide a secondary water source to Carpenter Creek for mammals and birds, as well as habitat for invertebrate species tolerant of periods of drying and non-flow. These swales may also provide a travel corridor for small species utilizing the flowing or standing water to reach downstream or upstream areas, and provide for suspended flow of detritus, sediments and associated nutrients as food sources into downstream waters and wetlands.	
14.0 Ecology	PB4-41	Use of streams/drainages as corridors/habitat connectors by particular species needs to be included.	
		Response:	
		This comment seeks information that was not required in the final Scoping Document, and which is not necessary for a complete evaluation of the reasonably anticipated environmental impacts of the Project because it seeks to extend the impact review to areas that will not be utilized by the Project and which cannot reasonably be anticipated to be affected by the Project.	
14.0 Ecology	PB4-42	14-15. Please locate the vegetated swales that drain into the streams onsite on the site habitat map.	
		<u>Response:</u>	
		The swales are identified on the revised Figure 14-1 included in the FEIS.	
14.0 Ecology	PB4-43	14-15 Point of clarification: The exclusive reliance on the NYS Herp Atlas and Breeding Bird Atlas as sole sources for determining what species may be present is insufficient, as these resource are not complete, nor are they specific to the Project site. Please document other resources used to determine which species may be present (e.g., the Biodiversity Manual contains some of this information as well, as does MCA's Southern Wallkill Biodiversity Plan).	
		Response:	
		The DEIS did not rely exclusively on the referenced atlases. The Wildlife section clearly stated that the wildlife species and habitat information that it presented was based on site observations by biologists and supplemented with publicly available resources (which are referenced in the text). The section stated the number and dates of site visits. The section fully met all requirements of the Scoping Document, and of SEQRA.	

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14.0 Ecology	PB4-44	14-17 to 23. Minor changes to tables: Amphibians. Please remove the tiger salamander from the table; these are not found in Orange County. Reptiles - Please remove the Blanding's turtle from this listing. It is not found in Orange County (not found west of the Hudson River). Birds: this list is not complete (see above comment for 14-15). Please add additional nocturnal species or raptors as appropriate.	
		Response:	
		Changes to tables, as applicable, have been made and are provided in Appendix 2C of the FEIS.	
14.0 Ecology	PB4-45	14-19. Turtle nesting area: not afforded protection from project disturbance; no description of impacts from interconnect ROW	
		Response: Since only a one-time crossing is proposed to occur in this area during the non-nesting season, impacts to turtle nesting habitat are expected to be negligible. The crossing area itself consisting of a trench with a linear construction corridor represents a small portion of the available habitat for nesting around the perimeter of the wetland and stream, and therefore minimal disturbance of the potential nesting area and activity, at the appropriate time of year, will occur. Once the crossing is completed, the grades around the trench will be restored and the area will be stabilized. Since most aquatic turtle species that have been observed or would likely nest in this area prefer bare ground and loose, open soils to dig for nests, ground disturbance associated with the electrical interconnect installation will not result in a loss of nesting habitat or opportunity.	
14.0 Ecology	PB4-46	14-20. The site's stream corridors play a crucial role as wildlife corridors to and from offsite areas. As such these corridors should be afforded sufficient protection. Buffers of at least 100 feet containing undisturbed vegetation are preferable as a minimum for wildlife habitat. This may need to be larger in places, depending on species present and specific site conditions. Where a buffer does not currently exist, or where it will be disturbed by the project, mitigation should be provided in the form of improved buffer protection or vegetation.	
		Response:	
		Due to the presence of roadways surrounding the site and culverts at the upstream and downstream ends of the on-site streams, the stream corridors generally do not play a "crucial role" as wildlife corridors between the site and adjacent habitats. Within the site, the streams do provide aquatic habitat and wildlife passage, which will not be significantly impaired during or following Project construction. Further, the retention of buffer areas	

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		around the stream corridors was addressed extensively in the DEIS. A buffer zone of 120 feet (36 meters) to 500 feet (152 meters) in width is maintained along the entirety of Carpenter Creek.	
14.0 Ecology	PB4-47	14-40. Site biodiversity is still an incomplete discussion. The EIS misrepresents the material from the Biodiversity Manual, taking it out of context and substituting a discussion of some of the attributes related to a habitat's role in the larger ecosystem for a discussion of biodiversity at the Project site. This list is used to make the case that the biodiversity onsite is low. This conclusion is not supported by the extensive lists of species of "greatest conservation need" that may be using the site, and which is also included in the EIS. These species lists are part of the biodiversity discussion. **Response:** While by definition, the entire Ecology section of the DEIS described the site's potential for biodiversity in terms of ecological communities, wetlands and watercourses, hydrology, wildlife species and habitat, riparian corridors, land uses and all their interactions, the specific discussion of "site biodiversity" was not a requirement of the Scoping Document. The discussion of site biodiversity was provided to accommodate a request made by GREENPLAN subsequent to approval of the final Scoping Document. In accordance with GREENPLAN's request, which specified the required resource document, this discussion attempted to encapsulate for the site the main components of ecological significance outlined in the regional planning guide, the Biodiversity Assessment Manual for the Hudson River Estuary Corridor (Kiviat and Stevens, 2001). Factors in determining the ecological significance of a site or region include: rarity, extent, small size and isolation, juxtaposition with other habitats, vulnerability, and exemplary nature. Having reviewed these factors for the site, the DEIS adequately addressed the topic of biodiversity. The subsequent Ecological Field Survey Report provides additional information on site impacts in terms of potential effects on site biodiversity by resource type. The list of potential species of greatest conservation need (SGCN) was placed into the document at the request of GREEN	

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14.0 Ecology	PB4-48	14-4: Project related impacts and mitigation measures	
		14-44. The discussion of Construction impacts includes mitigation and makes the case for minimizing impacts even before all the impacts have been described.	
		Response:	
		The discussion of Construction impacts in the DEIS fully satisfied all requirements of the Scoping Document and of SEQRA. That discussion has now been enhanced by the results of the Spring and Summer 2009 ecological field surveys. All potential ecological impacts that can be reasonably anticipated to arise as a result of Project construction and operation have been fully evaluated, and found to be adequately mitigated.	
14.0 Ecology	PB4-49	14-44 through 14-64. This discussion of impacts is so fragmented that it is difficult for the reviewer to piece it all together. The project is discussed in four separate parts (Energy Center, Electrical Interconnect, Laydown Areas, and Water/Wastewater Lines). Within each of these sections, ecological communities, wetlands, and wildlife/habitat are evaluated separately under each of three additional categories (construction, operation and mitigation). This piecemeal discussion is incomplete, redundant and confusing. The section needs to be completely reorganized so that all of the impacts on specific ecological resources are consolidated and can be evaluated in the same place.	
		Nevertheless, several comments on this section are provided:	
		Response:	
		Each section of the DEIS is organized in a manner that addresses the Project site proper, and then the off site work (electric transmission line, water interconnection). This is to ensure that each Project component is adequately addressed. This is the common, preferred, and typically stipulated format of an EIS for an energy projects. The Planning Board's consultants reviewed several versions of the DEIS, including Section 14.0 Ecology, and deemed the DEIS complete. Throughout the review period, there was never a comment stating that the format was "fragmented."	

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14.0 Ecology	PB4-50	14-45 . Revegetation of laydown areas is not discussed in terms of habitat for any species of conservation concern.	
		Perimeter fence, installation of anchored support poles: no information regarding impacts/mitigation for wildlife corridor/movement	
		Response:	
		Proposed Laydown Area 1 is a filled and compacted area containing numerous invasive plant species, does not contain requisite host communities or community conditions for target SGCN plants identified for the Project, and therefore is highly unlikely to contain SGCN plants. Laydown Areas 2 and 3 are maintained hayfields and are similarly unlikely to support SGCN plants due to the lack of a requisite community conditions as well as a dense sod layer that prevents seed germination and the regular mowing. Laydown Areas 4, 5, and 6 are located primarily within the prior crop land of the main energy Facility site and were surveyed for SGCN plants during the 2009 surveys. No target SGCN species were found in these areas. Therefore, revegetation of the laydown areas will not affect any plant SGCN.	
		See response to Comment Number PB4-32 for a discussion of the perimeter fencing.	
14.0 Ecology	PB4-51	14-45. General discussion of invasive species (pre- and post-construction) in areas of both temporary and permanent disturbance is not provided.	
		Response:	
		This discussion is provided on pages 14-6 and 14-7 of the DEIS. The excerpted text is below:	
		Invasive Species	
		Invasive species in both wetland and upland communities were observed on the site. Within the emergent marsh wetland communities, stands of common reed and purple loosestrife were noted. Common reed is located within the Cropland/row crops and Mowed roadside/Path communities situated in disturbed areas that are adjacent to the I-84 highway. Purple loosestrife was observed in the Shallow emergent marsh on the eastern end of the site, closest to Route 17M and the I-84 westbound on-ramp. Upland forested and successional areas were observed to contain Norway maple and tartarian honeysuckle, and both successional upland and forested/shrub swamp wetland communities were observed to contain common buckthorn, multiflora rose and poison ivy.	

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		The proposed Project will avoid the introduction and further spread of invasive species to the maximum extent practicable. A small area containing common reed within the croplands will be filled as part of the construction process. In order to mitigate for wetland filling, a wetland replication area will be constructed and will be planted with native saplings, shrubs and herbaceous vegetation. Seeding will be done as soon as possible after final grading of the replication in order to quickly establish herbaceous growth. Use of supplemental hydric soil and organic mulch within the replication area will be specifically obtained from sources free of invasive species, or containing invasive seed and/or roots. The rapid establishment of native vegetation will lessen the opportunity of invasive species colonization on the site.	
		Patches of purple loosestrife will generally be avoided during the construction process, though some plants adjacent to the unnamed stream will be cut to provide access for the establishment of electric lines and poles. These disturbed areas will re-vegetate naturally and it is likely that purple loosestrife will remain in the area.	
		Table 14-2 of the DEIS lists the plant species observed at the Project site, laydown areas, and interconnections by cover type.	
		Appendix 14-A of the DEIS contains the New York State list of Endangered, Threatened, rare, and exploitably vulnerable plant species which occur in Orange County, along with their general habitat and the potential for the plant to occur on the Project site. Most of these are herbaceous species that occur within marshes, alluvial plains and swamps. However, it is noted that the emergent marsh wetlands on the site are dominated by purple loosestrife, which tends to edge out other herbaceous species in otherwise diverse herbaceous communities. While none of these species were identified on the site during specific surveys and site visits, future site surveys will be conducted at the appropriate time of year to further characterize the site vegetation and areas of proposed permanent and temporary impacts. Surveys for wetland plants of conservation concern will be necessary and will be conducted during the 2009 growing season at the appropriate time for positive identification (form, flower, seed, etc.). The surveys will be focused on the proposed electrical interconnect right-of-way where the potential for these species is highest based on existing community types (i.e., marsh and wet meadow).	
14.0 Ecology	PB4-52	14-48. Ongoing impacts to receiving waters from stormwater pond outfall pollutant load are not discussed.	
		Response: See response to Section 13.0 Water Resources Comment Number PB4-14.	

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14.0 Ecology	PB4-53	14-49. Nutrient retention/loading discussion is confusing and misleading with regard to potential downstream impacts.		
		Response:		
		See response to Section 13.0 Water Resources Comment Number PB4-14 .		
14.0 Ecology	PB4-54	14-49. Ecological drainage patterns pre and post construction are inadequately described-more information is needed.		
		Response:		
		See response to Section 13.0 Water Resources Comment Number PB4-11 .		

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14.0 Ecology	PB4-55	14-50. The purpose for listing and describing habitat requirements for all SGCN (species of greatest conservation need) listed by the DEC is to match them with the habitat impacts/losses and evaluate mitigation in terms of these species and their habitats.
		Ecological resources affected by all parts of this project including offsite (e.g., a riparian area associated with Monhagen Brook) have not been adequately described
		Response:
		This comment lacks specificity regarding any inadequacies in the descriptions or analysis of Species of Greatest Conservation Need (SGCN) that were provided in the DEIS. The Scoping Document required that the following information on listed plant and animal (mammal, amphibian, reptile, bird, and selected invertebrate) species be included in the analysis:
		"Based on the habitat/vegetative cover map, and field reconnaissance, a species list and an assessment of the status of threatened, endangered and other plants of conservation concern, and likelihood of presence on the Project site; including but not limited to confirmation via NYS Natural Heritage records. Note: "Conservation concern" species include those listed in the following:
		Endangered or Threatened under the federal Endangered Species Act NYS list of Endangered threatened, rare, and exploitably vulnerable species (plants) S1, S2, or S3 by the New York Natural Heritage Program Regionally rare, scarce, declining, or vulnerable in Kiviat and Stevens (2001) NYNHP Rare plant status list (<u>www.nynhp.org</u>)
		These Scoping Document review criteria did not include the specific reference to SGCN, which is a distinct list of species of varying protected status on the NYSDEC's website (including components of the listings above). The requirement for this information was subsequently added by the Planning Board's consultant to provide an additional level of ecological documentation. Accordingly, all of the species on NYSDEC's list of SGCN were evaluated for their potential to occur on the Project site based on their known occurrence within the county and their given habitat requirements. If the potential for on-site habitat was established for a particular species, the relative likelihood of the species' actual occurrence on the site was determined, along with any potential impacts to that species' habitat resulting from the Project. In summary, the results of the habitat analysis indicated that since the site is of relatively low overall ecological value due to its isolation by major highways and its intensive agricultural use, it contains very limited potential habitat for SGCN. In addition, subsequent ecological field surveys for selected aquatic and semi-aquatic habitats (vernal pools, streams), forested habitats (bat roosting

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		habitat), and plant communities were conducted in the Spring and Summer of 2009. The results of these surveys are presented in Appendix 2A of the FEIS.	
		With regard to the evaluation of off-site habitats such as riparian areas along Monhegan Brook, such evaluations were beyond the requirements of the Scoping Document. In addition, it is noted that significant physical barriers occur between on-site and off-site ecological communities as a result of the highways that encompass the site. Further, on-site aquatic habitats such as Carpenter Creek that have more direct off-site connectivity has been taken into account with respect to potential project impacts. The assessments provided in the DEIS and the Ecological Field Survey Report (Appendix 2A of the FEIS) conclude that since extensive on-site measures will be taken to avoid and minimize impacts to the stream during Project construction, impacts to both on-site and off-site (downstream) stream habitat will be minimal and temporary. Such measures include the use of a temporary bridge span for vehicle crossings, minimal disturbance of vegetated riparian zones, use of sediment control techniques for construction vehicles on roadways, extensive use of sedimentation and erosion controls, wet crossing techniques for in-stream utility installation, and the on-site stormwater management system.	
14.0 Ecology	PB4-56	14-53 Despite the confused nature of Section 14.4 it is apparent that there are significant impacts from the electrical interconnect in particular. It may fragment some of the best habitat onsite, directly affecting vernal pools, emergent wetland (left out of the impacts discussion), red maple swamp and beech maple forest. Many species of greatest conservation need use these habitats, but specific species/habitat information is not connected with the description of impacts. This is a major flaw in the EIS that must be corrected. The siting of the interconnect disregards turtle nesting areas and vernal pools.	
		The interconnect is omitted from most of the site maps, and its entire area of disturbance has not been described. Clearing leaves the site vulnerable to invasive species, and a significant portion of the cleared area is within wetlands, or further fragments existing forest. Wetland impacts (hydrology, habitat, etc.) are not evaluated adequately. It is still not known whether any plants of conservation concern occur within this area, nor is it known how or if wetlands will be restored after construction of this interconnect. What is the effect of herbicides during maintenance? What exactly are swamp mats and how effective are they with respect to construction equipment? What are their limitations? No information on area of disturbance/ heavy equipment required for regular maintenance, or sedimentation /erosion control for this interconnect ROW is provided.	
		Response:	
		This comment contains a series of topics that are addressed throughout this response document and in	

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		supplemental reports. Individual comments have been broken down and addressed as appropriate below.	
		The "confused nature" of Section 14.4. Section 14.4 of the DEIS follows the outline of the Scoping Document and the standard SEQRA protocol for documentation of site components. The section was reviewed numerous times by the Planning Board's ecological consultant and deemed complete. The ecological communities and associated habitats, including the emergent marsh and forested wetlands, have been described extensively throughout the document. As stated in the DEIS, the seasonally dependent field surveys were to be included in the FEIS as recommended by GREENPLAN.	
		Overall, as the entire site has historically experienced disturbance such as agricultural activities, stream channel dredging, straightening and culverting, state highway construction and expansions on three sides of the site, and various development along the site boundaries. Therefore, with the proposed development activities and planned avoidance, minimization, and mitigation considerations, the activities are not expected to result in a significant impact to existing ecological conditions.	
		Siting considerations and impacts of the electrical interconnect – fragmentation. The response to <u>Comment Number PB4-34</u> discusses potential fragmentation to the existed forest (upland and wetland) patch as a result of the electrical transmission line. This discussion concludes that the size of the forested patch itself and its location along existing open corridors such as I-84 and agricultural fields create an "edge" ecological community in its current form, and therefore the introduction of a maintained electrical corridor along the outer edge of the community will have no additional effects of fragmentation. Emergent wetlands will not be affected by fragmentation except that they are likely to expand into the formerly forested wetland portions of the maintained electrical interconnect corridor.	
		Siting considerations and impacts from the electrical interconnect – vernal pools and turtle nesting areas. Evaluations of potential impacts to these habitats and specific communities such as vernal pools resulting from the electrical interconnect as are provided in the Ecological Field Survey Report (Appendix 2A of the FEIS). This report concludes: 1) the two vernal pools were identified on the Project site (VP-1 and VP-2) were rated as "low biological value;" 2) potential Project impacts to vernal pools resulting from construction of the electrical interconnect line will be quite limited, and will include removal of tree cover for the electrical corridor directly over VP-1. However, the pool itself will not be filled nor will the land area be directly disturbed (except for tree clearing activities). The area will continue to support undeveloped upland and wetland, forested and non-forested, breeding and non-breeding habitat for adult vernal pool species. A full discussion of potential impacts to turtle nesting habitat is provided in the responses to Comment Numbers PB4-35 and PB4-45. This discussion concludes that, while evidence of turtle nesting was observed in the area of the electrical interconnect stream crossing (banks), only a one-time crossing is proposed to occur in this area during the nonnesting season, and therefore impacts to turtle nesting habitat are expected to be negligible. Common aquatic	

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		turtles that have been observed on the site are opportunistic and variable with regard to their selection of nest sites, preferring bare ground and loose, open soils to dig for nests. Therefore, temporary ground disturbance associated with the electrical interconnect installation will not result in a loss of nesting habitat or opportunity.
		Impacts from the electrical interconnect – wetlands. Wetlands will also be temporarily crossed by vehicles for construction of the electrical interconnection line and manholes. This will be accomplished through use of swamp mats and/or Low Ground Pressure (LGP) equipment to distribute the vehicle weight, minimize rutting of vehicle tires in the wetlands and minimize any affects to wetland hydrology (see additional discussion of swamp mats and LGP below). Once the electric transmission line is installed, swamp mats are removed and the emergent wetlands are allowed to revegetate and function normally. Hydrological conditions and habitat associated with the wetlands in the path of the electrical interconnect are expected to remain virtually unchanged, except for a minor conversion from wooded to emergent wetlands.
		Impacts from the electrical interconnect – Species of Greatest Conservation Need. Plant Species of Greatest Conservation Need (SGCN) that have been identified on the site (see response to <u>Comment Number PB1-2</u>) are herbaceous species that tend to thrive in open, semi-disturbed and pioneer environments such as old agricultural fields and wet meadows, and therefore if naturally spread into the cleared corridor they will likely thrive there.
		Mapping of electrical interconnect. Mapping of the electrical interconnect route has been completed and is included in Appendix 5B of the FEIS. Also, see Figure 5 of the FEIS.
		Invasive Species. As discussed in the response to <u>Comment Numbers PB4-16 and PB4-32</u> , control of invasive species within the electrical interconnect and the site overall will consist of a multi-tiered invasive species control methodology that includes mechanical, chemical, and biological components as developed and approved by the EPA and NYSDEC. Routine maintenance will likely include vegetation control by a combination of mechanical cutting and use of herbicides. Depending on the vegetative conditions of the particular right-of-way, mechanical cutting and use of herbicides each have benefits, including overall effectiveness and ecological sensitivity, when used in combination over a several year cycle. Part of the management plan would likely include performance of vegetative maintenance during the winter.
		Description and use of swamp mats/disturbance/heavy equipment. Swamp mats are comprised of a series of thick wood planks that are bolted together (with or without some spacing) to form a solid surface for wheeled or tracked equipment to drive over. They are typically 14 to 16 feet long by 4 feet wide. Mats are laid side-by-side (typically long-wise) on the ground to form a continuous road through soft and/or wet terrain. The mats lay directly over herbaceous and shrub vegetation without permanently impacting the root structure or

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		often even live stalks, which allow the vegetation to grow back once the mats are removed. Low Ground Pressure (LGP) equipment consists of equipment with large tires or broad tracks that spreads the weight of the equipment over a larger surface area to minimize rutting (see response to Comment Number PB4-16).	
		Wetland restoration. As a result of the use of swamp mats and LGP equipment to minimize temporary wetland disturbances, the necessity for wetland restoration along the electrical interconnect route will be minimal. However, areas that have been disturbed will be restored to the previous grades with the existing topsoil, and to the vegetative cover conditions of the existing emergent wetland.	
		Erosion and sedimentation controls. As described throughout this document (e.g., see response to <u>Comment Number L-5-14</u>), an erosion and sedimentation control plan will be implemented for all construction components of the Project in accordance with the New York State Department of Environmental Conservation's (NYSDEC's) SPDES Discharge Permit for Stormwater and associated Storm Water Pollution Prevention (SWPP) Plan. Erosion and sediment controls will be installed and maintained around all areas of soil disturbance, storage, vehicle access, and where vegetation will be removed.	
14.0 Ecology	PB4-57	Alternative routes for the interconnect have not been explored, although possibly impacts may be reduced by placing it in or immediately adjacent to the I-84 ROW, or by burying the lines.	
		Response:	
		The referenced alternatives have been further evaluated. CPV Valley is proposing to bury the lines underground, which will reduce the amount of wetland impacts.	
		The alternative of abutting the electrical interconnect as close to Interstate 84 (I-84) as possible was also evaluated. The field surveys conducted of the site indicated the presence of wetland areas along the edge of the NYSDOT controlled right-of-way for I-84 extending eastward from near the edge of the generating facility footprint, all the way to Route 17M. The impacted wetland area associated with pursuit of an east to west right-of-way along I-84 is significantly greater than that of the preferred alignment.	
14.0 Ecology	PB4-58	14-59. Impacts of converting one type of wetland to another are not described.	
		Response:	
		Please see the response to Comment Number PB4-34 .	

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14.0 Ecology	PB4-59	14-63. Laydown areas: impacts of soil compaction and temporary seeding on drainage and restoration of habitat have not been described.
		<u>Response:</u>
		Erosion and sediment controls will be maintained throughout construction and during post-construction restoration. Vehicle exits will be designed to prevent unconsolidated surface materials from being transported to offsite local roadways.
		Guidelines established for agricultural soil removal and restoration will be followed as the site is developed. New York State Department of Agriculture and Markets farmland reclamation notes are included on the site plan, making these procedures a condition of the site plan approval for the Project.
		The methods proposed for stripping, stockpiling, and stabilizing the agricultural soil profiles is in accordance with New York State Department of Agriculture and Markets and NYSDEC guidelines. 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.
		As stated on page 14-63 of the DEIS, wildlife habitat impacts associated with the laydown areas will include temporary displacement of any species using the existing hayfields and agricultural fields. Since these open areas tend not to support continuous use by most species, except for ground burrowing field species, wildlife species are expected to utilize other areas, including on-site hayfields, to fulfill any habitat requirements provided by these areas. Once the laydown areas are restored, wildlife habitat usage is expected to resume. No impacts to rare, Threatened or Endangered species are anticipated within the proposed laydown areas.
14.0 Ecology	PB4-60	14-65. Additional site observations regarding wetland hydroperiod are needed.
		Response: The revised Site Plans (included in Appendix 5B of the FEIS) include detailed groundwater elevation observations from the period of May through September, 2009. These results were used in developing the revised wetland mitigation plan.

	Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response	
14.0 Ecology	PB4-61	14-65. Discussion of potential turtle habitat complexes, as well as habitat complexes required by snakes and amphibians of conservation concern, has not been provided.	
		Many SGCN are listed in the EIS, but specific mitigation for loss of habitat used by these species is not described	
		Response:	
		Discussion of potential turtle habitat and other SGCN habitat complexes, where applicable to the site, have been addressed in the response to <u>Comment Number PB4-35</u> .	
14.0 Ecology	L-1-12	The Department has reviewed Section 14.0 of the DEIS regarding the wetlands currently present onsite and the potential impacts of the construction and operation of the facility on the wetlands. In addition, the Department is also in receipt of the Joint Application for Permit (February 2009) submitted by CPV Valley for the wetland and stream impacts. As indicated in the DEIS and the Joint Application there are substantial amounts of wetlands on the 121 acre Project site. Based on the information provided in these documents the Department believes the project sponsor has taken the appropriate measures to avoid and minimize wetland impacts onsite. Further, the mitigation proposed by the applicant appears to be adequate. A more detailed review of the plan is being conducted by Department staff as part of the application review. **Response:** Mitigation measure guidance received to date from NYSDEC on the Facility's wetland permit application has been incorporated into the development site plan design currently under review by the Town Planning Board.	
14.0 Ecology	L-1-13	The Department does point out that the DEIS and Joint Application reference the total amount of permanent wetland impacts as approximately .25 acres. However, the Department notes that the installation of the onsite transmission line will require the conversion of approximately .92 acres of forested wetland to non-forest wetland. Table 14-8 in the DEIS lists and the discussion in Section 2.2 of the Joint Application reference the wetland conversion as a permanent impact. The Department agrees that wetland conversion is a permanent impact and as such the Department, in their view of the Joint Application, may require the mitigation of these impacts.	

	Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response	
		Response: A wetland mitigation plan has been prepared in accordance with the NYSDEC and U.S. Army Corps of Engineers 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. Conversion of forested wetlands to non-forested wetland within the electrical interconnect will be compensated by creating a permanent forested buffer along Carpenter Creek where there are currently fields in agricultural use.	
14.0 Ecology	L-1-14	Another issue for the Department relates to the laydown and parking areas. Due to the extensive wetland acreage on the site the project sponsor was required to create several small laydown and parking areas, instead one large one area. This allowed the project sponsor to avoid wetland impacts and keep all operations on the same site. The Department, however, is concerned that the layout of the laydown areas and even the facility footprint may result in further encroachment into the wetland areas. Based on the plans provided it appears the project sponsor is proposing to use the erosion and sediment controls to delineate the work limits, parking and lay down areas. In addition to the erosion and sediment controls, the Department recommends the use of a highly visible construction fence, particularly where areas of disturbance are close to the wetland boundaries.	
		Response: A highly visible construction fence will be used to mark the work limits in areas where disturbance will be close to wetland boundaries. Construction phase field verification will be completed to ensure that no unforeseen encroachment into wetland areas occurs.	
14.0 Ecology	L-1-15	If, during the course of construction, the project sponsor seeks additional laydown and parking area which will result in additional wetland impacts, a permit modification will be required. In that particular case, the Department may require the project sponsor to seek alternative solutions that avoid wetland impacts. **Response:* Comment noted.*	

	Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response	
14.0 Ecology	L-1-16	Should the Department determine the Joint Application for Permits meets the standards for permit issuance set forth in all applicable regulations, it will likely include a special condition requiring the use of a third party environmental monitor during construction. The third party monitor would be authorized to monitor compliance with the all Department permits, including the general permits and registrations. Ensuring wetland impacts are limited to those referenced in the DEIS and Joint Application is a primary reason for requiring a third party monitor.	
		Response:	
		Comment noted.	
14.0 Ecology	L-5-15	We also recommend that the banks of the Carpenter Creek and its onsite tributary be permanently vegetated with hardwood trees and shrubs to improve streambank stabilization and increase wildlife habitat in and around the streams. A riparian buffer, as it would be called, should extend at least 100 feet back from each side of the stream. Again we recommend consultation with OCSWCD the design of this buffer.	
		Response:	
		The Project is not altering the stream banks. The Project layout has been carefully designed to avoid impacts to Carpenter Creek and its tributary. A buffer zone of 120 feet to 500 feet in width, for the completed project, will be maintained along the entirety of Carpenter Creek (see Page 14-48 of the DEIS).	
14.0 Ecology	L-5-20	As referenced in the second paragraph of this letter: we request copies of the following surveys once they have been completed:	
		 stream biomonitoring, planned for Carpenter's Creek and other onsite streams in the late winter/early spring 2009. field surveys of vegetation, planned for "appropriate time of year" wetland plans of conservation concern, planned during the 2009 growing season at the appropriate time for positive identification site survey of two potential vernal pool areas, including determination of presence of vernal pool species summer nesting habitat for Indiana bat 	

	Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response	
		Response:	
		The results of the Spring and Summer 2009 ecological field surveys and assessments are included Appendix 2A of the FEIS. The Spring and Summer 2009 Ecological Field Survey Report was provided to the involved agencies, including the Orange County Planning Department, and was made available for public comment, prior to the Planning Board issuing the FEIS.	
14.0 Ecology	L-5-21	If survey work confirms that there are vernal pools onsite, strongly recommend that additional field surveys be completed to determine which upland areas are used by resident amphibian during hibernation and migration.	
		Response:	
		A vernal pool survey was conducted in the Spring of 2009. Only two vernal pools were identified on the Project site; both vernal pools were rated as "low biological value" according to the recommended reference document. Only small numbers of spotted salamander egg masses were found in the two confirmed vernal pools; therefore, we assume that a small number of adults use the forested area around the pools during non-breeding season. The vernal pools will not be directly disturbed as a result of Project construction; however there will be removal of tree cover over one of the pools and a portion of nearby forested upland and wetland habitat will be cleared for the electric line corridor for the other pool. A small percentage of this area will be converted to a non-forested electric right-of-way corridor, while the remaining area remains forested. Vernal pools occur extensively in right-of-way corridors in the northeast, and adult salamanders can thrive under both undeveloped open canopy and woodland conditions. No additional surveys are warranted.	
14.0 Ecology	L-5-22	We commend the applicant for proposing measures to reduce the spread and/or onsite dominance of invasive species onsite. We hope that the measures proposed such as the vegetating of the wetland replication area with native plant species, will be effectively implemented.	
		Response:	
		Comment noted.	
14.0 Ecology	L-5-23	Indiana bat hibernaculum was documented within two miles of the Project site and therefore a survey will be conducted in the summer of 2009 to determine the suitability of this site for Indiana bat roosting. We nonetheless recommend that a maximum number of suitable tree types be maintained onsite so that the site could potentially be utilized by the bat in the future, even if the survey reveals no current use by the bat. The EIS includes documentation of the presence of at	

	Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response	
		least one suitable tree type, the shagbark hickory.	
		<u>Response:</u>	
		The survey of potential Indiana bat roosting trees within the main forested area found a total 18 trees of the requisite size and "structural" characteristics containing loose, peeling bark. Trees identified included several different species. Based on the forest acreage and the requisite tree count, this area contains at least one potential roosting tree per 2.5 acres.	
		The construction of the electrical interconnect will result in the loss of two trees identified as potential summer roosting habitat. The remainder of the potential roosting trees both to the north and south of the proposed line will not be impacted. Furthermore, the loss of these two trees still maintains a density of at least one roost tree per 2.5 acres.	
		According to the U.S. Fish and Wildlife Service Draft Indiana Bat Revised Recovery Plan (FWS, 1999), the Indiana bat is fairly to highly adaptable with regard to changes in roosts such as tree harvesting, and readily move from one roost site to another within a season. As a result of this adaptability, as discussed in the Recovery Plan, the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) does not prohibit the clearing of trees, and the Service's primary goal is not the protection of every tree. Where clearing is necessary within known summer roosting habitat within five miles of a hibernaculum, such clearing is recommended to occur between November 15 and March 31.	
		Therefore, clearing of the Project's electrical interconnect route and the two potential roosting trees will not result in an impact to the potential summer roosting habitat for Indiana bat available on the site. In addition, in order to further eliminate any potential impacts to existing or future roosting habitat, clearing the right-of-way corridor will occur between November 15 and March 31.	
14.0 Ecology	L-6-45	This section contained a lot of good Figures and Tables, but there were very few onsite studies performed, or comments describing actual sighting of biologic activity. The Applicant needs to provide a more extensive bog turtle study. Four hours onsite is not a long enough study.	
		Response: Comprehensive field surveys of the Project site were conducted during the course of preparing the DEIS. In addition, coordinated site reviews were conducted with the U.S. Army Corps of Engineers and NYSDEC personnel. The response to Comment Number L-6-46 provides a chronology of the field studies conducted.	

Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response
		The listing includes the supplemental studies requested by the Planning Board acting in the capacity of SEQRA Lead Agency. Results of a bog turtle survey are provided in Appendix 2A of the FEIS.
14.0 Ecology	L-6-46	There are numerous studies that have not been provided because they have not yet been performed. This submission was premature. The studies that were provided are inadequate. The Applicant failed to look at the impacts of light, noise and vibrations on the ecological community from operating the facility.
		Response:
		The DEIS filing was not premature. The DEIS was based on significant field work and scientific assessment. Multiple site-specific field reviews where conducted by CPV Valley's environmental consultants prior to the DEIS being deemed complete by the Lead Agency. Specifically, field reviews were conducted on the following dates:
		05/01/07 – Initial site visit to view existing conditions: wetlands and uplands.
		 01/08/08 – Site visit to confirm and document wetlands characteristics and mapping (existing, approved mapping) along eastern end of site; view potential NYPA interconnection sites along NYPA right-of-way (north and east); identify winter vegetation (woody/persistent only.)
		 06/13/08 – Site visit to review early summer conditions for potential bog turtle habitat; view proposed underground electrical interconnect routes to NYPA right-of-way.
		 07/02/08 – Site visit to review wetlands, streams, ecological communities, identify vegetation, general wildlife habitat, and potential for bog turtle, Indiana bat and dwarf wedge mussel habitat; walked proposed electrical interconnect route.
		 10/22/08 – Wetlands/general habitat site visit for water/wastewater line routing to Middletown WWTP; reviewed proposed wetland mitigation area on Project site.
		As stated in the DEIS (page 14-65) and recommended by the Planning Board's consultant, certain seasonally dependent field work has been conducted in the Spring/Summer of 2009 and the results are presented in the FEIS. The results are included in Appendix 2A of the FEIS.
		Extensive ecological studies were conducted for the Project site in accordance with the approved Scoping Document.

	Response to Comments on Section 14.0 – Ecology			
DEIS Section	Comment Number	Comment/Response		
14.0 Ecology	L-6-47	Who is maintaining the unfenced portion of the Project site? The Applicant should consider making the unfenced area a sanctuary.		
		<u>Response:</u>		
		CPV Valley will maintain the unused portion of the Project site in its current condition.		
14.0 Ecology	L-6-49	The Applicant is installing a permanent fence along Carpenter Creek as a buffer. This fence should be further than 30 feet away from the Creek to protect the riparian buffer.		
		<u>Response:</u>		
		The fencing is located more than 30 feet away from Carpenter Creek at all locations. In fact, the fencing is located 120 feet or more from Carpenter Creek with the exception of small 270 foot segment near the site driveway. The closest point the fencing comes to the creek in this segment is 50 feet.		
14.0 Ecology	L-6-50	There are no studies included in the DEIS concerning different bat or bird species.		
		<u>Response:</u>		
		Desktop assessments were conducted for birds and bats and the results were provided in Section 14.2.3.3 (Birds) and 14.2.3.4 (Mammals) of the DEIS. Discussion of impacts is provided on pages 14-50 and 14-51, and 14-57 through 14-60.		
		Also, see Appendix 14-F (Bird Species Descriptions) of the DEIS (Volume III).		
		Specific discussions on the Indiana bat were provided in 14.2.5.5. The results of the Spring 2009 survey conducted for Indiana bat habitat is included in Appendix 2A of the FEIS.		
		Coordination with the U.S. Fish and Wildlife Service and NYSDEC's Natural Heritage Program indicated no Federal or State rare, threatened, or endangered plant or animal species are documented or were known to occur on the Project site.		

	Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response	
14.0 Ecology	L-6-51	Due to the biologic importance of vernal pools, this DEIS should have waited for a site-specific study and a stream habitat assessment to be performed. The public should have an opportunity to comment on both studies, and sufficient time for all interested parties to comment should be provided.	
		Response:	
		As stated on page 14-65 of the DEIS, the results of the vernal pool and stream habitat assessment surveys were to be provided in the FEIS. The stated intent of this process was to facilitate public review of the significant components of the Project while the detailed seasonal studies were underway. Now that the studies have been completed, the entire Ecological Field Survey Report has been submitted to the Planning Board and for public review prior to the issuance of the FEIS. The Ecological Field Survey Report is included in Appendix 2A of the FEIS.	
14.0 Ecology	L-6-52	The Applicant should provide a complete map or drawing designating the streams, wetlands and vernal pools. The DEIS states that "the site contains a number of interconnected wetland areas" (page 14-11), but it is difficult to make proper comments or ask appropriate questions without seeing the entire site on one map. It appears that the complete footprint of the power plant and power lines are never on the same maps as the areas of ecologic concern. These areas should be included on a map together.	
		Response:	
		The overall Project site spans five different watersheds, including off-site areas to the top of each watershed. The attached site plans contain the "Vicinity Watershed Map". This map details the pre and post development total impervious area for each watershed, streams, wetlands, and other hydrologic features. See Site Plans included in Appendix 5B of the FEIS. A revised Site Plan (Figures 2-7A) includes the Facility and the on-site portion of the electric transmission right-of-way.	

Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response
14.0 Ecology	L-6-53	The Applicant should be required to install bat boxes in the forested areas disturbed by the interconnect after performing the necessary site-specific studies.
		Response:
		Based on the results of the Indiana bat habitat survey conducted in the Spring of 2009, revealing the abundance of potential bat roosting habitat on the site, installation of bat boxes is not warranted.
14.0 Ecology	L-6-54	Why are there no mitigation plans to lessen the impacts to the vernal pools or potentially endangered species? The Applicant should present appropriate mitigation measures. Also, there is no mitigation provided to ensure uninterrupted biologic corridors, especially in the 1.93 acres affected by the electrical interconnect.
		Response:
		See response to Section 3.2 of the FEIS for a summary of the assessment of vernal pools and Indiana bat habitat.
		With regard to potential interruption of a biological corridor within the electrical interconnect right-of-way, only about 1/3 of the area proposed for the electrical interconnect corridor is presently forested and will be converted to a non-forested community, thereby potentially changing its biological corridor characteristics. This presently forested portion of the interconnect route currently functions as an edge environment since the I-84 highway corridor, which is fenced along the property line, is immediately adjacent to the south of the proposed interconnect. As such, the forested area does not connect any separate communities. The remaining 2/3 of the interconnect route and surrounding area is open meadow and shallow marsh, and therefore this part of the wildlife habitat community will not change at all with installation of the interconnect. Given this lack of existing connectivity, the relatively small size of the on-site forest patch, the existing meadow and marsh communities of the eastern part of the interconnect that will remain and expand, and the large forested buffer along Carpenter Creek of over 600' in width that will remain, no effect on biological corridors along the electrical interconnect are anticipated.
		Because no significant adverse impacts to vernal pools or potentially endangered species are anticipated, no additional mitigation for such impacts is warranted.

	Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response	
14.0 Ecology	L-6-55	How is the Applicant protecting and mitigating the impacts to the extensive wetlands that appear to be onsite? **Response:** Pages 14-47 through 14-49 and 14-54 through 14-57 of the DEIS describe the mitigation measures built into the Project. To the greatest practicable extent, the Project has been designed to avoid impacting wetlands on site. Impacted wetlands will be replaced on site at a greater than 2:1 area basis. Wetland mitigation plans have been developed in conjunction with the U.S. Army Corps of Engineers permit application review, and will comply with the mitigation guidelines, "Part 332 - Compensatory Mitigation for Losses of Aquatic Resources Compensatory Mitigation." In addition, the Project will comply with mitigation requirements under the NYSDEC's Freshwater Wetlands Permit. See Appendix 14-H of the DEIS (Volume III) for detailed wetland mitigation plan.	
14.0 Ecology	L-6-56	Figure 14.3 shows a 130-foot path to be maintained. This row clearing destroys biologic corridors. It destroys the north vernal pool, and destroys the path to the southern vernal pool, cutting it off from the tributary. This must be re-visited. **Response:** There is no evidence to suggest that removal of trees from portions of the already fragmented forested community around the vernal pools will result in destruction of the pools. At present, VP-2 is located partly within the maintained I-84 highway corridor, and vernal pools routinely occur within open and maintained transmission corridors. Edinger et al (2002) describes a vernal pool as occurring typically within an upland forest, but also within various Palustrine (i.e., forested, shrub, and emergent wetlands) and other terrestrial communities. While a portion of the forested area around the pools will be removed, the area will remain vegetated with shrub and small tree species, and the ground will remain relatively undisturbed. In addition, the majority of forested upland and wetland surrounding the pools in the eastern part of the site will remain undisturbed. The Spring and Summer 2009 Ecological Field Survey Report included in Appendix 2A of the FEIS provides further discussion of the vernal pools in the vicinity of the electric transmission line right-of-way. Further, with the reduction of the electric transmission line right-of-width from 130 feet to 20 feet, there will be a significant reduction in impacts to wetlands as described in Section 2.3 of the FEIS.	
14.0 Ecology	L-6-57	Pole #2 is located extremely close to the northern vernal pool. How aware will the electric interconnect contractors be to the sensitivity of these unique biologic areas, and how is the Applicant planning on making the contractors aware to minimize disturbance? This is the same situation with Pole #6 and its proximity to Carpenter Creek.	

	Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response	
		Response:	
		As described in Section 2.0 of the Ecological Field Survey Report (Appendix 2A of the FEIS), prior to tree clearing, the entire vernal pool VP-1 will be fenced off with orange construction fencing. As necessary, trees adjacent to VP-1 will be hand-cut and felled away from the pool and toward adjacent uplands (or otherwise away from the pool). Following tree clearing, a construction access corridor will be established within the upland area south of the vernal pool. This will allow the vehicles delivering and installing and equipment to traverse the area within a single access road as far away from the vernal pool as possible. Erosion controls will be placed between the access road and the vernal pool to minimize erosion and sedimentation from the road into the pool. If necessary, the entire access road including upland areas will be matted with wood or swamp mats to minimize equipment rutting and ground disturbance while traversing the right-of-way corridor.	
		The area immediately surrounding VP-2, which occurs partly on the cleared and maintained I-84 highway corridor, will not be disturbed, but a portion of nearby forested upland and wetland habitat approximately 100 feet to the north will be cleared for the electrical line corridor. For purposes of protecting the off right-of-way pool to the extent possible, orange construction fencing will be placed around the on-site portion of VP-2. Erosion controls will also be placed along the right-of-way access road at the closest point to VP 2.	
		The construction contractors will be required to follow and implement the Construction Stormwater Pollution Prevention Plan (CSWPPP), as well as comply with all wetland permit conditions for construction work that will be issued by the NYDEC and U.S. Army Corps of Engineers.	
14.0 Ecology	L-6-58	The Applicant should study how the purely aquatic species will be adversely impacted by the diversions, dams and flume pipes? Will the crossings be decommissioned after the poles are constructed, or will they be kept? How will they be maintained? The Applicant and Lead Agency should consider bio-friendly culverts, as well as the construction of the poles and portions of the facility, and delivering the pre-made structures to the site via helicopter rather than destroying the site on the way to those areas.	
		Response:	
		Appendix 14-I (Volume III of the DEIS) provides a description of the stream crossing. Impacts will be temporary and occur only during construction. In the eastern part of the site, the crossing of Carpenter Creek will result in temporary disturbance of a small area of shallow emergent marsh community with the crossing of Carpenter Creek, to install the electrical conduit bank. The trench and conduit bank crossing of the stream will be conducted using one of several possible methods available to the contractor and based on electrical engineering requirements. These standard construction techniques include a flumed crossing, dam and pump crossing, or	

		Response to Comments on Section 14.0 – Ecology
DEIS Section	Comment Number	Comment/Response
		wet crossing. Each of these are explained in Appendix 14-I of the DEIS.
		Each of these methods include a means of temporarily diverting stream flow around or through the work areas while the trench is dug and the conduits laid; there will be no permanent culverts. An equipment travel and work corridor will be temporarily established across the stream in order to dig the trench and install the conduits. In total, an approximately 16 to 20 foot wide construction corridor, including both the trench and the travel/work staging corridor, will be used for the stream crossing. Excavated soils will be temporarily stockpiled in adjacent non-wetland areas and/or on swamp mats to minimize fill placement directly on wetlands or in the watercourse.
		In the vicinity of the crossing, "purely aquatic species" (i.e., floating, or rooted or fixed within the streambed) consists primarily of filamentous algae and scattered macrophytes (e.g., Potomageton). These species are highly tolerant of disturbances such as channel scouring and silt accumulation (natural or man-induced), and will quickly re-colonize the disturbed streambed once it has been restored to previous conditions.
		The construction work will be subject to permit conditions that will be issued by the NYSDEC and U.S. Army Corps of Engineers. Below is a summary of the mitigation measures excerpted from Appendix 14-I of the DEIS.
		Mitigation Measures
		The general wetland construction and mitigation actions, as outlined below, are intended to minimize adverse environmental impacts to wetlands. The Applicant will minimize and mitigate impacts by:
		 Using the most appropriate equipment or machinery, including hand-cutting; Implementing appropriate maintenance and operation on the equipment or machinery, including adequate training, staffing, and working procedures; Using machinery and techniques that are designed to reduce drainage impacts to wetlands; Designing appropriate wetland crossings that will maintain water flows and accommodate fluctuating
		 water tables; Routing the interconnect to minimize the number of wetland crossings; Maintaining adequate flow in wetlands to protect aquatic life and prevent the interruption of downstream uses; Limiting equipment operating in wetlands; Limiting removal of vegetation;
		 Using low-ground-weight construction equipment if standing water or saturated soils are present; Dewatering trenches in such a manner that no heavy silt-laden water flows into any wetland; Utilizing temporary sediment barriers; and Provide post-construction maintenance and monitoring to establish success of revegetation.

	Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response	
		These measures are standard components of construction activities which are routinely permitted by NYSDEC and the U.S. Army Corps of Engineers. They have been submitted as part of the Wetlands Permit Application for the Project.	
		Erosion and sedimentation will be controlled by practical construction techniques and erosion and sedimentation controls. With the proper installation and maintenance of erosion control barriers and other control measures, the extent of any indirect impacts from erosion and sedimentation should be minor.	
		Once the crossing is completed and the electrical duct bank is installed below the bottom of the streambed, all temporary crossing and water diversion materials and equipment will be removed from the stream, and the streambed and bank will be restored to previous topographic and flow conditions.	
14.0 Ecology	L-7-11	There was no onsite study performed for existing vernal ponds, wetland disturbances or endangered species for the applicants property and what plans the applicant has in protecting them both during and after construction and for the life of the plant's operation.	
		Response:	
		Section 14.0, Ecology, of the DEIS fully evaluates wetlands, vernal pools, and endangered species as required by the Scoping Document. The results of the Spring and Summer 2009 field surveys for vernal pools and rare plants are summarized in Section 3.2 of the FEIS, and the full report is provided in Appendix 2A of the FEIS.	
		The wetland resources and vernal pools on the Project site have been delineated, and the Project was specifically designed to avoid impacting these resources to the maximum extent practicable. Impacted wetlands will be replaced on site at greater than 2:1 area bases. See Appendix 14-H of the DEIS (Volume III) for detailed wetland mitigation plan.	
		Only two vernal pools were identified on the Project site; both vernal pools were rated as "low biological value." The vernal pools will not be directly disturbed as a result of project construction; however there will be removal of tree cover adjacent to one of the pools. For the second (southern) pool, a portion of nearby forested upland and wetland habitat will be cleared for the electric line corridor. A small percentage of this area will be converted to a non-forested electric right-of-way corridor, while the remaining area will remain forested.	
		The plant survey was conducted in July and September 2009. Only one of the target species was identified within the upland and/or wetland portions of the main Facility footprint and electric transmission line right-of-way	

		Response to Comments on Section 14.0 – Ecology
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		areas: Georgia Bulrush (Scirpus georgianus), a State-Endangered Species (State Rank S1), inhabits wetland meadow and upland buffer zones within the transmission right-of-way and Facility footprint. These plants are unlikely to be adversely affected during transmission line construction or the long-term maintenance of the new right-of-way as a treeless wetland and upland meadow habitat. Since timber mats will be used in these wetlands during construction and the existing hydrology, soil features, and plant communities of these wet meadows will be preserved during/after transmission line construction, the Project poses no significant risk of adverse impact to SGCN plants within the electric transmission line right-of-way. In addition, prior to construction, these plants will be replanted within the proposed onsite mitigation wetland area.
14.0 Ecology	L-9-2	First of all, it will sit in what is basically the town's second largest area of both Federal and DEC wetlands. A stream runs through this property. I have heard it said at one of your meetings that a "wetland delineator" will separate this out as best as possible. Do we as townspeople want a million gallon oil tank and a 15,000 gallon ammonia tank sitting on this sensitive area? I know that no one likes to hear the words "vernal pool, riparian area, ecosystem, stream protection corridor, and biodiversity, etc." Historically, those words are never strong enough in this town to make a difference. Other, neighboring towns actually have Environmental Review Commissions that review every PB project. Sadly we have no such committee. If we did this ill-considered project would never have been allowed to reach this level.
		Response: The wetland resources and vernal pools on the Project site have been delineated, and the Project was specifically designed to avoid impacting these resources to the maximum extent practicable. The approximate loss of wetlands will be replaced on site at greater than 2:1 area bases. See Appendix 14-H of the DEIS (Volume III) for detailed wetland mitigation plan. The Project layout has been carefully designed to avoid impacts to Carpenter Creek and its tributary. A buffer zone of 120 feet to 500 feet in width will be maintained along the entirety of Carpenter Creek (see Page 14-48 of the DEIS).
		Only two vernal pools were identified on the Project site; both vernal pools were rated as "low biological value." The vernal pools will not be directly disturbed as a result of Project construction; however there will be removal of tree cover over one of the pools and a portion of nearby forested upland and wetland habitat will be cleared for the electric line corridor for the other pool. A small percentage of this area will be converted to a nonforested electric right-of-way corridor, while the remaining area remains forested. Salamanders can thrive under open canopy and woodland.

	Response to Comments on Section 14.0 – Ecology		
DEIS Section	Comment Number	Comment/Response	
14.0 Ecology	H-1-5	What is the impact of the hot water returns on the habitat that it passes through? Will it impact the plant and animal seasonal cycles there and lead to the decline in the native species or benefit of non-native, potentially invasive species. **Response:*	
		See response to Section 13: Water Resources Comment Number PB-4 .	
14.0 Ecology	Н-16-2	It will sit in basically the town's second largest area of both federal and DEC wetlands. A stream runs through the property. I heard it say at one of your meetings that a wetland delineator will separate this out at much as possible. Do we as townspeople want a million gallon oil tank and 15,000 gallon ammonia tank sitting on this sensitive area? I know that nobody likes to hear the words vernal pool, eco system, stream protection corridor and biodiversity.	
		Other neighboring towns also have environmental review commissions that review every Planning Board project. Sadly, we don't have a committee like that. This Planning Board then must do the job of protecting the people who live here in terms of infrastructure and resource protection.	
		Response: See response to Comment Number L-9-2.	

	Response to Comments on Section 15.0 – Construction Impacts		
DEIS Section	Comment Number	Comment/Response	
15.0 Construction Impacts	PB1-56	It is our understanding Pat Hines is providing comments on this section.	
		Response:	
		Comments received from MHE have been reflected in the site plans included in Appendix 5B of the FEIS.	

		Response to Comments on Section 16.0 – Community Character
DEIS Section	Comment Number	Comment/Response
16.0 Community Character	PB1-6	Community character has not been addressed adequately. **Response:*
		Community Character is adequately addressed in Section 16.0 of the DEIS in accordance with the final Scoping Document.
16.0 Community Character	PB1-57	Community character is the distinguishing physical and social qualities of the town, region or neighborhood. These qualities what make a community a desirable or undesirable place to live, work or visit. Community character is influenced by many things including land use plans and regulations and even surrounding areas. For example, the City of Middletown is likely to have a broader range of socioeconomic classes and mix of land uses than Wawayanda. It is considerably more urban whereas Wawayanda is more suburban and rural. These examples are offered to assist the Planning Board in thinking about the distinguishing qualities of your town. The Town's adopted Comprehensive Plan speaks of the residents desire to maintain the scenic quality and rural character of the Town, to protect natural resources and notes the "existing character of the Town's hamlets, scenic roads, and agricultural features should be preserved through the development and application of design guidelines". It is clear from the Comprehensive Plan that character of the community is an important issue.
		Response:
		The Comprehensive Plan targets the area of the Project site for Mixed Commercial use. See Section 12.1 of the Comprehensive Plan, which states: "Figure 12-1, Plan Recommendations Map, was created based on a set of environmentally-based criteria, existing land use and zoning, current land use planning principals and residents' preferences. The entire Town was evaluated with respect to conservation characteristics and development characteristics. Then, the land use and zoning maps were overlaid, and the resulting map depicts the areas where specific uses, zoning designations or open space are proposed."
		The Comprehensive Plan further states that "The purpose of the map is to graphically depict where the various relationships through natural and built processes should occur. Although the Plan Recommendations map is generalized and is not meant to convey the specific boundaries of future zoning districts, the spirit of this map should be reflected in the revised Zoning Map. Exact zoning district boundaries and definitions will be determined when the Zoning Code is revised."

Response to Comments on Section 16.0 – Community Character		
DEIS Section	Comment Number	Comment/Response
		Consistent with this recommendation, the Town of Wawayanda adopted a revised Zoning Map on May 7, 2009 that reflects the Plan Recommendations Map. Further, as a subsequent legislative enactment promulgated based upon the Town Board's consideration of the Comprehensive Plan, the revised Town Zoning Code and map must be considered to supersede inconsistent provisions of the Comprehensive Plan It should be noted that the revised Zoning Map is nearly identical to the Plan Recommendations Map included in the Town's Comprehensive Plan.
		The revised Zoning Map shows the Mixed Commercial district concentrated in the north eastern and north central portion of the Town of Wawayanda, which is consistent with the recommendations of the Comprehensive Plan.
		Having a condensed zone designated for intensive non-residential development, allows for the remaining portions of Town to be maintained as Agriculture Preservation, Agriculture Residential, and Suburban Residential as shown on the map.
		As stated previously, the Project site is located within the Mixed Commercial district. According to the Town of Wawayanda's Zoning Law, adopted on May 7, 2009 (as amended 2010), the Mixed Commercial District is intended to provide the Town with a principal area for intensive non-residential development such as office, retail, service business, and manufacturing. The Schedule of Zoning District Regulations for the MC District lists "Essential Services/Utilities" and "Industrial Uses" as permissible with a Site Plan Approval and Special Use Permit.

Response to Comments on Section 16.0 – Community Character		
DEIS Section	Comment Number	Comment/Response
16.0 Community Character	PB1-58	Over time, the character of a community may change. For example, many communities in the Hudson Valley were once primarily agricultural and now they more suburban. This is noted in your plan where it states "As growth from the New York City metropolitan area expanded from Westchester, Bergen and Nassau Counties to Orange, Putnam and Dutchess counties, communities such as Wawayanda began to experience a change in character as development increased. However, agricultural and vacant or environmentally constrained lands remain prominent land uses in Town, while development of low-density single-family residential uses continue." The question is not whether community character will change but rather will the change introduced by this proposed action be inconsistent with existing character. Community character cannot be justified by stating the use is a permitted or special permitted use in a Zoning district. Your adopted Plan questions this MI district and its relationship to the Town's vision. Does that mean any development proposal in the MI district or on this particular site will be inconsistent with existing character? No, probably not but ultimately the information in the FEIS and the finding on community character is a decision of the Planning Board. **Response:**
		The comment confuses community character and aspirational official plans. Current community character is the sum total of existing characteristics which collectively give a geographical area its existing character. Analyses of community character under SEQRA are intended to address only current community character. Officially adopted plans do not contribute to current community character because they are not existing physical or cultural aspects of the area. Such plans may well express the future desired character of a geographical area, and may base that expression on the existing character – but they are not part of the current character of the community. This distinction is why SEORA requires separate analysis of community character and of officially adopted future plans. In suggesting that the comprehensive plan reflects community character, the comment is confusing separate concepts that should not be combined. Further, and as noted in the response to Comment Number PB1-57, the adoption by the Town Board of a new Zoning Code based upon its consideration of the Comprehensive Plan must be viewed as superseding inconsistent provisions of the earlier-adopted Comprehensive Plan. It is clear that the community character in the currently undeveloped area along Route 6 (where the Project site is located) and that is recommended for Mixed Commercial land use in the Town's Comprehensive Plan will change over time as projects are proposed, approved, and then constructed. The proposed Project is consistent with character of the Route 6 corridor, which includes Pannattoni, NYSDOT, Frontier Communications, Tetz's gravel pit/concrete plant, Elvree Thermo-King, and other commercial/industrial

		Response to Comments on Section 16.0 – Community Character
DEIS Section	Comment Number	Comment/Response
16.0 Community Character	PB1-59	It is appropriate to look at a community's adopted land use plans when evaluating community character. In fact, the Town's adopted Comprehensive Plan is mentioned and briefly discussed, however the DEIS falls short of capturing the town's character as described in the Comprehensive Plan. The plan notes it was "developed with the intent of achieving a balance between hamlet, suburban and rural perspectives and a balance between new growth and protecting the existing quality of life". The plan includes a vision statement and four themes designed to achieve the balance noted in the previous sentence. This section needs more detail from the Plan in order to have a better understanding of the how the residents of Wawayanda perceive the community character now and in the future. The FEIS should include the vision statement and more details about the four major themes. **Response:**
		Please see the response to Comment Number PB1-58 above.
16.0 Community Character	PB1-60	Page 16-2 mentions the Project site is located within a proposed Mixed Commercial Zone recommended by the Comprehensive Plan. As noted in a previous comment related to the Land Use section, additional recommendations include a reexamination of the Zoning Districts and in particular, points out that certain uses in the MI are vague or not in line with the Town's vision. There should be explanation as to how this use is consistent or not consistent with the Town's vision.
		Response: The Town of Wawayanda has recently adopted an updated Zoning Law May 2009, as amended 2010, which is based on the recommendations of the Comprehensive Plan. The Project is appropriately sited in a location zoned as Mixed Commercial (MC1) (and previously zoned as Manufacturing Industrial (MI)). According to the Town of Wawayanda Zoning Law, the MC district is "to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses, and manufacturing." The Schedule of Zoning District Regulations for the MC District lists "Essential Services/Utilities" and "Industrial Uses" as permissible with a Site Plan Approval and Special Use Permit. The proposed Facility is consistent with the uses associated with the new MC district.
		Please also see the responses to Comment Numbers PB1-57 and PB1-58 above.

		Response to Comments on Section 16.0 – Community Character
DEIS Section	Comment Number	Comment/Response
16.0 Community Character	PB1-61	All data in this section points to an attractive community with a high quality of life which people are seeking out to purchase homes and make Wawayanda their place of residence. Does this project, due its massive scale, location, noise and air quality impacts, have the potential to alter the character of the community so that people no longer seek it as a primary residence? If the additional studies requested by the Hudson Group and members of the public in fact show devaluation in property values, does this project then alter the socio-economics of the community?
		Response:
		See responses to Comment Numbers PB1-57 and PB1-58 above.
		The analyses provided in Section 7.0, Socioeconomics, of the DEIS provide several data points to assess the impact on housing prices. The conclusion of two of the three studies were that there was no negative impacts to housing values resulting from the siting of a power plant nearby. The third study, which utilized census data and the author commented on its limitation, yielded results indicating a modest negative impact. However, the data was not based on house values from actual sales, but rather it was based on the respondent's current view of what their house would sell for, which could be more speculative than based on current market conditions.
		Another study performed by the Hudson Group during the Article X proceeding for the Empire Generation Facility in Rensselaer concluded "that after evaluating the potential negative and positive environmental, visual, and traffic externalities, there are not likely to be any discernable impacts on property values - pro or con - to residential or non-residential properties in the vicinity of the proposed facility."
16.0 Community Character	PB1-62	In Section 16.7 -Impacts to Community Character, the DEIS states "The siting of the project allows economic development without threatening the goals of the other themes in the Town's Comprehensive Plan." As noted earlier in this memorandum on the Land Use section, there was not enough information provided from the Plan on the themes and goals in the DEIS or an evaluation of consistency from which you can draw this conclusion.
		Response:
		See response to <u>Comment Number PB1-60</u> above.
16.0 Community Character	PB2-3	The Scoping Document describes community character as the built and unbuilt environment and the interaction between them, and the socio-economic, historic and cultural conditions of the community. In summarizing negative impacts to community character, the DEIS states that "the Project would not change the community character of the area except in

	Response to Comments on Section 16.0 – Community Character		
DEIS Section	Comment Number	Comment/Response	
		limited locations very close to the Project site where views exist." ⁵	
		Changing community character is not necessarily a negative environmental impact. A community may wish to transform itself and a project may be a part of the realization of a planned and desired change. To understand if the change in community character created by the project constitutes an environmental impact, the community's vision of itself needs to be examined and compared to the changes caused by the project. Only then can the significance of the impacts on community character be assessed.	
		The Comprehensive Plan for the Town is still recent (2006) and is an excellent officially adopted document that can illustrate the Town's community character and its vision for its future.	
		The document stresses the desire to stay rural, protect productive agricultural areas and focus growth around existing hamlet centers to "maintain the scenic quality and rural character of the Town and its hamlets." It has four major themes, which are:	
		"Promote economic development and diversity Maintain and support Wawayanda's rural character Protect natural resources and open space Cultivate a sense of community's ⁷	
		Regarding non-residential uses and economic development, the Comprehensive Plan states:	
		"The town must take a more proactive position towards economic development by <i>encouraging clean low impact commercial enterprises</i> , working to attract and retain target industries, and preparing shovel ready sites for development." (Emphasis added).	
		Visual character, preserving scenic views and the rural quality of the landscape is an important theme that runs through	

⁵ Page 16-11 ⁶ Page 2.1 ⁷ Page 1.2 ⁸ Page 2.1

	Response to Comments on Section 16.0 – Community Character		
DEIS Section	Comment Number	Comment/Response	
		the document. The document stresses that the Town needs to do more to protect these and other natural resources:	
		"As Wawayanda's development continues and growth pressures build, the Town must <i>increase efforts to protect natural resources.</i> Viewsheds have come under stress as residential and commercial growth has spread into areas that were once considered less suitable or desirable for development." (Emphasis added).	
		The project is sited at the 1-84 interchange, the entrance to the Town from the Interstate. The Comprehensive Plan states that the Town needs to improve the gateways to the Town, specifically, "the degree to which a community shapes this first impression can say a great deal to visitors about the values of residents and businesses." Arguably the largest visual impact of the project is to travelers along 1-84 (Viewpoint 13 reproduced as Figure 3 above) as they approach interchange for the Town and the City of Middletown. It does not appear that such a "first impression" reflects "the values of the residents and business" as described in the Comprehensive Plan.	
		Finally, and perhaps most concerning, is what the Comprehensive Plan says about the specific zoning district in which the project is located:	
		"Currently, the MI district in Wawayanda is large and allows certain uses (i.e. 'other manufacturing' or mining) that are vague or not in line with the Town's vision. Permitted uses and/or district designations need to be redefined."	
		The Comprehensive Plan explicitly states that the district within which the action is placed needed to be redefined so that uses "not in line with the Town's vision" could be excluded. The "clean low impact" non-residential uses called for in the Comprehensive Plan are quite dissimilar from the large-scale industrial use proposed.	
		As an outsider using only the written materials as evidence, I find it difficult to reconcile the vision for the community described in the Comprehensive Plan for Wawayanda with the proposed project and the impacts it creates. It is not apparent how the community character described in the year 2020 Vision Statement can be supported through the construction of this project and the materials provided in the Community Character chapter do nothing to show how the	

⁹ Page 2.2 ¹⁰ Page 5.1. It should be noted that, by name, the Plan identified Routes 6 and 17 as gateways, and is silent on if the entrance to the Town from I-84 should be considered a gateway.

11 Page 12.3

	Response to Comments on Section 16.0 – Community Character		
DEIS Section	Comment Number	Comment/Response	
		project is consistent with the Town's vision.	
		SEQRA requires that actions be consistent with local plans. The FEIS must show how the project is consistent with the vision of the community as detailed in the Comprehensive Plan. Lacking that, the FEIS must show evidence why the project does not need to follow the vision of the community as described in the Comprehensive Plan. This could be another more recent plan or perhaps a resolution that clarifies the community's vision. Regardless of the evidence that is selected to support the argument, the project's impact on community character as it is described in the Comprehensive Plan must be more fully addressed in the FEIS, which will include the reconciliation of significant impacts on visual resources with impacts on community character.	
1		Response:	
		The Comprehensive Plan targets the area of the Project site for Mixed Commercial use. See Section 12.1 of the Comprehensive Plan, which states: "Figure 12-1, Plan Recommendations Map, was created based on a set of environmentally-based criteria, existing land use and zoning, current land use planning principals and residents' preferences. The entire Town was evaluated with respect to conservation characteristics and development characteristics. Then, the land use and zoning maps were overlaid, and the resulting map depicts the areas where specific uses, zoning designations or open space are proposed."	
		The Town's updated Zoning Law is based on the recommendations of the Comprehensive Plan. The Project is appropriately sited in a location currently zoned as Mixed Commercial (MC) (and previously zoned as Manufacturing Industrial (MI)). According to the Town of Wawayanda Zoning Law, the MC district is "to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses, and manufacturing." The Schedule of Zoning District Regulations for the MC District lists "Essential Services/Utilities" and "Industrial Uses" as permissible with a Site Plan Approval and Special Use Permit. The proposed Facility is consistent with the uses associated with the new MC district.	
		The community character in the currently undeveloped area along Route 6 (where the Project site is located) and that is recommended for Mixed Commercial land use in the Town's Comprehensive Plan, will change over time as projects are proposed, approved, and then constructed.	
1		Also, see responses to Comments PB1-25, PB1-57, and PB1-58.	

	Response to Comments on Section 16.0 – Community Character		
DEIS Section	Comment Number	Comment/Response	
16.0 Community Character	L-6-59	What are the impacts to structures in the neighborhood? With the increased concentration of pollutants in the water and the air, what are the impacts to the paint on houses and cars, roofs and architectural features of structures? **Response:*	
		Emissions of particulate matter, generally in the form of carbon compounds, can result from fuel combustion and have the potential to deposit on building surfaces. Over long periods of time, particles can accumulate and affect the appearance of painted surfaces. This process is referred to as soiling. The secondary annual National Ambient Air Quality Standard (NAAQS) for PM ₁₀ was set to protect against numerous welfare effects, including the soiling of buildings. The secondary annual NAAQS for PM ₁₀ was set at a level of 150 μg/m³. The maximum annual PM ₁₀ impact from the Project was predicted to be 0.14 μg/m³. This level is less than 0.3% of the corresponding secondary NAAQS. Therefore, emissions from the Project would not be expected to cause any soiling on homes or buildings in the area. With respect to impacts on water, the Project will minimize water use by using treated effluent from the City of Middletown Sewage Treatment Plant. In addition, the Project will discharge process water back to the City of Middletown Sewage Treatment Plant in compliance with any pre-treatment requirements and thus will not affect surface water quality. The Project will not discharge to groundwater and will have a SWPPP and a SPCC Plan in place to prevent impacts to surface and groundwater quality.	

	Response to Comments on Section 17.0 – Cumulative Impacts			
DEIS Section	Comment Number	Comment/Response		
17.0 Cumulative Impacts	PB1-63	Section 17.2 discusses cumulative socio economic and fiscal impacts. We note the Hudson Group has provided which call for additional analyses which may require some changes to this section, however, this is not known at this time.		
		Response:		
		Comment noted. Please see the responses to the Hudson Group's comments on Section 7.0 Socioeconomics of the DEIS. The comments are referenced as PB3-1 through PB3-15.		
17.0 Cumulative Impacts	PB1-64	Section 17.2 ends with a conclusion that states "In summary, from a cumulative socio-economic standpoint, the large revenues related to the CPV Valley Energy Center will provide much needed revenue for the Town and will help offset the additional costs for municipal services that will result from the other proposed projects". Without additional information on the PILOT or the costs associated with the other projects, it is not possible to evaluate the merit of this claim.		
		Response:		
		Sufficient information has been provided on the PILOT in Section 7.0 of the DEIS. Specifically, see Section 7.4.4. This subsection goes well beyond what is typically included in a DEIS or an Article X Application for a power plant in New York.		
17.0 Cumulative Impacts	PB3-16	In our January 16, 2009 Comments Document, last page 9, we said: "If the applicant conducted all the fiscal impact analysis that we have outlined earlier, this would likely address our comments for these two DEIS subject areas."		
		The following is excerpted from the end of the revised latest DEIS section 17.3. "In summary from the cumulative socio-economic stand point the large revenues related to" (CPV Valley project)will provide much needed revenues for the town and will help offset the additional costs for municipal services that will result from the other proposed projects."		
		Since we do not know at this point the negotiated PILOT amounts for the town and school district, or even some possible lower or upper payment estimates against full payment of property taxes based upon taxable assessments, nor the Host Community Compensation Package, we cannot evaluate the merits of this DEIS findings. It is unsubstantiated, as are many other economic and fiscal impacts findings.		

	Response to Comments on Section 17.0 – Cumulative Impacts		
DEIS Section	Comment Number	Comment/Response	
		Response: The statement in the DEIS is appropriate, accurate, and consistent with the approved Scoping Document. Please refer to the response to Section 7.0, Socioeconomics, Comment Number PB3-4 for more details. In summary, the DEIS provided the approximate PILOT payments of other power projects for illustrative purposes. This was to provide the public with an overview of how the PILOT arrangement works. Those payments were presented in comparison to the property taxes of the Project site, which is the baseline, to demonstrate the positive fiscal impact in comparison to the tax revenue derived from the Project site today. A comparison to projected future property taxes if the plant is constructed is neither necessary to understand the fiscal impacts of the Project, nor appropriate given that it would be highly speculative, and that the Project will not be constructed in the absence of a PILOT agreement.	
17.0 Cumulative Impacts	L-6-60	An expert hired by the Lead Agency should review the data contained in Section 17-4, referring to air quality pollutants. **Response:*	
		Allegiance Resources (ARC), the Planning Board's air quality consultant, has reviewed this information.	
17.0 Cumulative Impacts	L-6-61	There are a number of routing options provided in Section 17-5 for the gas line. The first in the list disturbs the least amount of wetlands. Is that the option being used by the Applicant? If not, it should be used to best preserve wetlands.	
		Response: The gas pipeline will be a separate project, sponsored and owned by a third party. Environmental impacts associated with each of the natural gas pipeline supply alternatives will be evaluated under a separate jurisdictional review. Impacts associated with construction of an underground natural gas pipeline can be mitigated through implementation of wetlands restoration programs. For the final routing of the natural gas transmission line, environmental impacts will be avoided, minimized, and mitigated as appropriate.	

	Response to Comments on Section 17.0 – Cumulative Impacts		
DEIS Section	Comment Number	Comment/Response	
17.0 Cumulative Impacts 9.0 Air Quality	L-6-72	What are the cumulative health impacts on humans and animals from all emissions? For example, Revere Smelting is reported to be releasing 60.7 pounds of arsenic per year. What are the releases from all locations within the 5-mile radius for arsenic? Will this facility be contributing to those releases, and what are the impacts on children and seniors?	
		Response:	
		Tables 12-6 and 12.7 of the DEIS lists the materials used for operation. Arsenic is not processed or produced.	
		Trace amounts of arsenic may be emitted due to the combustion of fuel. The DEIS provides maximum predicted annual impacts of potential Project emissions of several non-criteria pollutants, including arsenic. The maximum Project impact was calculated by adding the maximum predicted annual impact from each individual combustion source at the Project even those these impacts do not necessarily occur at the same location. The resulting upper bound estimate of maximum annual Project impacts for arsenic is less than 6% of the corresponding Annual Guideline Concentration (AGC) defined by NYSDEC for arsenic.	
		Review of NYSDEC's DAR-1 AGC/SGC Tables, as revised September 10, 2007, shows that the annual guideline concentration (AGC) defined by NYSDEC for arsenic was set at a level equivalent to a one in a million cancer risk. Therefore, the maximum predicted Project impact of arsenic is less than 6% of the level defined to be equivalent to a one in a million cancer risk.	
		The most recent data (2007) available from EPA's Toxics Release Inventory (TRI) were searched to identify facilities that reported arsenic emissions under the TRI Program. The nearest facility reporting arsenic emissions in 2007 was Revere Smelting & Refining, which reported arsenic emissions of 50 pounds to the air. This facility is slightly more than 5 miles from the air emission units proposed by CPV Valley Energy Center.	
17.0 Cumulative Impacts 9.0 Air Quality	L-6-73	The Applicant should address the following: www.epa.gov/fedrgstr/eo/eo13045.htm . **Response:	
		The intended link is to Executive Order 13045—Protection of Children From Environmental Health Risks and Safety Risks. This order was issued April 23, 1997.	
		This executive order is directed at federal agencies. It requires each federal agency to make the identification of environmental health and safety risks that may disproportionately affect children a high priority. It also requires federal agencies to ensure that their policies, programs, activities, and standards account for any	

	Response to Comments on Section 17.0 – Cumulative Impacts		
DEIS Section	Comment Number	Comment/Response	
		disproportionate risks to children that may result from environmental health or safety risks. As discussed above, this executive order applies to federal agencies and thus does not apply to the Project. It should be noted that various standards set by the USEPA (including National Ambient Air Quality Standards) routinely are set at levels to protect sensitive populations, such as children, and account for factors specifically related to children, such as their increased sensitivity to certain environmental exposures and differences in respiration rate and lung capacity.	
17.0 Cumulative Impacts	L-13-4	The DEIS indicates that the power plant is principally supplied by natural gas. Since a source of natural gas is apparently 2-8 miles away (depending upon selected route), it appears pertinent to explore the viability, risks, and impacts of the various supply routes beyond the DEIS' desktop study. Decoupling the point of use and the supply appears ill-conceived when neither the power plant nor the supply pipeline would exist without each other *Response:* The gas line will be designed, constructed, owned, and operated by the supplier, not CPV Valley. It is not part of CPV Valley's Project. It will be reviewed in a separate regulatory and environmental impact review proceeding prior to construction. CPV Valley is not seeking any of the permits for construction of the gas line. The gas supply alternatives are examined in appropriate detail, and in full compliance with the approved Scoping Document, in Section 17.5, Gas Line Cumulative Impact Analysis of the DEIS.	

	Response to Comments on Section 18.0 – Other Environmental Impacts		
DEIS Section	Comment Number	Comment/Response	
18.0 Other Environmental Impacts	PB1-65	Section 18.3.1 incorrectly states the intent of the MI district. According to the Schedule of Zoning District Regulations for the MI district, "This district is intended to provide areas for various industrial and manufacturing enterprises within well-planned complexes on parcels with good access to the regional transportation system, where they can be free of potentially incompatible land uses" [emphasis added]. This last phrase was omitted from the DEIS and in its place is the phrase "which allows electric generating facilities by special permit". This is also incorrect. The list of special uses does not include electric generating facilities. This proposed use has been described as "other industrial" in other sections of the DEIS.	
		<u>Response:</u>	
		With the newly adopted Zoning Law, Section 18.3.1 should read as follows:	
		Construction of the Project would result in the development of 21.25 acres of a 122 acre property for the purpose of electric generation. The Project site is located within the Mixed Commercial district of the Town of Wawayanda (See Figure 3-2). According to the Town of Wawayanda's Zoning Law, the Mixed Commercial District is intended to provide the Town with a principal area for intensive non-residential development such as office, retail, service business and manufacturing. Even under the prior Zoning Law, however, the comment was not correct. The DEIS and CPV Valley's special permit application demonstrated that the Project is compatible with the former MI district, and with the land uses surrounding the Project site. Further, the Project was classified as a use that could be authorized by special permit in the MC district.	
18.0 Other Environmental Impacts	PB1-66	Section 18.4.4 states that development of the facility is consistent with the goals of the Town of Wawayanda. Please see our earlier comments on Section 3.0 –Land Use. This statement may need to be revised once additional analysis is provided in the FEIS. Further, the reference to "expressly allows electric generating facilities by special permit" needs to be corrected as noted in the previous item.	
		Response:	
		Please see responses to those same comments.	
18.0 Other Environmental Impacts	PB1-67	It is our understanding Section 18.7 is being reviewed by Allegiance Resources.	

	Response to Comments on Section 18.0 – Other Environmental Impacts			
DEIS Section	Comment Number	Comment/Response		
		Response:		
		Comment noted.		
18.0 Other	L-6-62	How is the Applicant going to monitor the electrical fields?		
		Response:		
		Electric and Magnetic Fields (EMF) analyses were performed as part of the DEIS. The results confirmed that the design meets New York State Public Service Commission guidelines regarding EMF levels at right-of-way boundaries.		
18.0 Other	L-6-65	Section 18-4 states that the Applicant will be using locally available construction workers, and in other locations states that it will be using union workers from this area. Please clarify the estimated percentages of local and unionized workers to the estimated total workforce. In addition, how will the Applicant ensure that the workers hired are capable of constructing a plant of this magnitude, and have the proper expertise?		
		Response:		
		The DEIS acknowledges the commitment to utilize union and local labor; however, the exact percentages are not fixed at this time. Contractors experienced with projects of this scale and magnitude will be utilized. These constructors are contractually and via industry reputation incentivized to maintain the expertise necessary to construct such a facility.		
18.0 Other	L-6-66	Section 18-4 states that there will be increased local revenue. The source and amount of such revenue must be identified. Also, to what extent will such increased local revenue be adversely impacted by the net loss and/or delay of revenue that will result from the referenced PILOT agreement? The proposed PILOT agreement must be attached as an exhibit to the FEIS so as to provide the public with an opportunity to comment on the PILOT Agreement.		
		Response:		
		Section 7.4 (Socioeconomic Impact) describes the economic benefits of the Project, including the secondary		

	Response to Comments on Section 18.0 – Other Environmental Impacts		
DEIS Section	Comment Number	Comment/Response	
		economic benefits/revenues.	
		Also Appendix 7-A (Volume II of the DEIS) includes an independent study of the "The Economic and Fiscal Impacts of Construction of the CPV Valley Project. The PILOT agreement goes through a separate public hearing process.	
18.0 Other	L-6-67 L-7-12	Section 18-5 makes mention of "possible additional facilities." These "additional facilities" must be further identified and studied, even on a generic basis. There must be an opportunity for the public to comment on these additional facilities?	
		Response:	
		As stated on page 18-8 of the DEIS, one gas interconnection option that had been under consideration could potentially have improved the reliability of the gas distribution system in the area. Under this option, there would likely have been additional piping, valves, pressure regulation, etc. facilities added to the system. The addition of these facilities could have provided reliability benefits to the Orange and Rockland system. However, this equipment would not be identified until it was confirmed to be the natural gas supply option and further engineering is performed by Orange and Rockland Utilities. The gas line and associated structure would be the subject of a separate comprehensive environmental permitting process, either through FERC or the PSC Article VII law. As noted above, however, CPV Valley has executed an agreement with the Millennium Pipeline, and now plans to receive its gas supply from that pipeline.	
		CPV Valley is not proposing to construct a 145 kV switchyard as mentioned in Section 18.5 of the DEIS. The switchyard mentioned in the DEIS was in reference to a 345 kV switchyard. However, since the electrical interconnect now includes the underground transmission line, the 345 kV switchyard has been replaced by a set of breakers located adjacent to the facility and the 345 kV GIS substation located adjacent to the Marcy South 345 kV transmission line.	
18.0 Other	L-6-68	The magnetic field information and report are outdated. This section requires review by an expert of the Planning Board, and requires more recent information.	
		Response:	
		The section on electric magnetic fields (Section 18.7 of the DEIS) was conducted in accordance the New York Public Service Commission requirements and standards.	

	Response to Comments on Section 18.0 – Other Environmental Impacts		
DEIS Section	Comment Number	Comment/Response	
		The study was conducted in the Fall-Winter of 2008 specifically for the DEIS. The analyses conducted were based on current engineering design plans.	
18.0 Other	L-6-70	It appears that the riser pole is one of the most dangerous aspects of this project. How is the Applicant protecting the pole, and the plant for that matter, from public access other than installing a 6-foot fence?	
		Response:	
		The riser pole will be moved to the location adjacent to the existing 345 kV Marcy South transmission line, located in the City of Middletown. Rather than the riser pole being a stand-alone structure as previously described, the riser pole will now transition the underground cable directly into the GIS building located at the point of interconnection. The GIS building will be restricted from public access.	
		The on-site switchyard previously depicted in the plans will be reduced from the five breaker configuration to a two breaker configuration. The electric transmission line will transition to an underground arrangement after exiting the two breakers. It will follow the same path that was identified for the above-ground configuration, ultimately reaching the GIS building to be built in the City of Middletown, adjacent to the existing transmission lines. The underground cable will transition from underground within the building and then tie into the existing lines.	
		For the Facility, as stated on page 6-2 of the DEIS, the Project site will be secured by 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. The gate will be staffed at all times. The Facility security will be controlled by the Facility's operators in the control room 24 hours per day, 7 days per week, and 365 days per year.	
18.0 Other	L-7-15	Finally, allow me to note that Orange Environment (OEI or OE) was an active intervener in the administrative hearings that occurred for a predecessor to Valley Energy Center, Calpine's effort to build a similar plant in your town from roughly 1995-2002. In those hearings, our principle work occurred around three issues. Calpine reached settlement with OEI on these issues. We would like to offer 3 similar arrangements in the current matter as means of mitigating some of the concerns that we have raised.	
		Response: Comment noted.	

DEIS Section	Comment Number	Comment/Response
General	L-12-1	Will there be an opportunity for the town people to vote "yeh or neigh" on this project? If not, why not?
		Response:
		There is no provision in State law that would authorize a referendum on the Project.
		There has already been, and there will continue to be, extensive opportunities for public participation and comment with respect to the CPV Valley Project. The Board conducted public scoping of the DEIS. The Board's consultants and sub-consultants performed extensive review of the DEIS and deemed it complete for public review and comment. The Board then initially set a public comment period on the DEIS that was roughly twice the minimum required by the SEQRA regulations. The Board further extended the comment period by another three weeks. The balance of the SEQRA process will include a further public review period after acceptance of the FEIS and before issuance of SEQRA Findings by the Board.
		Both the NYSDEC and EPA are responsible for reviewing the Air Quality Permit Application and issuing permits. The Air Permit process will involve a public comment period. Similarly, NYSDEC and the U.S. Army Corps of Engineers are reviewing the Wetland Permit Application and will issue permits. There will be a public comment period for that process as well. There will also be a public comment period as part of the SPDES Permit process through NYSDEC if an individual SPDES permit is required for the Project.

	Response to Comments on Section 19.0 – Alternatives		
DEIS Section	Comment Number	Comment/Response	
19.0 Alternatives	L-6-74	The Alternatives do not consider or study options for green production or the use of solar and wind energy. One example of utilizing green technology to benefit Town residents is to use the recycled heated water to clear sidewalks in the Town. The Applicant should study various different green options that could be incorporated into its plan to further mitigate environmental impacts within the multiple alternatives studied.	
		Response:	
		This site was not considered for solar or wind because of the site characteristics and location. Significant land area and specific conditions are required for wind towers and solar panels, to produce the amount of electricity that the CPV Valley Energy Center will produce.	
		For example, on open, flat terrain, a utility-scale wind farm requires about 60 acres per megawatt of installed capacity (American Wind Association, 2009). A wind plant located on a ridgeline in hilly terrain will require less space, as little as two acres per megawatt. A 630 MW wind farm project would require 37,800 acres of land, with about 250 wind towers each of 400 feet high.	
		The most concentrated solar technologies (Concentrated PV or Solar Thermal) require approximately 5 acres per MW. A project the size of the CPV Valley Energy project would require 3,150 – 5,000 acres to accomplish the same generation capacity.	
19.0 Alternatives	H-25-1	Just in the paper today there was a solar power plant that communities were looking at. I don't know why we are not looking at building and bringing companies that want to provide solar power and manufacture power that way instead of just looking at gas and so forth.	
		Response: See response to Comment Number L-6-74.	

		Response to Comments on Section 19.0 – Alternatives
DEIS Section	Comment Number	Comment/Response
19.0 Alternatives	PB1-68	It is our understanding Allegiance Resources is providing comments on this section.
		Response:
		Comment noted.
General	PB1-3	The entire action is not depicted on the Site Plans. The above ground transmission lines and its associated 150 foot right of way from the facility to 17M are missing although it is discussed in the text and appears on various figures in the DEIS. This has potential implications related to visual impacts.
		Response:
		The onsite electric transmission line right-of-way is shown on numerous plans throughout the DEIS (e.g., Figures 1-1, 2-1, 2-4, as well as the figures in Sections 3.0, 11, 14, etc). The Existing conditions and impacts of the electric transmission lines are fully evaluated throughout the DEIS.
		Subsection 5.4.2.4 of the Visual Resources section (Section 5.0) discusses the potential impacts of the electric transmission line. Appendix 4 of the FEIS includes an additional visual impact assessment of the aboveground electric transmission line. See Section 2.3 of this FEIS for discussion of the electric transmission line.
		The Figures 2-7A and B (Site Plan) of the DEIS have been revised to include the electric transmission line right- of-way and are included in the figures section of the FEIS.
General	PB1-16	In several places in the DEIS, it mentions that the project will occupy approximately 22 acres out of the 122 acre site. Please identify the number of acres associated with environmental constraints which make certain portions of the site unsuitable for siting a building, in particular the acreage of wetlands, so that a better understanding of the impact on the site.
		Response:
		The Project site is 122 acres, of that that there are approximately 70 acres of wetlands.

Response to Comments on Section 19.0 – Alternatives			
DEIS Section	Comment Number	Comment/Response	
Site Plans	PB5	McGoey, Hauser and Edsall, engineers to Planning Board, provided on the site plans dated January 28, 2009 and February 13, 2009 to CPV as part of the Site Plan review process. Appendix 5A of the FEIS includes a copy of the letter and CPV's responses to the comments. The site plans have been revised to reflect the comments, and are included in Appendix 5B of the FEIS.	

5.0 RESPONSE TO PUBLIC COMMENTS RECEIVED ON THE ADDITIONAL STUDIES DOCUMENT

In response to comments received on the DEIS, the following technical memoranda were prepared and made available for public review from March 8 through March 22, 2010, prior to issuing the final FEIS. The memoranda are included as appendices to the FEIS:

- Spring and Summer 2009 Ecological Field Survey Report, which provides the results and assessment of the seasonally dependent ecological surveys conducted as proposed on page 14-65 of the DEIS and agreed to by the Planning Board's consultants (Appendix 2A of the FEIS)
- Technical Memoranda regarding comments on the Visible Plume and Secondary Formation of Fine Particulate Matter (PM_{2.5}) (Appendix 3A of the FEIS)
- Technical Memorandum: Visual assessment further analyzing the impacts of the above ground electric transmission line. Additional photosimulations were prepared to complement the visual assessment included in the DEIS (Appendix 4 of the FEIS)

Comment letters were received from the following agencies and individuals:

- A. Orange County Department of Planning, March 23, 2010
- B. George M. Janes & Associates, March 22, 2010
- C. Alicia R. Albertson and George H. Albertson, March 22, 2010
- D. Marianne Feely, March 22, 2010
- E. New York State Department of Environmental Conservation, April 20, 2010
- F. New York State Department of Environmental Conservation, April 23, 2010

Copies of the letters are provided in Appendix 1D of the FEIS.

Each comment is provided below followed by a response to the comment.

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
General	A-1	The Department has received the additional studies for the Draft Environmental Impact Statement for the above reference site plan. Although we appreciate the extra work involved with the additional studies that address some of our concerns, many issues raised in our letter date April 22, 2009 remained unaddressed. We have also have concerns with elements of the additional studies; we outline these concerns below.	
		Response:	
		Responses to Orange County's April 22, 2009 comment letter on the DEIS are provided in Section 4.0 of the FEIS. Appendix 1C of the FEIS includes a listing of each comment provided by Orange County and the page number of the FEIS where the response is located.	
Air Quality	A-2	We found Section 2 of the Additional Studies (and Section 9.0: Air Quality of the DEIS) difficult to interpret. Though this is undoubtedly due, in part, to our limited expertise in such a specific technical field, we were unable to find answers to basic questions in the section. Orange County is currently non-attainment for both ozone and fine particulate matter $(PM_{2.5})$. As such, the potential for any air quality impacts is among the most significant of all impacts associated with this project. We recommend that this Section be amended to improve its readability to the average reader. Specifically, we also recommend that the following be clearly answered:	
		Response:	
		Section 3.3, Air Quality: Secondary Formation of $PM_{2.5}$ and 3.4, Visibility of Plumes, of the FEIS provide a summary description of the technical studies, which should be easier to understand for the average reader.	
		The presentation of air quality information in Section 9.0 of the DEIS is consistent with technical information required by both USEPA and NYSDEC for an electric generating facility.	
Air Quality	A-3	What will be the specific changes (degradation), if any, in local air quality once the facility is in operation?	
		<u>Response:</u>	
		Please see response to <u>Comment Number L-5-4</u> (Response to Comments on Section 9.0 Air Quality), of Section 4.0 of the FEIS.	

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
Air Quality	A-4	What are the potential impacts if any of degraded air quality to people living and working in close proximity to this project? Of highest concern, due to their close proximity, are residents of Horizons at Wawayanda apartment complex and residents living on Kirbytown Road and Route 6.	
		Response:	
		Please see response to <u>Comment Number L-5-5</u> (Response to Comments on Section 9.0 Air Quality) of Section 4.0 of the FEIS.	
Air Quality	A-5	What are the alternative emissions offsets and how will they improve local, micro, and regional air quality? In particular, how will NOx and VOCs be reduced in the region due to the construction of the power plant?	
		These questions should be answered in a way that clearly distinguishes between impacts associated with combusting natural gas and impacts associated with combusting oil.	
		We further recommend the applicant utilize the best available control technology to eliminate or mitigate pollutants from the stacks.	
		Response:	
		Please see response to <u>Comment Number L-5-6</u> and <u>Comment Number L-5-7</u> (in Response to Comments on Section 9.0 Air Quality), of Section 4.0 of the FEIS in response to the first two questions.	
		The Applicant is required by EPA to use best available control technology and/or lowest available emission rate technologies to control and reduce emissions. Section 9.3 of the DEIS summarizes the control technologies proposed for the Project. The technologies include, but are not limited to, use of low-sulfur fuels, good combustion and oxidation catalyst, Dry Low NOx (DLN), and Selective Catalytic Reduction (SCR).	
Visual	A-6	We appreciate the updated, computerized renderings of the proposed power plant with the transmission lines. However, we recommend that the computerized renderings of the proposed facility be regenerated to include the chain link fence as well as the entire length of the electric transmission lines that are proposed along I-84. These renderings should be consistently in all of the materials associated with this project in order to more correctly represent how the facility will appear.	

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
		Response: The chain link fence is included in the photosimulation from the I-84 viewpoint. See Figure 3-5B of the Technical	
		Memorandum included as Appendix 4 in the FEIS. The chain link fence is 8 feet high in comparison to the building structures which are 113 feet high and is therefore not that noticeable in the rendering.	
Visual	A-7	We recommend that the landscape plan include additional vegetation buffers in order to visually soften the view of the proposed facility. Specific examples include, but are not limited to, planting a line of tress along the boundaries with I-84 and Route 6 for the same reason. Priority should be given to native tree species that ground to substantial heights with a full canopy. Native evergreens may be an appropriate choice.	
		Response:	
		The Project will utilize 30 acres of the total 122 acre Project site (less than 24%), and the remaining land (76% of the parcel) will be left in its natural or existing state. The Project includes a landscaping plan that is intended to provide visual buffering for the surrounding areas. Through selective tree plantings, development of a landscaped buffer area will be pursued to minimize impacts of the Facility to residences along Route 6. Land to be left as buffer outside the Facility fence line will be restored to its current open space use after construction.	
		The landscaping plan will be addressed in the site plan review and approval process with the Town of Wawayanda Planning Board and will be in compliance with local code.	
Ecology	A-8	We appreciate the applicant's completion of the following biological surveys:	
		 stream biomonitoring for Carpenter's Creek and other onsite streams field surveys of vegetation 	
		 wetland plans of conservation concern site survey of two potential vernal pool areas, including determination of presence of vernal pool species summer roosting habitat for Indiana bat 	
		Since the survey work confirmed the presence of two vernal pools, with one located directly below the transmission line, we strongly recommend additional field surveys be completed to determine which upland areas are used by resident	

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
		amphibians during hibernation and migration. We further recommend the applicant limit the removal of vegetation in the vicinity of vernal pool VP1 as much as possible thereby reducing the potential to compromise the habitat of any salamanders, as salamander populations are generally decreasing in the region. This population decrease makes salamanders more likely to become threatened or endangered as their habitats are impacted by vegetation clearing and development. In fact, the Metropolitan Conservation Alliance's technical paper titled "Best Development in the Northeastern United States" states the following:	
		Site clearing removes shade trees, which alters local climate, resulting in elevated vernal pool water temperatures and increased drying of the forest floor. Amphibians are sensitive to alterations in temperature and are highly subject to desiccation. Elevation temperatures in vernal pools can increase algal productivity; thereby reducing oxygen available to developing amphibian larvae and increasing the likelihood of larval die-offs (p. 20).	
		Response: Two vernal pools were identified on the Project site; both vernal pools were rated as "low biological value." Only small numbers of spotted salamander egg masses were found in the two confirmed vernal pools; therefore, it is safe to conclude that only a small number of adults use the forested area around the pools during non-breeding season. The vernal pools will not be directly disturbed as a result of Project construction; however there will be removal of tree cover over one of the pools and a portion of nearby forested upland and wetland habitat will be cleared for the electric line corridor for the other pool. A small percentage of this area will be converted to a non-forested electric right-of-way corridor, while the remaining area remains forested. Vernal pools occur extensively in right-of-way corridors in the northeast, and adult salamanders can thrive under both undeveloped open canopy and woodland conditions. No additional surveys are warranted.	

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
Ecology	A-9	We commend the applicant for proposing measures to reduce the spread and/or onsite dominance of invasive species and to transplant the state endangered Georgia bulrush and the state-endangered blue eyed grass that may be on the site to a proposed on site wetland replication area. We recommend that the applicant provide a map showing the location for all transplanted plants within the "Spring and Summer 2009 Ecological Field Survey Report." We hope that measures proposed including the vegetating of the wetland replication area with native plant species will be effectively implemented.	
		Response:	
		The Site Plans which are included in Appendix 5B of the FEIS shows the location of the wetland mitigation area and details for transplanting the Georgia bulrush and Blue-eyed grass.	
Ecology	A-10	We also appreciate the proposed 120 foot "undisturbed vegetated riparian corridor" along the streams on this site, as this corridor will reduce potential erosion, stormwater run-off and habitat damage resulting from the proposed project.	
		We further commend the limited removal of trees suitable for the Indiana bat roosting site at this site, based on its "Indiana Bat Roosting Tree Survey." This limited removal of suitable trees increases potential onsite locations that may be utilized by the bat in the future.	
		Response:	
		Comment noted.	
Other	A-11	We would like to reiterate the following concerns outlined in our letter dated April 22, 2009 and not addressed by the additional information provided by the applicant.	
		Response:	
		The responses to the comments from Orange County's April 22, 2009 letter are included in Section 4.0 of the FEIS. See Appendix 1C of the FEIS for an index listing of Orange County's comments and the page number where the response is located within the FEIS.	

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
Visual	B-1	This review focuses on substantive issues regarding the incremental environmental impacts of the transmission poles and wires that are the subject of this additional study.	
		Summary The Additional Visual Impact Analysis shows the proposed transmission poles and wires to be a startling addition to near-field viewpoints including I-84 and its entrance ramp, NYS Route 17, and Horizons at Wawayanda. Viewed from a greater distance, the transmission poles and wires will be difficult to see and will not significantly alter the character of the views. The Planning Board should consider requiring measures that mitigate the impacts of the transmission poles and wires on near-field viewpoints. These mitigation measures include burying all or some of the wires, conifer screens, and/or offsets. The benefit of mitigation measures considered need to be weighed against both the environmental and financial cost of implementing them, and all mitigation measures require additional study to evaluate effectiveness, costs and feasibility. **Response:**	
		The Project has been refined to place the electric transmission lines underground. Therefore, the views of transmission poles and wires will be eliminated.	
Visual	B-2	New photosimulations The transmission poles and wires, and the vegetation removal associated with clearing the ½ mile long wide right-of-way, were not included in the DEIS photosimulations for the CPV Valley Energy Center. The Additional Visual Impact Analysis included new photosimulations and analysis so that the impacts of these elements of the action were disclosed. Three photographs from the DEIS were reused for the new photosimulations. Additional photographs were taken from I-84 (two views) and from Horizons at Wawayanda. These were constructed as panoramas so that all of the action seen from the viewpoint could be shown in each photosimulation.	
		The quality of the photosimulations, while acceptable for commencing public review, may have minor issues. In addition to minor production issues, my office has questioned the assumptions used to remove vegetation along the utility right-of-way, especially from the I-84 viewpoints; we have concerns that the existing vegetation removal may be understated. Because of the size of the transmission poles, however, existing vegetation does not offer much screening and the photosimulations still disclose visual impacts as required. The applicant has agreed to reexamine these minor	

		Response to Comments on the Additional Studies Document:
Topic	Comment Number	Comment/Response
		issues in the FEIS and make clarifications, if needed.
		Response:
		The photosimulation from the viewpoint heading east along I-84 (Figure 3-5B) has been revised as recommended by the Planning Boards' consultant. The remaining minor issues were reviewed and the applicant has determined that the photosimulations are of suitable quality and that no additional clarifications are needed.
		Nevertheless, this comment describes the aboveground electric transmission lines, which are no longer being proposed.
Visual	B-3	Incremental impact of the wires From viewpoints taken at higher elevation, some distance from the action (Bates Gates Road, Kirbytown Road), the transmission poles and wires do not create significant incremental visual impacts; the scale of the power plant and distance helps to mitigate the scale of the poles and, because they are located in a low point relative to these viewpoints, the wires will be difficult to distinguish from the vegetation that surrounds them. From near-field viewpoints (Balchem (NYS Rte. 17), Horizons at Wawayanda, and I-84 entrance ramp), however, the poles and wires are startlingly visible and will introduce a dramatic change in the nature of views from these locations. The transmission poles introduce a feature with a scale that is dramatically different than surrounding structures. Additionally, from these near field locations the viewer looks up to the wires, which are clearly visible against the sky. From each of the above viewpoints the proposed transmission poles introduce a significant feature into the landscape that is highly contrasting with the existing view, and create large visual impacts distinct from the power plant itself, which is either not visible or can only be seen far in the distance. The impacts of individual poles are not equal. From the above viewpoints, pole 5 has the largest impact; pole 4 has a smaller impact, and so on down to pole 1, which cannot be seen from these viewpoints. From other viewpoints shown in the technical memo, the impacts of pole 1 and, to a lesser extent, pole 2 are mitigated by their proximity to the power plant itself. Simply, the scale of the power plant dominates views where these poles can be seen, which means that the scale of the first poles will not contrast with elements of the view as much as poles 3, 4 and 5, which are further away from the facility.

5-8

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
		Pole 5, the riser pole, is unlike the other poles and most other transmission poles found in Wawayanda and elsewhere. The transmission wires transition underground at this pole, which is the reason for its unusual design. It is the tallest pole (at approximately 130 feet) and has large arms with appendages that direct the wires into the pole and then downward into the ground. Independent of its location, the riser pole will have a larger visual impact than the other poles due to its unusual design and height.	
		Response:	
		The Project has been modified to place the electric transmission lines underground.	
Visual	B-4	Mitigation Wetland follow up from January 27th Meeting The photosimulations found in the additional visual impact analysis technical memo were presented to the Planning Board at their January 27th meeting. At that meeting there was discussion between Planning Board members regarding burying all or some of the wires as a mitigation measure for these near-field viewpoints. During that discussion the issue of the right-of-way traversing a wetland was acknowledged, though the location of the wetlands was incorrectly referenced during the meeting. The largest wetland starts in-between poles 1 and 2 and continues to the riser pole (pole 5) near NYS Route 17. Smaller wet areas exist between the facility and pole 2. The January 27th Planning Board discussion incorrectly identified the area around poles 3, 4 and 5 as not being in wetlands and the discussion focused on burying the wires strung from the poles with the largest impact (3, 4, and 5) and not 1 and 2 because of wetland concerns under poles 1 and 2. Virtually all of the open area visible between the entrance ramp and Horizons are wetlands; if the poles with the largest impact (3, 4 and 5) from this viewpoint are removed, the wires will be buried entirely through wetlands.	
		Other mitigation measures The DEC identifies the following measures (From page 7 of Assessing and Mitigating Visual Impacts, 2000.) as methods that can be used to mitigate visual impacts:	
		 Screens and buffers: using landscaping, berms or other measures to block views of the development; Relocation: moving elements of the action out of view of the resource; 	

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
		Camouflage: hiding the action by using sensitive colors and materials;	
		• Low profile: lowering structure heights, either directly or with grading to lower site elevations;	
		• Downsizing: Reducing the number, area or density of objects;	
		• Alternative technologies: Substituting one technology for another;	
		• Non-specular materials: Using building materials that do not shine;	
		• Lighting: use of visually sensitive lighting design;	
		• Offsets: Offsetting impacts of an action by removing unrelated visually discordant elements.	
		Because of their height and relative distance to the poles, vegetative screens and buffers are not an obviously effective mitigation measure. Nevertheless, screens of large conifers placed close to the I-84 westbound entrance ramp, NYS Route 17, and Horizons at Wawayanda may provide some screening, but cannot be as effective as relocating the wires underground, which would remove all the visual impacts associated with this part of the project.	
		Regarding other mitigation measures, the materials proposed are non-specular and the color of the wires and poles are a neutral gray. This portion of the action is unlit and alternative technologies seem unlikely. It is my understanding that the pole height and density is the minimum required and there is no other pole design that would have materially less impacts on visual resources.	
		The Planning Board may wish to investigate the concept of offsets. If there are unsightly or discordant features in the landscape that are unrelated to the project, the Planning Board may ask for the removal of those features as a kind of visual compensation for the introduction of the transmission poles.	
		Response: The Project has been revised to place the electric transmission lines underground, which would eliminate all visual impacts of the proposed transmission wires. The above comment is no longer applicable.	

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
Visual	B-5	Finding significance Without explicit input and direction from the Planning Board, it can be argued that the viewpoints which experience the greatest visual impacts (I-84, NYS Route 17 and Horizons at Wawayanda) are not viewpoints that were selected because they are highly valued visual resources. They appear to be "side-of-the-road" viewpoints selected because they will experience the largest visual impacts from the action, not because they are a locally valued visual resource. Through their guidance documents, the DEC tells us that if these viewpoints are not locally valued visual resources, even if they experience large visual impacts, they would not be significant impacts requiring mitigation. The Planning Board can state that these views are valued locally for their scenic quality, which would make them a visual resource, even if they experience large visual impacts, they would not be significant and require the mitigation of those impacts. If these are not locally valued views, the Planning Board may still make a finding of significance that would require mitigation, based upon the impact the transmission wires will have on community character that would require mitigation, based upon the impact the transmission wires will have on community character. 2 On significance DEC states: "Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Significant each of the submit of the public enjoyment and appreciation of an inventoried resource, or one that impairs the character or guality of	
		The referenced DEC Program Policy (page 2) states that local resources are frequently designated through local zoning and planning process. In the Town of Wawayanda, the comprehensive plan (page 9.7) states that "There	

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
		are opportunities throughout the Town to recognize the unique character of scenic roads and preserve them as view corridors with a Rural Road Standard. The purpose of such a standard is to remind the future public officials and NYSDOT that certain roads need to maintain a rural or scenic character. The Town's Comprehensive Plan recognizes several roads be codified as view corridors, including: Guinea Hill Road, Lime Kiln Road, County Route 12, Mt. Orange Road, South Centerville Road, Ridgebury Road, Post Road, Greeves Road, Gardnerville Road, Stony Bar Road, Delmar Hill Rod, the Flat's Section of Route 284, and Jogee Road.	
		Interstate-84, Route 17, and Horizons at Wawayanda are not identified as visual resources of local concern in the Town's Comprehensive Plan. Rather, they were identified as visual resources of local concern during the DEIS process. Sections 5.2.3.2 and 5.2.3.3 of the DEIS identify the visual resources of local concern studied for this project and include these viewpoints along with several others.	
		While the quality of the view, how the view is experienced, and the duration of the view may all be mitigating factors when assessing impacts and developing mitigation strategies, these viewpoints must be considered visual resources of local concern because they were so identified during the SEQRA process. With the preferred option of placing the electric transmission lines underground, however, any visual impact these viewpoints experience from the transmission wires will be entirely mitigated.	
Visual	B-6	Recommendations The impacts the transmission poles and wires have on either visual resources and/or the community character of the area justifies measures that mitigate the impacts of the wires. The most effective mitigation measure would be to bury the wires through the entire right-of-way. The environmental benefits of burying the wires need to be balanced against the environmental cost of damaging the wetlands through which they travel, and any additional financial cost of burying the wires and maintaining buried wires.	
		The wetlands through which the wires will traverse will be damaged either through the construction of the transmission poles or the burying of the wires. The right-of-way will have to be maintained in either instance, which will continue to damage this wetland. The Planning Board has not been presented with information about either the environmental or financial costs of burying the wires. I recommend that these costs be investigated so the Planning Board can understand the consequences of removing the poles and burying the wires. Regarding financial feasibility, the DEC provides guidance that states that 10% of the total cost of the project is reasonable for all environmental mitigation measures, including visual impacts (DEC Policy System: <i>Assessing and Mitigating Visual Impacts</i> , 2000, page 8.)	
		Should burying the wires be too high of an environmental and/or financial cost, I encourage the Planning Board to	

	Response to Comments on the Additional Studies Document:		
Topic	Comment Number	Comment/Response	
		investigate the effectiveness of thick conifer buffers set close to I-84 and NYS Route 17, and in back of Horizons at Wawayanda. It is possible that tall conifers placed close to the viewer in these areas would block or partially block views to the wires. Finally, the Planning Board should investigate the potential for offsets in the area around the wires. An example of an offset would include using the transmission poles also hold cellular antenna panels, adding cellular capacity to the area and possibly eliminating the need for one or more cellular towers. Another offset example would include removing decommissioned facilities that detract from the aesthetic quality of the area, should any such facilities exist.	
		Response:	
		CPV Valley is pursuing the option of installing the electric transmission lines underground within the Project site as discussed in Section 2.3 of the FEIS.	
		<u>Costs</u>	
		The cost of underground transmission cable is significantly more expensive than overhead cable. The expense for converting the proposed overhead portion of the electrical interconnect to an underground configuration results in a doubling of the transmission component of the Project. The doubling of costs represents an additional \$26.2 million. The combination of these factors originally led to a hybrid configuration of the transmission line that balanced the impacts to the wetlands and overall cost to the Project.	
		<u>Reliability</u>	
		Concerns over reliability of underground lines have been expressed by the transmission line owners. Maintenance and more specifically, repairs due to a fault on the line are of concern for overall reliability of the electrical system. Repairs to the line can be made much faster to the overhead lines and the reliability of the system can be maintained. For underground cabling, it is more difficult to locate the faults and once located, it is much more time consuming to replace the section of line where there is a fault in the cable. These issues were taken into consideration when considering the impacts to system reliability. Minimizing the amount of underground cabling would minimize impacts to the reliability of the system. To address these issues, the interconnection was originally designed to minimize the amount of underground cable to only those areas where overhead transmission lines and structures could not be accommodated.	
		<u>Visual Impacts</u>	
		The underground installation of the electric transmission lines eliminate any visual impacts caused by the	

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		overhead configuration and supporting pole structures.	
		See Appendix 2D (response to NYSDEC letter on the Joint Wetlands Permit Application dated October 17, 2011) of the FEIS for a discussion of wetland impacts of the above ground and underground options.	
Ecology	C-1	According to the 2009 Ecological study this plant will displace some animals and bats; this will disrupt the natural balance of this area. For instance if we displace the bats (bats eat insects) then there will be an increase of insects. This could also mean an increase of virus's carried by insects for example the West Nile Virus. This could be putting our health at risk, especially the young and the old.	
		<u>Response:</u>	
		The Project will not displace animals or bats. The Indiana bat has not been identified at the Project site. The ecological survey was conducted to determine if the habitat (i.e., specific types of trees and foraging areas) exists for the bats. In addition, this survey only considered one species of bat due to its protected status. Other more abundant bat species and other insectivores are likely to occur at the site and will continue to utilize forested wetlands, forested uplands, wet meadows, upland fields, and the riparian corridor as part of their roosting and foraging habitat.	
		Below is a summary of the ecological survey as it relates to the Indiana bat habitat:	
		The survey of potential Indiana bat roosting trees within the main forested area found a total of 18 trees of the requisite size and "structural" characteristics containing loose, peeling bark. Trees identified included several different species. Based on the forest acreage and the requisite tree count, the area contains at least one potential roosting tree per 2.5 acres.	
		The construction of the electrical interconnect line will result in the loss of two trees identified as potential summer roosting habitat. The remainder of the potential roosting trees both to the north and south of the proposed line will not be impacted. Furthermore, the loss of these two trees still maintains a density of at least one roost tree per 2.5 acres.	
		According to the U.S. Fish and Wildlife Service Draft Indiana Bat Revised Recovery Plan (FWS, 1999), the Indiana bat is fairly adaptable with regard to changes in roosts such as tree harvesting, and readily moves from one roost site to another within a season. As a result of this adaptability, as discussed in the Recovery Plan, the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.)	

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		does not prohibit the clearing of trees, and the Service's primary goal is not the protection of every tree. Where clearing is necessary within known summer roosting habitat within five miles of a hibernaculum, such clearing is recommended to occur between November 15 and March 31.
		Therefore, clearing of the Project's electrical interconnect route and the two potential roosting trees does not result in an impact to the potential summer roosting habitat for Indiana bat available on the site. In addition, in order to further eliminate any potential impacts to existing or future roosting habitat, right-ofway corridor will be cleared between November 15 and March 31.
		Of the 122 acre site, the Project will only use a 30 acre portion leaving the rest of the site in its existing or natural conditions, including approximately 70 acres of wetlands.
		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 overhead electrical interconnect and the use of roadway shoulders for the underground portion. 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 and existing overland utility corridors to minimize use of any new overland routes/corridors.
		Regarding foraging habitat, see also the response to Comment Number E-2 , below.

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Visual	C-2	I have noted that in the visual impact analysis that from the Kirbytown Rd, the resident's views will be irreversibly damaged. This will bring down property values for those residents as well as quality of life. Looking out in my back yard my children will be looking down on a large facility with 275 foot smoke stacks with huge plumes of smoke carrying PM2 particle matter; this is not acceptable to me. I chose to move to Wawayanda for the scenic views, a good school system, clean air and knowing that with a location like Wawayanda. I would have a good resale value for my property. I do not feel this type of project belongs in a rural setting such as Wawayanda. When the residents were surveyed this kind of project was not wanted in the area.	
		<u>Response:</u>	
		With respect to visual impacts, the Project will be visible from select locations, with most views limited to areas close to the vicinity of the Project where trees, buildings, and topography do not visually shield the structures. It is acknowledged that your property has open views of the Project site and will have direct views of the CPV Valley Energy Center. The Project will include landscaping along Route 6 to help mitigate and soften views of the Facility from your and other nearby properties to the extent possible.	
		Most of Kirbytown Road itself and many of the residences will not have views of the Facility during leaf-on conditions as the view will be blocked by the intervening trees.	
		The analyses provided in the DEIS provide several data points to assess the impact on housing prices. The conclusion of two of the three studies were that there was no negative impacts to housing values resulting from the siting of a power plant nearby. The third study, which utilized census data upon the limitations of which the author commented, yielded results indicating a modest negative impact. However, the data was not based on house values from actual sales, but rather was based on the respondent's current view of what their house would sell for, which produced a more speculative result than could have been achieved through use of actual market data.	
		Another study performed by the Hudson Group (former consultant to the Town of Wawayanda Planning Board) during the Article X proceeding for the Empire Generation Facility in Rensselaer concluded "that after evaluating the potential negative and positive environmental, visual, and traffic externalities, there are not likely to be any discernable impacts on property values - pro or con - to residential or non-residential properties in the vicinity of the proposed facility."	
		Condensed water vapor exiting the stack during certain temperature and humidity conditions is the only visual plume impact of a combined cycle plant. The plant stacks will not emit visible smoke.	

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		The air quality impact modeling analyses demonstrate that the Project will comply with all National Ambient Air Quality Standards (NAAQS) that have been established by the U.S. EPA, including those for fine particulate matter. The primary NAAQS were established to protect human health, including the most sensitive populations, such as the elderly, asthmatics, and children. The secondary NAAQS were established to protect human welfare, including protection against decreased visibility and damage to animals, crops, and buildings. The modeling analyses also show that the Project will comply with all New York State Ambient Air Quality Standards, with Federal Prevention of Significant Deterioration (PSD) increments that limit the extent to which existing air quality can be degraded, and with short-term and annual guideline concentrations established by NYSDEC for toxic air contaminants.
Other - Safety	D-1	I am responding to the Notice of Public Comment Period advertised in the Times Herald Record regarding CPV Valley, LLC. I have many concerns about this project. First, I would like to address the safety of this kind of facility. In Middletown Connecticut, there was a natural gas explosion during construction of a power plant similar to the kind CPV is planning to construct here in Wawayanda. What safety measures do they have in place to assure that does not happen here? Our local fire companies do not have the manpower or the equipment for an emergency of that scale. **Response:**
		The Kleen Energy incident that occurred in Middletown Connecticut was a very unfortunate industrial accident. While the specifics of that accident will be under review by the appropriate agencies for some time, there are some publicly-available details that provide insight into what occurred and how such an accident can be avoided in the future.
		The explosion occurred while the contractor was purging the natural gas pipe going into the facility. The practice of purging the gas pipe with natural gas has been used frequently throughout the industry for many years without incident. Over the past twenty (20) years, there have been approximately 330,000 MW of combined-cycle natural gas power projects brought on line. During the course of commissioning these facilities, there was never before an accident as unfortunate as the one at Kleen Energy.
		Based on the preliminary reports and information gleaned from various news sources, it appears that the natural gas used to purge the natural gas pipe at the Kleen Energy facility was vented to an outdoor location that had restricted air flow where the natural gas was able to collect adjacent to the building. In addition, basic safety procedures were not followed such as clearing the site of potential ignition sources and nonessential personnel. These are serious breaches of safety protocol while performing such a procedure. The combination of the natural gas being allowed to vent to a confined area where it collected and an ignition source in that area caused

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		the explosion. It appears that the incident could have been avoided if the natural gas had been vented up where it would not have collected, and further, if an ignition source was not permitted in the vicinity of the purging activity.	
		Experienced constructors familiar with constructing power generation facilities are keenly aware of the critical role of safety procedures and protocols in large construction projects. CPV only works with such contractors and such a constructor will be selected to construct the CPV Valley Energy Center. One energy project in construction in Rensselaer, New York recently completed the purging of its natural gas lines without any problems. The procedure had oversight from State Public Service Commission staff as will be the case with the CPV Valley Energy Center.	
		To prevent a similar situation from occurring at the CPV Valley Energy Center, at a minimum the following will occur:	
		 utilization of a qualified and experienced constructor, conforming to safety protocols (such as not venting natural gas into an enclosed area, remove potential ignition sources and nonessential personnel; 	
		2. utilization of lower explosion limit (LEL) detectors, etc.); and	
		3. Extensive communication with appropriate state and local officials regarding the procedure. There will be a detailed protocol for the procedure developed with input from the local officials at the time of commission. Based on adhering to this detailed protocol, utilizing experienced constructors familiar with natural gas pipelines and facilities of this nature, we would expect similar successful and safe purging of the natural gas line that has occurred throughout the industry and most recently in New York at the Empire Generating Station.	
Ecology	D-2	I am also concerned about the environmental impact of this project. The wildlife that has been living on this 20 acre site will be displaced. In the Indiana Bat Survey, 18 trees were identified to contain bats. Displaced bats and other animals will certainly menace the surrounding properties.	
		<u>Response:</u>	
		Please see the response to <u>Comment Number C-1 above</u> . In addition, the areas of the site being utilized for this Project include primarily agricultural fields, which are routinely disturbed and provide only marginal, temporary habitat features. While displacement of some wildlife species that use these habitats will occur, a large proportion of existing habitats such as forested wetlands, forested uplands, wet meadows, upland fields,	

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		and the riparian corridor will remain to support such species. Very few if any of the wildlife species that utilize the site would be considered as menace species.	
Visual	D-3	The two 275 feet tall smoke stacks at this generating plant are capable of releasing plumes 10,000 meters long and 500 meters tall. The fine air particles released will pollute the air and penetrate our lungs. The pollution these plumes distribute will affect the whole region, which is why other municipalities have stated their objection to this project.	
		Response:	
		The air quality impact modeling analyses demonstrate that the Project will comply with all National Ambient Air Quality Standards (NAAQS) that have been established by the U.S. EPA, including those for fine particulate matter. The primary NAAQS were established to protect human health, including the most sensitive populations, such as the elderly, asthmatics, and children. The secondary NAAQS were established to protect human welfare, including protection against decreased visibility and damage to animals, crops, and buildings. The modeling analyses also show that the Project will comply with all New York State Ambient Air Quality Standards, with Federal Prevention of Significant Deterioration (PSD) increments that limit the extent to which existing air quality can be degraded, and with short-term and annual guideline concentrations established by NYSDEC for toxic air contaminants.	
		Regarding the comment referring to the release of plumes 10,000 meters long and 500 meters tall, please see Section 3.4 of the FEIS. The prediction of very long and high plumes, which was included in the DEIS, was largely an artifact of the model used to predict plume formation. The modeling analysis was revised to provide more accurate and meaningful results estimating the frequency and extent of visible plumes. The revised results presented in the Technical Memorandum (included in Appendix 3A of the FEIS), and a summary is provided below:	
		 Visible plumes with a length of 50 meters or greater were predicted to occur for 13.2% of modeled hours, meaning that the remaining 86.8% of modeled hours would be characterized by shorter visible plumes or by no visible plumes. 	
		 Visible plumes are predicted to be most common in the winter and least common in the summer. 	
		 Visible plume frequency decreases with increasing plume length (in other words, longer visible plumes are less frequent than shorter visible plumes). 	
		 The frequency of very long and tall visible plumes is drastically reduced, and the 10,000 meter long plumes are no longer predicted to occur. 	

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Other	D-4	The City of Middletown has agreed to provide reclaimed water for cooling. If it is not sufficient, CPV has plans on drilling wells on site. Have there been any studies to how this will affect the local aquifer?	
		Response:	
		CPV Valley intends to obtain its process water from the City of Middletown's Sewage Treatment Plant. The ground water well option is presented solely as an alternative option. A test production well has been installed on the Project site. The 72 hour continuous pumping test at the Project site indicates that the test production well(s) are capable of producing continuous flows well in excess of 250 gpm for sustained periods of time. Under normal rainfall conditions of 40 to 50 inches of rain per year, recharge should be routinely available to the formation such that the normal radius of influence around the proposed well field would remain between 400 and 1,000 feet. During dry periods exceeding 4 weeks, the radius of influence may expand to as much as 1,000 feet with measurable impacts of several feet in the monitoring wells on site. If CPV Valley were to install a production well (which CPV Valley does not intend to do), the use of such well by CPV Valley would not be expected to decrease yields in any nearby wells.	
		The testing and monitoring program carried out in the Groundwater Study (DEIS Appendix 13-A) for the Facility demonstrates that withdrawal of up to 360,000 gpd would not have an adverse impact on adjoining well water supplies, or the aquifer in the vicinity of the Project site.	
Visual	D-5	With the main generation building being 113 feet above ground, an air-cooled condenser with a height of 115 feet, and transmission lines 130 feet high, the visual impact of this project will destroy the town's rural identity. As described in the DEIS Viewpoint 8, the Facility is substantially larger than any existing element of the view and the stacks break the established ridgeline, which is in contrast with the existing horizontal line of the view. While the color of the Facility is designed to minimize contrast, this view shows that there are visual impacts from this viewpoint that cannot be obscured with mitigation. and are attributable to the size and nature of the proposed Facility.:	
		Response:	
		The commenter appears to be referring to the viewpoint along Bates Gate Road, which is DEIS Viewpoint 6 not Viewpoint 8. With respect to visual impacts, the Project will be visible from select locations, with most views limited to areas close to the vicinity of the Project where trees, buildings, and topography do not visually shield the structures.	
		The community character in the currently undeveloped area along Route 6 (where the Project site is located) and	

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		that is recommended for Mixed Commercial land use in the Town's Comprehensive Plan will change over time as projects are proposed, approved, and then constructed. The proposed Project is consistent with character of the Route 6 corridor, which includes Pannattoni, NYSDOT, Frontier Communications, Tetz's gravel pit/concrete plant, Elvree Thermo-King, and other commercial/industrial uses.	
Other	D-6	CPV estimates construction will last approximately 2 years, and employ 650 to 700 workers on site. The noise of the construction will be disrupting on a daily basis, and the additional traffic will destroy our local roads. There are so many negative this project will have on our community, please take my concerns into careful consideration.	
		Response:	
		The proximity to I-84, Route 17M, and Route 6 facilitates access to the Project site. There are a few instances when the peak construction related traffic will cause deterioration in Level of Service (LOS) at a study location. The intersections with approaches that may experience lower peak hour LOS due to Project-related construction traffic include:	
		 Route 17M and Route 6/Sunrise Park Road (LOS degradation from C to D during peak morning and evening) 	
		Route 6 at Kirbytown Road (LOS degradation e from d to f during peak morning and evening)	
		The drop in LOS is generally moderate and will be temporary, lasting only during the 4 to 5 months of peak construction activity. Thereafter, conditions will return to pre-construction levels.	
		Traffic measures to mitigate these construction phase impacts will include police officer control for the duration required.	
		A detailed noise assessment of the proposed Project was conducted and was included as Section 10.0 of the DEIS. Calculated construction noise levels were shown to be below measured average (Leq) noise levels at all locations. No mitigation measures are therefore anticipated to be required. However, the Project will nonetheless require the use of functional mufflers on all equipment engine exhausts. Further, construction activities are currently scheduled to occur primarily during daytime hours.	
Ecology	E-1	The Ecological Report consists of additional ecological studies completed in Spring 2009. These studies were completed after the DEIS was accepted by the Town. In order to provide some context to the Department's comments attached is a copy of a letter dated July 9, 2009 from the Department to the project sponsor regarding its wetland	

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		application.	
		As indicated in the letter, the Department made a determination that the wetland application did not contain enough information for staff to commence the required public review period. The Department's primary issue with the application related to the potential impacts from the installation of the electric transmission lines on wetlands. The construction and maintenance of these lines will have a direct impact on at least one of the vernal pools assessed in the Spring 2009 ecological studies.	
		As the Town Board will note, the Department, other than acknowledging that the transmission line will have some level of impact on the wetland, did not draw any conclusions regarding the significance or acceptability of the impact. Instead, what the Department concluded was that the project sponsor needed to demonstrate that the impacts on these wetlands could not be avoided. Therefore, Department staff requested an evaluation of alternative transmission line routes in order to completely avoid all impacts. Further, if the result of the alternatives analysis does find that no other reasonable alternatives exist than the project sponsor must look at minimizing the wetland impacts. Lastly, if the impacts cannot be avoided the Department will consider mitigation options. However, the determination to accept mitigation will depend on staff's weighing of the project impacts against the benefits.	
		Until the referenced analyses completed and submitted for review the Department cannot make a determination regarding the project and its ability to meet the standards for permit issuance set forth in the regulations. In addition, it is the Department's opinion that without this information the environmental record is also inadequate because 6 NYCRR Part 617 (State Environmental Quality Review) requires that impacts be minimized to the maximum extent practicable.	
		Response:	
		A response to NYSDEC's comment letter describing wetland minimization and avoidance measures has been submitted to the NYSDEC and is provided in Appendix 2D of the FEIS.	
		Please see Section 3.2.1 of the FEIS for a discussion of vernal pools. A vernal pool survey was conducted in the Spring 2009. Only two vernal pools were identified on the Project site (VP-1 and VP-2). Both vernal pools were rated as "low biological value." The vernal pools will not be directly impacted as a result of the Project. The Project may indirectly impact the two vernal pools by removing part of the adjacent forested habitat for the placement of the underground electrical line. The impacts on these two vernal pools will not be significant.	

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Ecology	E-2	<i>Indiana Bats:</i> Roosting habitat was assessed, but summer foraging was not assessed, only mentioned briefly. The Department's data base shows two maternity colonies were found within 1.2 miles of the site. An assessment of the total acreage of trees being cleared for the ROW for the transmission line should also be completed.	
		<u>Response:</u>	
		Summer roosting habitat for Indiana bat was evaluated for the project and discussed in the "Spring and Summer 2009 Ecological Field Survey Report," which was submitted to the Planning Board on November 4, 2009. The report is included in Appendix 2A of the FEIS.	
		According to the United States Fish and Wildlife Service (USFWS) Indiana Bat Draft Recovery Plan, most maternity colonies of Indiana bats that are known exist in fragmented landscapes with low-to-moderate forest cover. However, maternity colonies have been found in environments that vary considerably in amount of forest cover, and only generalizations can be made about the most significant habitats and the degree and type of fragmentation that the bats use. Telemetry studies have found that Indiana bats prefer foraging in forested riparian, riparian, lowland, and upland forest. Indiana bats hunt primarily around, not within, the canopy of trees, but they occasionally descend to subcanopy and shrub layers. In riparian areas, Indiana bats primarily forage around and near riparian and floodplain trees, including solitary trees. Old fields and agricultural areas are also used by bats for foraging, although the forest-field edge is used more often than the interior of fields.	
		Therefore, with the overall site development occurring primarily within an agricultural area, the clearing of the electrical transmission right-of-way occurring along the edge of an already fragmented forest patch, and the preservation and proposed enhancement (via additional tree planting) of the riparian area along Carpenter Creek, impacts to the potential foraging habitat of Indiana bat is considered to be minimal. The amount and location of existing forest-field edge will remain virtually unchanged after site development, and the significant riparian/buffer areas to be preserved and enhanced along Carpenter Creek will continue to provide foraging habitat for Indiana bat. Finally, the clearing of the electrical transmission right-of-way will likely have minimal effect on foraging habitat since, while the right-of-way has been located to minimize clearing forest canopy to the extent practicable, the cleared right-of-way will actually result in the addition of edge habitat.	
Air Quality	E-3	Department staff reviewed the Fine Particulate Matter Report that addresses PM _{2.5} increases resulting from secondary PM _{2.5} formation. Based on its review, staff have determined the analysis completed by TRC adequately addresses the concerns in the DEIS review process. Staff specific comments are provided below;	
		Assuming that the methodology for calculating secondary formation is valid, then the increases in the annual	

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		concentration (0.15 ugm-3) and 24hr concentration (0.64 ugm3) fall below the lower limits of the proposed significant impacts levels for both averaging times (0.3 ugm-3 and 1.2 ugm-3, respectively). The applicant has updated its PM _{2.5} monitoring values using the years 2006-2008 as requested. With the resulting increases in the monitored background, the peak 24hr value (30.2 ugm-3) and the annual value (10.3 ugm-3 fall below the NAAQS when both direct and indirect PM _{2.5} impacts are included in the compliance analysis. The applicant has noted that compliance has been achieved without the inclusion of VOC and NOx emissions offsets. It appears that the applicant has not yet identified the name and precise location of the source providing the offsets.	
		Response:	
		Comment noted. The Applicant will provide additional information to the Planning Board concerning the source of emission offsets for NOx and VOCs once the offsets have been procured contractually. See Section 4.1.10 of the FEIS for additional discussion.	
Visual	F-1	In a letter dated April 20, 2010 staff of the New York State Department of Environmental Conservation ("Department") indicated it would provide comments on the Additional Visual Impact Analysis Report ("VIA Report") dated February 4, 2010 prepared for the CPV Valley Energy Center. Based on a review of the VIA Report the Department has determined that the analysis contained in the VIA Report, in conjunction with the visual analysis contained in the DEIS, meets the requirements of the Department's visual policy titled Assessing and Mitigating Visual Impacts (DEP -00-2). The Department's detailed comments on the VIA Report are provided below.	
		First, the Department believes it was completely reasonable for the Town of Wawayanda Planning Board ("Planning Board") to request the additional visual analysis to determine the potential visual impacts of the transmission lines. Transmission lines are a critical component of any power project that potentially can have significant visual impacts.	
		With regard to the specific visual analysis, the Department found the general methodology for assessing the impacts to be consistent with the Department's visual policy. As you are aware, the Department's visual policy is focused on the potential visual impacts on resources of statewide significance. The most recent VIA Report did not include any specific photosimulations from any resources considered to be of statewide significance. This is most likely due to the fact the visual analysis in the DEIS already adequately addressed these potential impacts. Specifically, no impacts on statewide resources were identified in the DEIS analysis.	

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		Response: Comment noted. The DEC is correct in that the DEIS did adequately address the potential impacts to visual resources of state wide significance. Photosimulations were prepared from three resources of state wide significance, including the Paramount Theater in Middletown (Viewpoint 1), the proposed Orange Heritage Trail (not built yet) (Viewpoint 2), the Primitive Baptist Church of Brookfield (Viewpoint 7). The Facility will be barely visible from the Paramount Theater as shown in Figure 5-2B of the DEIS. Similarly the Facility will be barely visible from the area of the proposed Orange Heritage Trail as shown in Figure 5-3B of the DEIS. The Facility is not visible from the Primitive Baptist Church as shown on Figure 5-8B of the DEIS. The visual assessment of the above ground electric lines did not show impacts to visual resources of statewide significance, and therefore, that is why there are no photosimulations included from such viewpoints.	
Visual	F-2	In a phone conversation, Planning Board Chairperson Barbara Parsons indicated that potentially, some portion of the transmission line was going to be buried by the project sponsor. It was the understanding of staff that the installation of the transmission line below ground was in order to mitigate potential visual impacts on local resources. Because the visual impacts are primarily local in nature the Department will not provide comment on the issue. However, as indicated in its previous letter the Department is interested in avoiding and minimizing onsite wetland impacts. If locating the transmission lines underground in order to mitigate visual impacts also allows wetland impacts to be avoided the Department fully supports the modification.	
		The Department would also like to clarify one of its comments in the April 20, 2010 letter. Specifically, the Department stated that without the wetland impact avoidance and minimization analysis the environmental record was incomplete. The Department should have indicated that it believes it would be appropriate to include this analysis in the FEIS. Although it is the Planning Board 's ultimate decision, it does not appear that a Supplemental DEIS would be required for this issue alone.	
		Again, thank you for the opportunity to comment and reaching out to the Department specifically on these issues. Please contact me if you have any questions.	
		Response: A response to NYSDEC's comment letter describing wetland minimization and avoidance measures has been submitted to the NYSDEC and is provided in Appendix 2D of the FEIS.	