

SCOPING SUMMARY REPORT

CHAMPLAIN HUDSON POWER EXPRESS TRANSMISSION LINE PROJECT ENVIRONMENTAL IMPACT STATEMENT



**U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
Washington, DC 20585**

**Cooperating Agencies:
U.S. Environmental Protection Agency
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
New York Department of Public Service
New York Department of Environmental Conservation**

DECEMBER 2010

ACRONYMS AND ABBREVIATIONS

AC	Alternating Current	NOAA	National Oceanic and Atmospheric Administration
CFR	Code of Federal Regulations	NOI	Notice of Intent
CHPEI	Champlain Hudson Power Express, Incorporated	NYISO	New York Independent Systems Operator
CP	Canadian Pacific Railway	NYSPSC	New York State Public Service Commission
CSX	CSX Railroad	NYSCC	New York State Conservation Council
CZMA	Coastal Zone Management Act	NYSDEC	New York State Department of Environmental Conservation
DC	Direct Current	NYSDPS	New York State Department of Public Service
DOE	U.S. Department of Energy	NYSTA	New York State Thruway Authority
EIS	Environmental Impact Statement	SCFWH	Significant Coastal Fish and Wildlife Habitats
EMF	Electromagnetic Fields	USACE	U.S. Army Corps of Engineers
EO	Executive Order	USEPA	U.S. Environmental Protection Agency
EPAct	Energy Policy Act of 2005	USFWS	U.S. Fish and Wildlife Service
HVAC	High Voltage Alternating Current		
HVDC	High Voltage Direct Current		
km	kilometer		
kV	kilovolt		
MW	megawatt		
NEPA	National Environmental Policy Act		

**SCOPING SUMMARY REPORT
CHAMPLAIN HUDSON POWER EXPRESS EIS**

TABLE OF CONTENTS

1. INTRODUCTION..... 1

 1.1 OVERVIEW 1

 1.2 PUBLIC OUTREACH 1

 1.3 COOPERATING AGENCIES 2

 1.4 PROJECT CHRONOLOGY TO DATE 4

 1.5 PROJECT OVERVIEW 5

2. SCOPING COMMENTS..... 7

APPENDICES

- A. Federal Register Notice**
- B. Newspaper Advertisements and Affidavits**
- C. Example Press Release and Press Release Distribution**
- D. Meeting Transcripts**
- E. Comment Letters**
- F. Detailed Route Maps**
- G. Chronological Listing of Scoping Commenters and Summarized Comments**

FIGURES

1. Project Regional Map 3

TABLES

1. Dates and Locations of the Public Scoping Meetings..... 2

2. Summary of Scoping Comments Received by DOE 9

3. Directory of Stakeholder Comments..... 19

THIS PAGE INTENTIONALLY LEFT BLANK

1. Introduction

1.1 Overview

On January 25, 2010, Champlain Hudson Power Express Inc.¹ (CHPEI) applied to the U.S. Department of Energy (DOE) for a Presidential permit in accordance with Executive Order (EO) 10485, as amended by EO 12038, and the regulations codified at 10 Code of Federal Regulations (CFR) 205.320 et seq. (2000), “Application for Presidential Permit Authorizing the Construction, Connection, Operation, and Maintenance of Facilities for Transmission of Electric Energy at International Boundaries.” The DOE Office of Policy, Siting and Analysis, in the Office of Electricity Delivery and Energy Reliability (OE-20) is responsible for issuing Presidential permits. The Presidential permit for CHPEI (OE Docket Number PP-362), if issued, would authorize CHPEI to construct, operate, maintain, and connect the U.S. portion of the project, which consists of an electric transmission line that would cross the international border between the United States and Canada, near the village of Rouses Point, New York. A project overview is provided in **Section 1.5**, and additional project details are provided in CHPEI’s January 25, 2010, application letter to DOE, as amended on August 5, 2010. All of these documents are available on the DOE Web site at <http://chpexpresseis.org>, and additional project information is also available on the Applicant’s Web site at <http://chpexpress.com>.

Pursuant to the National Environmental Policy Act of 1969 (NEPA), and in considering an application for a Presidential permit, the DOE must take into account possible environmental impacts of the proposed facility. DOE has determined that an Environmental Impact Statement (EIS) is the appropriate level of environmental review under NEPA for granting the requested Presidential permit. DOE will use the NEPA planning process to encourage agency and public involvement in the review of the proposed project, and to identify the range of reasonable alternatives. The public outreach process is designed to facilitate the public discussion of the scope of appropriate issues to be addressed in the EIS.

1.2 Public Outreach

On June 18, 2010, DOE published in the *Federal Register* its Notice of Intent (NOI) to Prepare an EIS and to Conduct Public Scoping Meetings; Notice of Floodplains and Wetlands Involvement; Champlain Hudson Power Express, Inc. (75 FR 34720). The Notice of Intent (NOI), provided in **Appendix A**, explained that DOE would be assessing potential environmental impacts and issues associated with the proposed project and reasonable alternatives. The NOI was sent to interested parties including Federal, state, and local officials; agency representatives; stakeholder organizations; local libraries, newspapers, and radio and TV stations; and private individuals in the vicinity of the proposed transmission line. Issuance of the NOI commenced a 45-day public scoping period that ended on August 2, 2010. However, the NOI did note that comments submitted after the deadline “would be considered to the extent practicable.”

DOE placed advertisements in 32 local and regional newspapers along the proposed project corridor to invite the public to local scoping meetings, and to announce their times and locations. Copies of newspaper tear sheets and affidavits are included in **Appendix B**. In addition, press releases were

¹ CHPEI is a joint venture of TDI-USA Holdings Corporation (TUHC), a Delaware corporation, and National Resources Energy, LLC (NRE). TUHC is owned by Transmission Developers, Inc. (TDI), a Canadian Corporation and by Sithe Global TDI LLC (Sithe Global TDI). Sithe Global TDI is a wholly owned subsidiary of the Blackstone Group L.P. NRE is a wholly owned subsidiary of National RE/sources Group, a limited liability corporation duly organized under the laws of the State of Connecticut.

sent out to 10 local radio and 17 television stations and to 26 newspapers prior to the meetings. **Appendix C** contains an example of the press releases and a list of media outlets to which they were sent.

During the public scoping period, DOE conducted seven scoping meetings: one in Connecticut and six within the Hudson River Valley corridor of New York State. **Figure 1** provides an overview of the route of the proposed transmission line along with an identification of the locations where scoping meetings were held. The meetings occurred between July 8 and July 16, 2010, as noted in **Table 1**.

Table 1. Dates and Locations of the Public Scoping Meetings

Meeting Date	Location	Number of Attendees
July 8, 2010	City Hall, Bridgeport, CT	10
July 9, 2010	Federal Building, Manhattan, New York City	25
July 12, 2010	Royal Regency Hotel, Yonkers, NY	27
July 13, 2010	Holiday Inn, Kingston, NY	28
July 14, 2010	Holiday Inn, Albany, NY	31
July 15, 2010	Ramada Inn, Glens Falls, NY	18
July 16, 2010	Hampton Inn, Plattsburgh, NY	28

The meetings provided the public with the opportunity to learn more about the proposed project and to provide comments on potential environmental issues associated with the project. A total of 33 people gave verbal comments at the meetings, and their comments were transcribed by court stenographers. Transcripts of the scoping meetings along with materials submitted at the meetings are provided in **Appendix D**. In addition, DOE received scoping comments in the form of 22 written letters or emails from private citizens, government agencies, and nongovernmental organizations. A copy of the comment letters received during the scoping period and written materials submitted for the record at the scoping meetings are included in **Appendix E** to this report and are also available at <http://chpexpress.org>.

DOE's Draft EIS will also contain a subsection that summarizes the comments received during the scoping period.

1.3 Cooperating Agencies

DOE has invited several Federal and state agencies to participate in the preparation of the EIS to ensure that it satisfies the environmental requirements of those agencies to make their respective determinations regarding their permitting processes and to engage their specialized expertise. Region 2 of the U.S. Environmental Protection Agency (USEPA), the New York District of the U.S. Army Corps of Engineers (USACE), and the New York Field Office (Region 5) of the U.S. Fish and Wildlife Service (USFWS) are Federal cooperating agencies. In addition, the New York State Department of Public Service (NYSDPS) and the New York State Department of Environmental Conservation (NYSDEC) are cooperating agencies in the development of the CHPE Project EIS.

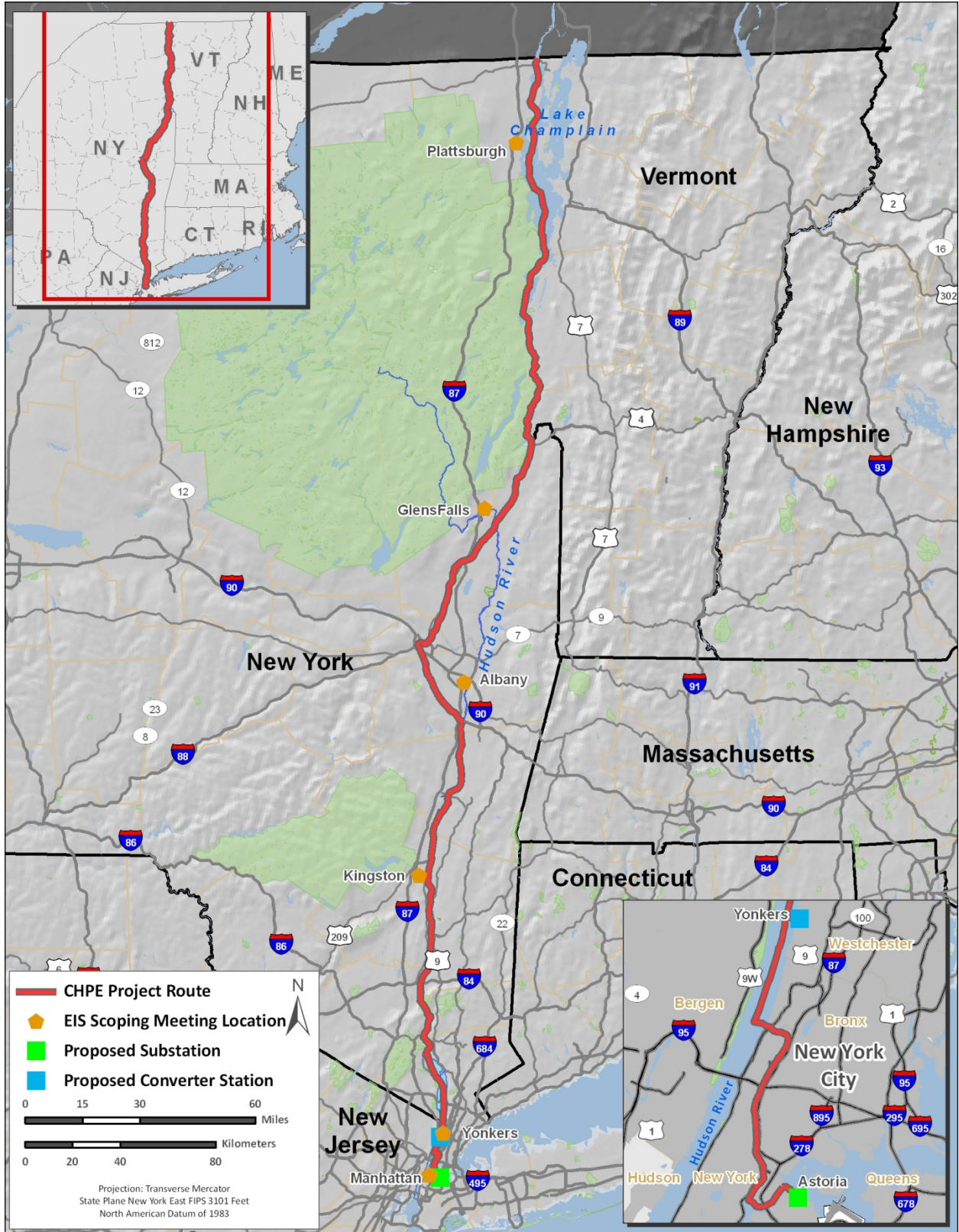


Figure 1. Project Regional Map

The following outlines each agency’s requirements for the EIS:

USEPA. The USEPA does not have a direct regulatory role in the permitting process for the CHPE Project. However, Federal law provides for USEPA review of draft and final EISs. Specifically, the USEPA’s Office of Federal Activities has the following responsibilities:

1. Review and prepare written comments on NEPA documents prepared by Federal agencies.
2. Review all major proposed Federal actions subject to NEPA and work with Federal agencies to avoid, minimize, and mitigate adverse environmental impacts.
3. Coordinate with Federal agencies to maximize environmental protection of proposed projects
4. Foster interagency partnerships to promote environmental stewardship in planning and implementing Federal actions.

USACE. The USACE will use the EIS in their decisionmaking for the permits that would be required under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. In accordance with 33 CFR Part 325 Appendix B (8)(c), the USACE will coordinate with DOE to ensure that the CHPE Project EIS can be adopted by USACE in support of its decisionmaking requirements on the Section 10 and Section 404 permit application by CHPEI.

USFWS. The USFWS role as a cooperating agency will include evaluation of environmental impacts on fish and wildlife, in general. They will also evaluate potential environmental impacts on federally listed threatened and endangered species and designated critical habitat and might issue a Biological Opinion based on a potential Biological Assessment prepared for the project.

NYS DPS. Construction and operation of the CHPE Project would require that the New York State Public Service Commission (NYSPSC) issue a Certificate of Environmental Compatibility and Public Need (Certificate) and a Federal Clean Water Act of 1972 (CWA) Section 401 Water Quality Certification. The NYSDPS, who serve as staff to the Commission, has requested Cooperating Agency status to coordinate its review with that of DOE.

NYSDEC. NYSDEC has responsibility for the review and approval of projects that would affect water quality, wetlands, and air quality within the state and has promulgated a number of regulations that would affect the development of the CHPE Project. NYSDEC has requested cooperating agency status in the NEPA process to participate in reviewing the scope and the analysis included in the EIS. NYSDEC will review the EIS, evaluate impacts and mitigation measures in accordance with the State Environmental Quality Review Act, and provide comments on the EIS to DOE.

1.4 Project Chronology to Date

The following timeline summarizes the scoping process events previously described:

January 25, 2010	DOE received CHPEI application for Presidential permit.
June 18, 2010	DOE issued <i>Federal Register</i> NOI (75 FR 34720) to Prepare an EIS.
July 8 to 16, 2010	Seven public scoping meetings held in Connecticut and New York State.
August 2, 2010	Scoping period ended.
August 5, 2010	CHPEI submitted addendum to Presidential permit application eliminating the Connecticut portion of the project, changing the proposal from two parallel cables to one cable, and moving a portion of

the transmission line from the Champlain Canal to a railroad right-of-way.

1.5 Project Overview

The CHPE project is described in the January 25, 2010, application letter to DOE as amended by additional correspondence on August 5, 2010, both of which are available on the DOE project Web site at <http://chpexpressEIS.org>.

According to the Applicant's Presidential permit application, the proposed transmission system comprises a 1,000-megawatt (MW) Voltage-Sourced Converter controllable High Voltage Direct Current (HVDC) bipole. A bipole consists of two connected submarine or underground cables, one of which is positively charged (+), and the other negatively charged (-). This two-cable bipole would be laid between Quebec, Canada, and a converter station in Yonkers, New York (see **Figure 1**). The CHPEI stated purpose of and need for the proposed transmission line is that it would connect sources of renewable power generation in Canada with load centers in and around New York City.

Detailed maps showing the entire proposed project route are included in **Appendix F** and posted on DOE's Web site at <http://chpexpressEIS.org>. The Project's precise final route is subject to a number of factors, including resource issues, permitting, land acquisition, and stakeholder agreement. As noted in Section 1.4, since the publication of the NOI, the Applicant's proposal was revised to eliminate the Connecticut portion of the project, reduce the project's total transmission capacity, and change the location of one segment of the transmission line route from the Champlain Canal to a nearby railroad right-of-way.

The project would originate at an HVDC converter station near Hydro-Québec TransÉnergie's 765/315-kilovolt (kV) Hertel substation, located southeast of Montreal, and travel approximately 35 miles (56.3 kilometers [km]) to the international border between the United States and Canada, crossing the border to the east of the village of Rouses Point, New York, within the town of Champlain, New York. South of the international boundary, the bipole would travel south under Lake Champlain for approximately 111 miles (178.6 km) entirely within the jurisdictional waters of the State of New York. At the southern end of Lake Champlain, the bipole would exit the water just north of Lock C12 of the Champlain Canal in the town of Whitehall, New York, and would be buried within an existing railroad right-of-way owned by Canadian Pacific Railway (CP) for approximately 65.7 miles (105.7 km) through the municipalities of Comstock, Fort Ann, Kingsbury, Fort Edward, Moreau, Northumberland, Wilton, Greenfield, Saratoga Springs, Milton, Ballston, Clifton Park, Glenville, and Schenectady, New York. In the town of Rotterdam, New York, the buried route would transfer to the CSX Railroad (CSX) right-of-way and proceed south for approximately 23.7 miles (38.1 km) through the municipalities of Guilderland, New Scotland, Voorheesville, and Bethlehem, New York. The proposed project route would exit the railroad right-of-way (ROW) and enter the Hudson River south of Albany at the town of Coeymans, New York.

Upon entering the Hudson River, the bipole would be buried in the river bottom for 118 miles (189.9 km) until it reaches the City of Yonkers, New York. The HVDC bipole cables would terminate at the converter station near Wells Avenue in Yonkers, New York, for a total length of approximately 319 miles (513.4 km) from the U.S. border with Canada to Yonkers, New York. From the Yonkers Converter Station, double-circuit 345-kV High Voltage Alternating Current (HVAC) cables would enter the Hudson River and travel south through the Hudson and Harlem rivers for a distance of approximately 14.3 miles (23 km). The HVAC cables would terminate in a spare bay at a new electric substation being constructed by the New York Power Authority on Consolidated Edison

Power Park property near the site of the former Charles Poletti Power Plant in Astoria, Queens, New York.

In addition, Champlain Hudson applied to DOE on September 12, 2009, for a Federal loan guarantee for the proposed project in response to a DOE competitive solicitation, “Federal Loan Guarantees for Electric Power Transmission Infrastructure Investment Projects,” issued under Section 1705, Title XVII, of the Energy Policy Act of 2005 (EPAcT). Section 406 of the American Recovery and Reinvestment Act of 2009 amended EPAcT by adding Section 1705. This section is designed to address the current economic conditions of the nation, in part by facilitating the development of eligible renewable energy and transmission projects that commence construction no later than September 30, 2011. The Loan Programs Office of DOE is carrying out an evaluation of the application submitted by Champlain Hudson. Should DOE decide to enter into the negotiation of a possible loan guarantee with Champlain Hudson, DOE would use the CHPE EIS to meet its NEPA requirements in making a determination associated with the funding. Additional information on the Loan Program Office is available at <http://lpo.energy.gov/>.

2. Scoping Comments

A variety of issues and concerns were raised during the public scoping period. DOE considered the content of all comments in determining the scope of the EIS and identified the following representative issues and concerns:

- Many commenters questioned the purpose of and need for the project, noting that the EIS needs to establish the evidence that the necessary electricity demand exists (or will exist) for the proposed project.
- Many commenters expressed concerns about the proposed Yonkers location for the Converter Station. Commenters noted potential visual impacts, land use issues, impacts on cultural resources, health and safety concerns, potential air quality impacts, and concerns about the converter station having disproportionate impacts on the low-income and minority populations in Yonkers.
- Commenters noted the potential environmental impacts from burying the transmission line in Lake Champlain and the Hudson River. Commenters expressed concerns regarding sediment disturbance and the impacts that sediment would have on wildlife, fish habitat, endangered species, and benthic habitat. Commenters also noted that the sediment disturbance could churn up PCBs and other contaminants into the water column and have an adverse impact on drinking water quality and human health and safety.
- Commenters requested that the EIS contain an analysis of the effects of Electromagnetic Fields (EMFs) and thermal effects produced by both Direct Current (DC) and Alternating Current (AC) transmission lines on aquatic ecosystems, including behavior and reproduction of fish and other animals.
- Many commenters expressed concerns about the impacts of the transmission line and Yonkers Converter Station on existing infrastructure. Commenters noted the presence of pipelines, power cables, outfalls, and other electricity lines that the proposed transmission line could impact.
- Commenters noted that the transmission line route contains many visually important resources and that the EIS should analyze the impact that construction of the transmission line would have on these resources.
- Many commenters also identified additional alternatives that they believed should be analyzed in the EIS. Based on scoping comments, the following alternatives have been included in the analysis:
 - Substation siting alternatives. Several commenters requested DOE discuss a siting alternative to the CHPE interconnection at ConEd Power Park.
 - Several commenters requested that alternative converter station sites in the City of Yonkers be examined, including the possible re-use of the former Glenwood Power Plant building.
 - Alternative transmission line routing alternatives that would follow upland rights-of-way, such as highways and rail lines.
- Commenters requested information on the potential for impacts associated with the use of HVDC technology.

A summary of the comments received during the scoping period is provided in **Table 2**, which identifies the major issues raised, arranged by general topic. Each issue that is within the scope of the

EIS will be addressed in the Draft EIS. **Table 3** presents a list of the individuals or organizations who submitted scoping comments along with the date each comment was received by DOE.

Transcripts of the scoping meetings along with materials submitted at the meetings are provided in **Appendix D**. Copies of the complete comments are included in **Appendix E** and are also available on the DOE project EIS Web site at <http://chpexpresseis.org>. **Appendix G** presents a summary compilation of all of the comments received, arranged by the date the comments were received. The Draft EIS will also contain a subsection that summarizes the comments received during scoping. For the purposes of this Scoping Report, the comments are paraphrased and condensed from the actual comments; however, the environmental analysis included in the EIS will rely on the full text of the comments as submitted.

Table 2. Summary of Scoping Comments Received by DOE

Subject Area	Comment Summary
NEPA Process	<p><i>Purpose and Need.</i> Nine commenters noted that the purpose and need statement should establish the evidence that the need for electricity exists in the area, or will exist if projected population and planned land use growth are realized.</p> <p><i>Cooperating Agencies.</i> One commenter noted that the National Oceanic and Atmospheric Association (NOAA) should be included as a cooperating agency, because of the agency’s expertise in evaluating impacts on fisheries and aquatic biota. In addition, the New York State Hudson Valley Greenway Council should also be included as a cooperating agency to evaluate potential project impacts and consistency with the criteria established by New York State during the creation of this organization (see New York Environmental Conservation Law Article 44, Hudson River Valley Greenway).</p> <p><i>Public Involvement.</i> One commenter noted that the development of the EIS should proceed with a perspective of incorporating transparency during the review process and post-approval (if approved). The alternatives that are evaluated should include a consideration of opportunity for public scrutiny of impacts, such as thorough review of monitoring data. Accordingly, the alternatives design should incorporate facilities or options that promote public assessment during the project lifetime. These might be metering abilities, equipment locations, or other facilities that aid in sampling and reviewing project impacts and success of mitigation measures.</p> <p><i>Worst-Case Analysis.</i> One commenter noted that the EIS should analyze the possible worst-case scenarios if any of the infrastructure or equipment used in its installation fails in any way.</p> <p><i>Precautionary Principle.</i> One commenter noted that the precautionary principle should be used to frame the analysis in the EIS.</p> <p><i>Permits.</i> One commenter noted that the EIS should include a discussion of all potential permits, including Section 404 permits from the USACE that might be required for this project.</p>

Subject Area	Comment Summary
<p>Proposed Action and Alternatives</p>	<p><i>Project Description.</i> Four commenters noted that the EIS should describe the construction, operation, and maintenance of the transmission line, convertor station, and other components of the Proposed Project. The description of construction should include a discussion of the locations of staging areas; the installation method, exact location, and depth of underwater transmission lines; and any facilities, maintenance, or other activities needed to ensure project compliance with North American Electric Reliability Corporation standards. One commenter noted that the EIS should discuss the feasibility of installing an underwater cable for distances greater than 50 miles. The EIS should include a discussion of operations in relation to the New York Independent System Operator (NYISO), regional entities (e.g., New England Independent System Operator, PJM Interconnection, and Northeast Power Coordinating Council), and non-discriminatory open access. One commenter noted that the EIS should include a discussion of anticipated project life and a description of decommissioning and abandonment of facilities.</p> <p><i>Yonkers Converter Station.</i> Four commenters noted that the EIS should describe the siting of the Yonkers Converter Station and the risks of flashovers. The area surrounding the proposed converter station, particularly the Alexander Street area, is made land that did not exist 100 years ago. The cable landfall might have to be supported on piles and the impacts of that activity should be investigated in the EIS. Alternatives to the proposed location of the Yonkers Converter Station should be considered, including the Glenwood Power Plant site and property on the south side of the American Sugar Refinery site.</p>
<p>Proposed Action and Alternatives (continued)</p>	<p><i>Alternatives Analysis.</i> Fourteen commenters noted that the EIS should include an evaluation of alternatives to the Proposed Action, including reasonable alternatives not within the jurisdiction of the lead agency, and the No Action Alternative. The alternatives analysis should include discussion of diversified generation, and upgrading existing transmission infrastructure to meet the purpose of meeting existing and future electricity demands in New York City. Alternative locations for the transmission line should be evaluated, including construction in existing utility corridors, highway rights-of-way (e.g., the I-87 corridor), and railroad rights-of-way. The EIS should consider the potential of extending the proposed transmission line or expanding capacity if market conditions should become favorable to such enhancements in future years, including expansion east into Long Island Sound.</p> <p>In the event that renewable resources are not used for power generation or are discontinued, then the environmental impact of the project would vary from the proposal. Therefore, the EIS should consider alternative power generation sources, for example fossil fuel sources, that can be used with the new CHPEI facilities and evaluate environmental impacts. In addition, it is possible that the CHPEI facilities would be used to transmit New York-generated electricity for export to Canada. Under this scenario, fossil-fuel sources, rather than renewable sources, might be used. Alternative transmission and generation scenarios should thus be considered in the evaluation of environmental impacts.</p> <p><i>Connected Actions.</i> Nine commenters noted that implementation of the Proposed Project would result in development of hydroelectric power sources, which should be evaluated in the EIS. If the Applicant is exploring the use of upstate wind or other U.S. energy sources, the DOE should include those sources in the EIS, as well.</p>
<p>Biological Resources</p>	<p><i>Impacts on Flora and Fauna.</i> Eight commenters noted that the EIS should evaluate the impacts of construction and operation of the CHPE project on biological resources, including threatened and endangered terrestrial and aquatic species. The</p>

Subject Area	Comment Summary
	<p>analysis should include evaluation of impacts on sensitive wetlands, aquatic and terrestrial wildlife and habitat, and spawning periods. One comment noted that impacts on biological resources can occur from increased turbidity in the water column, resuspension of contaminants, electromagnetic fields, storm water discharges into terrestrial environments, thermal resistivity, and shoreline disturbance.</p> <p><i>Impacts of Burying Underwater Pipelines.</i> One comment noted that burying the transmission line beneath Lake Champlain and the Hudson River might be unnecessarily disruptive ecologically and hydrologically. The EIS should include an analysis of the projected underwater sediment disturbance caused by the dredging and trenching techniques along the Richelieu River, Lake Champlain, and the Hudson River onto wildlife, fish habitat, endangered species, micro-organisms, vegetation, and human activities such as swimming and fishing. In addition, the EIS should describe the area and quality of benthic habitat (e.g., oyster beds and submerged aquatic vegetation) that will be disturbed due to the placement of cables. The EIS should also discuss the area and quality of benthic habitat that will be permanently lost due to the placement of concrete mats on the cables if it is laid on the surface of the sediment. This EIS should evaluate different methods (e.g., water jet trenching, mechanical plowing, or dredging) that will be used in different areas and the varying environmental impacts of each of these methods, and the potential for resuspension of contaminants and ways that risks can be minimized.</p>

Subject Area	Comment Summary
<p>Biological Resources (continued)</p>	<p><i>Impacts of Electromagnetic Fields.</i> Four commenters noted that the EIS should include a rigorous and independent analysis of the effects of EMFs and thermal effects produced by both DC and AC transmission lines on aquatic ecosystems, including behavior and reproduction of fish and other animals. One comment noted that EMF could affect aquatic species that use the Earth’s magnetic field for orientation during navigation. Electra-sensitive species could be attracted or repelled by the electrical fields generated by the transmission cables. Areas of breeding, feeding, or nursing are particularly prone to these effects because of the congregation or dispersion of sensitive individuals in the benthic community.</p> <p><i>Special Status Species.</i> One commenter noted that the EIS should assess the impacts on the federally listed endangered Karner blue butterfly, the species that has the greatest potential for impacts from the proposed project (<i>Lycaeides melissa sarnuelis</i>). Suitable habitat occurs in several portions of the project, and there are some known occurrences. One comment noted that the NOI discussed federally listed species under NOAA jurisdiction, but omitted species under USFWS jurisdiction.</p> <p><i>Protected Areas.</i> One commenter noted that the EIS should also consider the effects on Essential Fish Habitat designated under the Magnuson-Stevens Act; Haverstraw Bay has some other designations that should be considered. The transmission line would pass through the Hudson River National Estuarine Research Reserve, a marine protected area. Two commenters noted that the EIS should analyze all Significant Coastal Fish and Wildlife Habitats (SCFWHs) that would be affected by the installation, operation, or maintenance of the proposed transmission line and determine if they would affect the viability of the SCFWHs. Any difference in effects between installations in disturbed versus undisturbed areas of applicable SCFWHs should be discussed.</p> <p><i>Invasive Species.</i> Two commenters noted that the EIS should evaluate the potential of the project to spread aquatic invasive species, including the zebra mussel, Chinese mitten crab, and the purple loosestrife.</p> <p><i>Coastal Zone Management.</i> One commenter noted that the EIS should include an analysis of all applicable Coastal Management Program and Local Waterfront Revitalization Programs (LWRP) policies. The New York State Department of State requires all applicants seeking concurrence with a consistency certification to provide an analysis of all applicable Coastal Management Program or applicable LWRP policies. The proposed action would traverse multiple communities with federally approved LWRPs and, as such, where the proposed action would have an effect on such a community, an analysis of applicable LWRP policies for each LWRP community should be provided.</p>
<p>Geology and Soils</p>	<p><i>Seismic Activity.</i> One commenter noted that the EIS should evaluate the impact of seismic activity on power cable integrity.</p> <p><i>Geology and Soils.</i> One commenter noted that the EIS should characterize sediment size and soil type along the entire transmission line route and characterize the suitability of each area to use the proposed installation method.</p>

Subject Area	Comment Summary
<p>Visual Resources</p>	<p><i>Aesthetic and Visual Resources.</i> Two commenters noted that the EIS should characterize all visually important resources affected by construction and operation of the Proposed Project, including below-ground construction of the transmission line. Visually important resources include Scenic Areas of Statewide Significance, and areas that have been specially designated as scenic districts by New York State under New York Environmental Conservation Law Article 49, Protection of Natural and Man-Made Beauty (e.g., the Tappan Zee East Scenic District, Olana Scenic District). One comment noted that extended construction and maintenance of facilities, including below-ground facilities, can produce visual and aesthetic impacts. As such, these impacts should be identified and evaluated. Presently, the NOI only states that aboveground components will be evaluated. Another comment indicated that the EIS should consider temporary visual impacts of nighttime lighting and equipment near the Hudson River.</p> <p><i>Visual Impacts from the Yonkers Converter Station.</i> Three commenters noted that the EIS should assess the visual impact of the converter station and discuss mitigation strategies. A thorough visual analysis determining places from which the converted station would be seen should be prepared. The analysis should include computer-generated visual simulations in order to understand how the converter station would look from important vantage points. These should include the Library, Yonkers Station, Hudson River, upland neighborhoods, adjacent sidewalks, and nearby intersections. At a minimum the visual impacts from the Yonkers Train Station Platform should be shown. Views from Palisades Interstate Park (National Natural Landmark), located across the river in New Jersey and in Rockland County, New York; and from the Bell Place National Register Historic District, the Old Croton Aqueduct State Park, and Philips Manor Hall, listed on the National Register of Historic Places and a State Historic Site, must be assessed. Other locations should be identified in consultation with City officials.</p>
<p>Land Use and Infrastructure</p>	<p><i>Transmission Line Land Use.</i> One commenter suggested proposed signage to alert river users to the presence of the buried power cables to avoid disturbance and damage. Another comment suggested that the EIS should identify and characterize all agricultural land that might be affected by the proposed transmission line.</p> <p><i>Yonkers Converter Station Land Use.</i> One commenter noted that the EIS should characterize land use around the proposed Yonkers Converter Station and analyze the potential impacts of constructing the converter station on surrounding land uses. The analysis should discuss future land values, impacts on the Alexander Street Master Plan, impacts on future redevelopment by the City of Yonkers near the converter station, impacts on commuter parking, impacts on marina development and harbor management by the City of Yonkers, impacts on continued use of the Yonkers Recreation Pier as a ferry point and embarkation point for other boats, impacts on the Beczak Environmental Education Program and on the Yonkers Canoe Club, and impacts on the City of Yonkers Jail.</p>

Subject Area	Comment Summary
<p>Land Use and Infrastructure (continued)</p>	<p><i>Infrastructure.</i> One commenter noted that the development of the EIS should consider the impacts on existing infrastructure in the vicinity of the proposed transmission line route and the proposed Yonkers Converter Station. Specifically, commenters noted the presence of Rip Van Winkle Bridge piers, pipelines, power cables, outfalls, and the high-voltage electrified lines along the Metro-North Railroad. The analysis in the EIS should also consider the operation of existing infrastructure on the proposed project. One commenter noted that electrical or magnetic interference with the proposed transmission line could occur with existing infrastructure. With respect to the upland placement of the cables, the General Accounting Office briefing on “Issues Associated with High-Voltage Direct-Current Transmission Lines along Transportation Rights of Way” dated February 2008, stated that electromagnetic fields and stray current could interfere with railroad signaling systems and highway traffic operations, and accelerate pipeline corrosion. The Hudson River Federal Navigation Channel is authorized at 32-foot depth. The EIS should analyze how to avoid damage to the power cables due to periodic maintenance dredging to maintain that depth.</p> <p>One commenter asked the questions: Would the converter station require service from City of Yonkers infrastructure including water, storm, or sanitary sewer? What volume of water will be required at the converter station? Will potable water be used for any reason other than human consumption and sanitary needs? Where will connections for city infrastructure be made? Does sufficient capacity exist for the need of the converter station or will new connections be required to be made?</p> <p>One commenter suggested that the EIS determine if the Hudson River navigation channel’s maximum depth is practicable to support existing and future commercial navigation given existing, authorized depths, topography, necessary channel side slopes, port infrastructure, and aerial clearances.</p>
<p>Cultural Resources</p>	<p><i>Transmission Line Cultural Resources.</i> Five commenters noted that the EIS should evaluate the impacts of construction on historic resources along the transmission line route, including the Glenwood Power Station, historic shipwrecks within Lake Champlain, and the Champlain Canal (part of the Erie Canal National Heritage Corridor).</p> <p><i>Yonkers Converter Station Cultural Resources.</i> One commenter noted that the EIS should evaluate the impacts of construction and operation of the converter station on surrounding National Register of Historic Places-eligible resources, including the Otis Elevator Plant, the Philips Manor Hall, the Habishaw Club site (the Beczak Environmental Education Center), and the North Yonkers Pump Station. The EIS should discuss means to blend the proposed converter station into the surroundings.</p> <p><i>Impacts on the Champlain Canal.</i> One commenter noted that the EIS should evaluate the impacts on the Champlain Canal (a National Heritage Corridor). The potential impacts on the canal include evaluating underground utility depth requirements in order to minimize potential impacts on vessel operations and channel maintenance operations; placement of cables within the official canal channel, which would not be permitted (alternatives to effective crossing of the canal that do not impact maintenance and use of the channel should be discussed); impacts on New York State Conservation Council (NYSCC) corporate operations; impacts on commercial boating traffic due to delays during construction; impacts on NYSCC employee safety; impacts on the canal from electromagnetism; and impacts associated with turbidity within the canal system. The EIS should also discuss that real property rights or a permit must be acquired from the NYSCC to use the Champlain Canal.</p>

Subject Area	Comment Summary
<p>Health and Safety</p>	<p><i>Public Health and Safety near the Yonkers Converter Station.</i> One commenter noted that the EIS should consider the impacts on public health and safety from electrical and magnetic fields generated near the proposed Yonkers Converter Station. The EIS should also consider the potential impacts on the public from fires and explosions at the convertor station.</p> <p><i>Occupational Health and Safety.</i> Three commenters noted that the EIS should discuss the potential for explosions and fire from electrical equipment contained in the Yonkers Converter Station. The EIS should discuss mitigation measures to be taken to reduce the probability and reduce the impacts of fires and explosions, such as deluge and fire suppression systems. As the Consolidated Edison substations near the proposed converter station site have had major transformer fires, the EIS should discuss the potential for impacts from similar fires at the convertor station. The EIS should discuss whether workers would be more likely to be injured given the increased safety risk of close proximity of the transmission lines to transportation rights-of-way. One comment asked if there would be any human health impacts upon workers in adjacent buildings in the I-Park/Otis Elevator Plant complex near the Yonkers Converter Station. Are there any potential impacts upon equipment or manufacturing or research activities that might take place in the buildings surrounding the proposed converter station or adjacent to the cables serving the station?</p>
<p>Air Quality</p>	<p><i>Air Quality Analysis.</i> One commenter noted that the air quality analysis in the EIS should include a General Conformity Applicability Analysis and a carbon footprint analysis. One commenter suggested using diesel particulate filters on construction equipment to reduce impacts from particulate matter.</p> <p><i>Air Quality near the Yonkers Converter Station.</i> One commenter noted that the EIS should discuss air quality impacts of operation of the converter station. Will there be ozone creation from the electrical equipment? Will there be any public health issues to area residents from the operation of the plant? What mitigation can be instituted to deal with air quality issues to area residents? One comment noted that Southwest Yonkers is an asthma problem area and suggested that the EIS discuss any impact that might add to the asthma problem stemming from the proposed converter station.</p> <p><i>Ozone Standards.</i> One comment noted that the USEPA is on the verge of finalizing a revised National Ambient Air Quality Standard for ozone. The new standard will be 20 to 40 percent more stringent than the current standard and will require significant emissions reductions, possibly by 70 percent or more, within the eastern United States. DOE should work with the NYISO and the New York State Public Service Commission (NYSPSC) to assess the air quality impacts associated with importing an additional 1,000 MW of clean new capacity to the greater New York City metropolitan area. This effort should assess ozone precursor reductions, toxic air pollutant emissions reductions, and any environmental justice benefits associated with reduced emissions from older, less-efficient electric generating units in the area to be served by this new capacity. One commenter noted that DOE should also work with NYISO to identify those electrical generating units likely to become uneconomic as a result of an influx of significant new capacity so that USEPA can develop appropriate air quality modeling assumptions for the implementation of the revised ozone standard.</p>

Subject Area	Comment Summary
<p>Water Resources</p>	<p><i>Water Quality.</i> One commenter noted that the EIS should address the potential impacts of sediment disturbances in the Superfund Area along the transmission line route on drinking water quality supplied by the Hudson River to the residents of Rhinebeck, Port Ewen, Lloyd, Poughkeepsie, Stillwater, Halfmoon, Waterford, and Green Island. The commenter suggests assessing sediment contamination before working in these areas to minimize disturbance. Six commenters noted that the EIS should identify and characterize all pollutants along the route and analyze the likelihood of resuspension or release. Where specific pollutants are identified, adequate preventative measures, including applicable alternatives, should be analyzed and their anticipated coastal effects should be included in the EIS. One commenter noted that the EIS should investigate the potential in Lake Champlain for impacts from fuel leaks from the wrecked tugboat McAllister.</p> <p><i>Surface Water and Wetlands.</i> Four commenters noted that the EIS should characterize the potential effects of construction, operation, and maintenance of the proposed transmission line on the surface water regime along all buried portions of the route including freshwater and tidal wetlands. Further, the impacts of Horizontal Directional Drilling, which is proposed for transition points where the cables enter and exit the water, on wetlands must be investigated.</p> <p><i>Floodplains.</i> One commenter noted that the portions of the proposed route using the railroad right-of-way would cross Federal Emergency Management Agency-mapped floodplains associated with the Hudson River, as would the underground connection to the Yonkers converter station. Any potential impacts from construction equipment and activities on wetlands should be evaluated in the draft EIS.</p> <p><i>Resuspension of PCBs.</i> Four commenters noted that the EIS should address the potential for resuspension of PCBs and other contaminants in the Mid- and Lower-Hudson River due to the burying of cable in contaminated sediment. While the concentration of PCBs is greatest in the Upper Hudson, it is undisputed that PCBs contaminate the Mid- and Lower-Hudson River as well. The resuspension of PCBs would impact wildlife and aquatic species, and human health.</p>
<p>Environmental Justice</p>	<p><i>Environmental Justice Analysis for the Proposed Yonkers Converter Station.</i> Three commenters noted that the EIS should include a detailed environmental justice analysis of the siting of the proposed Yonkers Converter Station. The City of Yonkers contains a number of utility and transportation land uses that serve the greater New York City area. These utility and transportation land uses could have a disproportionate impact upon area residents. Additionally, the City of Yonkers has a higher share of the county's low- income and minority populations than would be proportionate to its share of the county's overall population. The area around the proposed converter station is overwhelmingly low-income and minority.</p> <p><i>Socioeconomic Impacts.</i> One commenter noted that since the proposed project will pass through but provide no benefits to the communities along the route of the cable, the EIS should consider mitigation opportunities for these communities.</p>

Subject Area	Comment Summary
Socioeconomics	<p><i>Economic Benefits.</i> One commenter noted that the EIS should evaluate the economic benefits of the additional 1,000 MW of additional electricity capacity and its impact on marginal electric supply costs, including the potential for these benefits to accrue beyond the immediate New York City metropolitan area.</p> <p><i>Economic Impacts of the Yonkers Converter Station.</i> One commenter noted that the EIS should examine the impacts upon the planned changes to the Yonkers downtown area around the site of the proposed converter station. The comment asks what socioeconomic changes are likely with and without the converter station? The analysis should include employment at the site, income tax implications of employment at the site, sales tax spin-off impacts of employment at the site, and the impacts upon the surrounding downtown with the converter, with other planned uses and without the converter station. One comment requested that the EIS investigate and discuss area businesses that would be negatively impacted by construction period air quality impacts. Another comment requested that the EIS discuss the property tax implications of the proposed converter station in Yonkers and any other real property installations that are a part of the proposed action. An additional comment suggested that the EIS examine and analyze the occupancy impacts of the converter station upon nearby properties. The comment asked if the converter station would cause a change in the quality of occupancy in the commercial buildings to the east of the proposed site and if the converter station would have any impacts upon the residential community to the north of the I-Park/Otis Elevator Plant Site?</p>
Hazardous Materials and Waste	<p><i>Hazardous Materials at the Yonkers Converter Site.</i> One commenter noted that the EIS should discuss the presence of any toxic materials used at the facility. Are there nontoxic materials used at the facility that when combined with other nontoxic materials at the facility might become toxic?</p> <p><i>PCBs.</i> One commenter noted that there are known or likely accumulations of paper-processing waste including PCBs in the areas of Cumberland Bay and near the mouth of the LaChute River. The area around the existing International Paper Plant in Ticonderoga should also be considered a potential area of contamination.</p>
Recreation	<p><i>Recreation.</i> Six commenters noted that the EIS should contain an analysis of the impacts on recreational river traffic, including impacts on public access to recreational opportunities along the transmission line route. One commenter noted that the EIS should analyze the impacts of the proposed project and alternatives on anchoring boats in Lake Champlain. The issue would be particularly relevant in the shallow and narrow southern part of the lake. If there are any risks to swimmers, divers, or snorkelers, these should also be addressed in the EIS.</p>
Cumulative Impacts	<p><i>Cumulative Impacts Analysis.</i> Seven commenters noted that the EIS should consider the following projects in the cumulative impacts analysis: New York State Thruway Authority (NYSTA) ongoing maintenance and capital improvements projects for the Tappan Zee Bridge, demolition and replacement of the Crown Point Bridge, previous and future dredging projects along the transmission line route, and projects in the downtown Yonkers area.</p>
Mitigation	<p><i>Mitigation Measures.</i> One commenter noted that the EIS should consider all appropriate mitigation measures to avoid sensitive aquatic and terrestrial habitats; cable installation during mating, spawning, and migration seasons; resuspension of contaminants; and permanent alternation of lake and river bed substrates.</p>

Subject Area	Comment Summary
Other Issues	<p><i>Impacts in Canada.</i> Three commenters noted that the EIS should consider impacts on the Canadian environment and the social and economic impacts upon native people affected by new power development in Canada as a result of the CHPE transmission line.</p> <p><i>Balance of Payments.</i> Three commenters noted that from an economic perspective, purchasing of energy from outside New York State is bad for the state's balance of payments, and for national balance of payments. The public interest would not be served by the project from this perspective, and the comment requests that this be considered in the EIS.</p> <p><i>Energy Efficiency and Conservation Measures.</i> Three commenters noted that the EIS should include an evaluation of alternatives to the Proposed Project that includes energy efficiency and conservation measures in lieu of construction of the transmission line.</p>

Table 3. Directory of Stakeholder Comments

Stakeholder Name and Affiliation	Comment Date and Source
Federal Agencies	
Grace Musumeci, Chief Environmental Review Section, U.S. Environmental Protection Agency Region 2	July 28, 2010, letter to DOE
David Stilwell, Field Supervisor, U.S. Department of the Interior, U.S. Fish and Wildlife Service, Cortland, NY Office	August 2, 2010, letter to DOE
Native American Tribes and Canadian First Nations	
Patrycja Ochman, O'Reilly & Associates Avocats, stated as on behalf of the Uashannuat, Innu of Uashat mak Mani-Utenam First Nation	August 2, 2010, letter to DOE
State and Provincial Agencies	
Alain Olivier, Government of Quebec	July 9, 2010, public scoping meeting July 14, 2010, public scoping meeting
Peter Casper, Assistant Counsel, New York State Thruway Authority, New York State Canal Corporation	July 29, 2010, letter to DOE
M. Jodi Rell, Governor, State of Connecticut	July 30, 2010, letter to DOE
Jeffrey Zappieri, Supervisor, Consistency Review Unit, Office of Coastal, Local Government and Community Sustainability, New York State Department of State	August 2, 2010, letter to DOE
Local Government Agencies	
Chuck Lesnik, City Council President, City of Yonkers	July 12, 2010, public scoping meeting August 2, 2010, letter to DOE
Lee Ellman, Planning Director, Planning Bureau, City of Yonkers	July 12, 2010, public scoping meeting July 30, 2010, letter to DOE
Frank Stilo, Yonkers 1 st Precinct Community Council	July 12, 2010, public scoping meeting
John Bowacic, New York Senate, 42nd District	July 13, 2010, public scoping meeting
Ronald Miller, Trustee, Village of Menands	July 14, 2010, public scoping meeting
Roland R. Vosburgh, Principal Planner, Columbia County	July 28, 2010, letter to DOE
Christopher Crane, Legislative Counsel, Westchester County Board of Legislators	August 1, 2010, letter to DOE
Philip A. Amicone, Mayor, City of Yonkers	August 2, 2010, letter to DOE
Non-Governmental Organizations and Individuals	
Angela Pernice, private citizen	July 8, 2010, email to DOE
Scott Lorey, Legislative Director, Adirondack Council	July 12, 2010, public scoping meeting
James Frakes, Adirondack Council	July 16, 2010, public scoping meeting
Steve Davis, private citizen	July 29, 2010, email to DOE

Stakeholder Name and Affiliation	Comment Date and Source
Mike Winslow, Staff Scientist, Lake Champlain Committee	August 1, 2010, letter to DOE
John Davis, Conservation Director, Adirondack Council	August 2, 2010, letter to DOE
Non-Governmental Organizations and Individuals (continued)	
Rose Van Guilder, Alliance for Independent Long Island; Long Island Rockaway Ratepayers Alliances	July 9, 2010, public scoping meeting
Frank Eadie, private citizen	July 9, 2010, public scoping meeting
Joel R. Kupferman, NY Environmental Law and Justice Organization	July 9, 2010, public scoping meeting
Demosthenes Matsis, private citizen	July 9, 2010, public scoping meeting
Annie Wilson, Energy Committee Chair, Sierra Club Atlantic Chapter	July 9, 2010, public scoping meeting August 2, 2010, letter to DOE
Susan Leifer, private citizen	July 12, 2010, public scoping meeting
Richard S. Tarantelli, private citizen	July 12, 2010, public scoping meeting
Clifford Schneider, Bezak Environmental Education	July 12, 2010, public scoping meeting
Philip Musegaas, Hudson River Program Director, Riverkeeper	July 12, 2010 , public scoping meeting July 13, 2010, public scoping meeting August 2, 2010, letter to DOE
Hayley Mauskapf, Environmental Advocacy Associate, Scenic Hudson, Inc.	July 12, 2010, public scoping meeting July 13, 2010, public scoping meeting August 2, 2010, letter to DOE
George Klein, Chairman, Sierra Club Lower Hudson Group	July 12, 2010, public scoping meeting August 2, 2010, letter to DOE
William Overstone, private citizen	July 13, 2010, public scoping meeting
David Ladenheim, private citizen	July 13, 2010, public scoping meeting
Jurgen Wekerle, Sierra Club - Ramapo/Catskill Group	July 13, 2010, public scoping meeting
Randolph Horner, Solar Evolution, LLC	July 13, 2010, public scoping meeting
Geddy Sveikauskas, Ulster Publishing Company	July 13, 2010, public scoping meeting
Tom Ellis, Citizens' Environmental Coalition	July 14, 2010, public scoping meeting
Julia Stokes, Saratoga Plan	July 15, 2010, public scoping meeting
Gordon Boyd, Energy Next, Inc.	July 15, 2010, public scoping meeting
Skip Stranahan, private citizen	July 15, 2010, public scoping meeting
David Manwell, private citizen	July 16, 2010, public scoping meeting
Peter D'Elia, private citizen	July 16, 2010, public scoping meeting
Lori Fisher, Lake Champlain Committee	July 16, 2010, public scoping meeting
Jack Hills, private citizen	July 16, 2010, public scoping meeting
Jean Public, private citizen	July 21, 2010, email to DOE
Roger L. Jennings, President, RJennings Company	August 2, 2010, letter to DOE

Stakeholder Name and Affiliation	Comment Date and Source
Doris Delaney, PROTECT	Undated letter to DOE, received August 2, 2010

THIS PAGE INTENTIONALLY LEFT BLANK