

Islander East Pipeline Project

Final Environmental Impact Statement

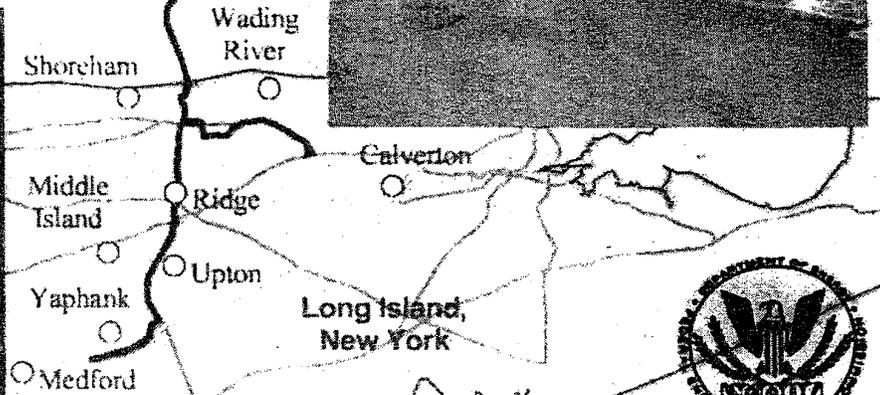
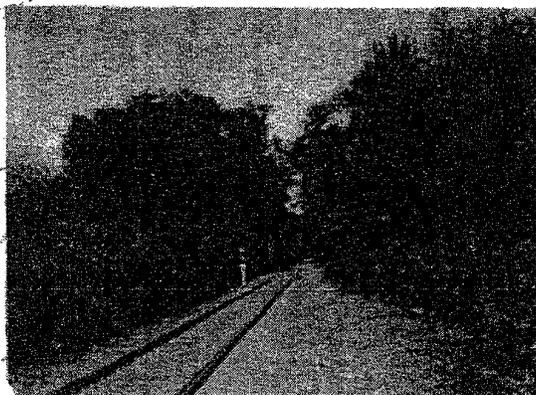
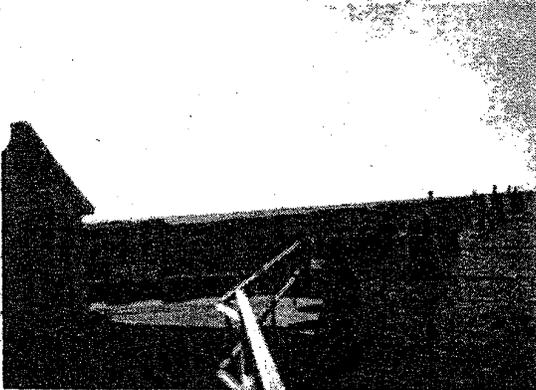
New Haven County,
Connecticut

Islander East Pipeline Company, L.L.C.

Docket No. CP01-384-000

Algonquin Gas Transmission Company

Docket No. CP01-387-000



Federal Energy Regulatory Commission

Washington, D.C. 20426

In Reply Refer To:
Gas Branch 2, PJ - 11.2
Islander East Pipeline Company, L.L.C.
Docket No. CP01-384-000
Algonquin Gas Transmission Company
Docket No. CP01-387-000

TO THE PARTY ADDRESSED:

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared this final Environmental Impact Statement (EIS) on the natural gas pipeline facilities proposed by Islander East Pipeline Company, L.L.C. (Islander East) and Algonquin Gas Transmission Company (Algonquin) in the above-referenced docket.

The final EIS was prepared to satisfy the requirements of the National Environmental Policy Act (NEPA). The staff concludes that approval of the proposed Project with appropriate mitigating measures, as recommended, would result in limited adverse environmental impacts. The DEIS evaluates alternatives to the proposal, including system alternatives, route alternatives, and route variations, and requests comments on them.

The final EIS assesses the potential environmental effects of the construction and operation of the following facilities in New Haven County, Connecticut and Suffolk County, New York.

Algonquin's facilities would consist of:

- a new 12,028 horsepower Cheshire Compressor Station in New Haven County, Connecticut;
- the removal of two launchers from an existing mainline valve and interconnect facility in New Haven County, Connecticut;
- retest and upgrade of about 27.4 miles of the existing C-1 and C-1L mainline in New Haven County, Connecticut; and
- an anomaly investigation along about 0.1 mile of the C-1 and C-1L mainline in New Haven County, Connecticut.

Islander East's facilities would consist of:

- about 44.8 miles of 24-inch-diameter pipeline from New Haven County, Connecticut to KeySpan Energy's existing facility in Suffolk County, New York;
- about 5.6 miles of 24-inch-diameter pipeline (the Calverton Lateral) in Suffolk County, New York to a planned power plant in Calverton, New York;
- three new meter stations: the North Haven Meter Station, the Brookhaven Meter Station, and the AES Calverton Meter Station; and
- five mainline valves (two in Connecticut and three in New York).

The purpose of the Islander East Pipeline Project is to provide transportation service for 285,000 dekatherms per day of natural gas from supply areas, including eastern Canada, to energy markets in Connecticut and New York (specifically Long Island and New York City).

The final EIS has been placed in the public files of the FERC and is available for public inspection at:

Federal Regulatory Energy Commission
Public Reference and Files Maintenance Branch
888 First Street, N.E., Room 2A
Washington, DC 20426
(202) 208-1371

A limited number of copies of the final EIS are available from the Public Reference and Files Maintenance Branch identified above. In addition, the final EIS has been mailed to Federal, state, and local agencies, elected officials, public interest groups, individuals, and affected landowners who requested a copy of the final EIS; public libraries; newspapers; and parties to this proceeding.

In accordance with the Council on Environmental Quality's (CEQ) regulations implementing the National Environmental Policy Act, no agency decision on a proposed action may be made until 30 days after the U.S. Environmental Protection Agency publishes a notice of availability of an FEIS. However, the CEQ regulations provide an exception to this rule when an agency decision is subject to a formal internal appeal process which allows other agencies or the public to make their views known. In such cases, the agency decision may be made at the same time the notice of the FEIS is published, allowing both periods to run concurrently. The Commission decision for this proposed action is subject to a 30-day rehearing period.

Additional information about the proposed project is available from the Commission's Office of External Affairs at 1-866-208-FERC (1-866-208-3372) or on the FERC website (www.ferc.gov)^{1/}. Click on the "FERRIS" link, enter the docket number excluding the last three digits in the Docket Number field. Be sure you have selected an appropriate date range. For assistance with FERRIS, the FERRIS helpline can be reached at (202) 502-8222, TTY (202) 208-1659. The application and supplemental filings in these dockets are available for viewing on FERRIS.

Magalie R. Salas
Secretary

^{1/} On October 11, 2001, the Commission announced that, as the result of the September 11 terrorist attacks, the FERC would limit access to certain public documents (PL01-2-000). Documents containing specific information on energy facilities would not be available through its web site or on its public reference room. Individuals requiring such information are directed to file Freedom of Information Act (FOIA) requests.

Islander East Pipeline Project

August 2002

Environmental Impact Statement

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LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
AES	AES Corporation
AGT	Algonquin Gas Transmission Company
Algonquin	Algonquin Gas Transmission Company
APE	Area of Potential Effect
ATV	all-terrain vehicle
BACT	Best Available Control Technology
bbls	barrels
BNL	Brookhaven National Laboratory
BTU	British Thermal Unit
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
Certificate	Certificate of Public Convenience and Necessity
CFR	Code of Federal Regulations
CGA	Compatible Growth Area
CH ₄	methane
CIPWG	Connecticut Invasive Plant Working Group
CMP	Coastal Management Program
CO	carbon monoxide
CO ₂	carbon dioxide
COE	U.S. Army Corps of Engineers
Commission	Federal Energy Regulatory Commission
CPA	Core Preservation Area
CPD	Coastal Programs Division
CRP	Conservation Reserve Program
CTDEP	Connecticut Department of Environmental Protection
CWA	Clean Water Act
CZMA	Coastal Zone Management Area
CZMP	Coastal Zone Management Program
dB	decibels
dBA	A-weighted decibel
DOT	U.S. Department of Transportation
Dth/d	dekatherms per day
EA	environmental assessment
EFH	essential fish habitat
EIS	environmental impact statement
ELI Extension Project	Iroquois Eastern Long Island Extension Project
EMF	electromagnetic fields
EPA	U.S. Environmental Protection Agency
ERL	Effects Range-Low
ERM	Effects Range-Medium
ESA	Endangered Species Act
ESC Plan	Islander East's Erosion and Sedimentation Control Plan

FERC	Federal Energy Regulatory Commission (or Commission)
FWS	U.S. Fish and Wildlife Service
GIS	Geographic Information System
gpm	gallons per minute
HDD	horizontal directional drill
hp	horsepower
IPCNYS	Invasive Plant Council of New York State
Iroquois	Iroquois Gas Transmission System, L.P.
Islander East	Islander East Pipeline Company, LLC
KeySpan	Key Span Energy Delivery Long Island
kW	kilowatt
KWh	Kilowatt-Hour
L_{dn}	day-night average sound level
L_{eq}	24-hour equivalent sound level
LIPA	Long Island Power Authority
LIPBS	Long Island Pine Barrens Society
LUST	Leaking Underground Storage Tanks
Memorandum	Memorandum of Understanding on Natural Gas Transportation Facilities
MMBTU	million British thermal units
MMI	Modified Mercalli Intensity
MP	milepost
MUID	map unit identifier
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act of 1990
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NGA	Natural Gas Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO	nitrogen oxide
NO_2	nitrogen dioxide
NO_x	nitrogen oxides (nitric oxide plus nitrogen dioxide)
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent to Prepare an Environmental Assessment for the Islander East Pipeline Project and Request for Comments on Environmental Issues
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NSA	noise sensitive area
NSPS	new source performance standards
NSR	New Source Review
NWI	National Wetland Inventory

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NYSCL	New York State Consolidated Laws
NYSDEC	New York State Department of Environmental Conservation
NYSCL	New York State Consolidated Laws
O ₃	ozone
OCRM	Ocean and Coastal Resource Management
OEP	Office of Energy Projects
OSHA	Occupational Safety and Health Administration
PAHs	polynuclear aromatic hydrocarbons
PCBs	Polychlorinated biphenyls
Pine Barrens Commission	Central Pine Barrens Joint Planning and Policy Commission
PD	preliminary determination on non-environmental issues
PEM	palustrine emergent wetlands
PFO	palustrine forested wetlands
Plan	Upland Erosion Control, Revegetation, and Maintenance Plan
PM ₁₀	inhalable particulate matter
PSD	Prevention of Significant Deterioration
psig	pound per square inch gauge
PSS	palustrine scrub-shrub wetlands
Procedures	Wetland and Waterbody Construction and Mitigation Procedures
RCV	remote control valve
ROI	region of impact
ROW	right-of-way
SCADA	Supervisory Control and Data Acquisition
SCCRWA	South Central Connecticut Regional Water Authority
SCDHS	Suffolk County Department of Health Services
Secretary	Secretary of the Commission
SER	significant emission rate
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO _x	sulfur oxides (sulfur dioxide plus sulfur trioxide)
SO ₂	sulfur dioxide
Sound	Long Island Sound
SPCC Plan	Spill Prevention, Control and Countermeasure Plan
SSURGO	Soil Survey Geographic database
STATSGO	State Soil Geographic database
Study Plan	<i>Long Island Sound Sampling, Analysis and Study Plan</i>
Suffolk DPW	Suffolk Department of Public Works
Tennessee	Tennessee Gas Pipeline Company
THPS	tetrakis hydroxymethyl phosphonium sulfate
TPY	tons per year
TWI	Tidal Wetland Inventory
USDA	U.S. Department of Agriculture
USDOC	U.S. Department of Commerce
USGS	U.S. Geological Survey
VOC	volatile organic compound

EXECUTIVE SUMMARY

This Final environmental impact statement (EIS) for the Algonquin Gas Transmission Company (Algonquin) and Islander East Pipeline Company (Islander East) Islander East Pipeline Project has been prepared by the staff of the Federal Energy Regulatory Commission (FERC or Commission) to fulfill the requirements of the National Environmental Policy Act and the Commission's implementing regulations under Title 18, Code of Federal Regulations, Part 380.

Islander East proposes to construct and operate an interstate natural gas pipeline and associated aboveground facilities under Section 7(c) of the Natural Gas Act and Title 18, CFR Part 157. Algonquin proposes the uprate of about 27 miles of 10- and 16-inch-diameter pipeline and 12,028 horsepower (hp) of additional compression at one new compressor station; Islander East proposes construction of about 50 miles of new 24-inch-diameter pipeline, 22.6 miles of which would be across the Long Island Sound; and other associated auxiliary facilities (i.e., three meter stations and five mainline valves) in various locations in Connecticut and Long Island, New York.

The purpose of the Islander East Pipeline Project is to provide natural gas transportation service for 285,000 dekatherms per day (Dth/d) of natural gas from supply areas in the Northeast to energy markets in Connecticut, Long Island, and New York City. The project would supply enough natural gas to heat approximately 600,000 homes and meet local gas company growth on Long Island and in New York City.

Project Impacts

Considering both offshore and onshore segments, construction of the Islander East Pipeline Project would impact about 590.4 acres, with an additional 2,808 acres for anchor cable sweep. Construction in offshore areas would affect 298.6 acres, based on a 80-foot-wide temporary right-of-way. Construction of the onshore portion of the Islander East Pipeline Project, including pipeline and aboveground facilities, would affect about 291.8 acres of land in the states of Connecticut and New York. Of this amount, 268.9 acres would be affected by construction of the pipeline right-of-way, 15.5 acres by construction of aboveground facilities, and 7.4 acres by access road construction.

The proposed construction work area, defined as the construction right-of-way and temporary extra work areas, would be located within 50 feet of 41 residences. Islander East has proposed general mitigation measures to minimize impacts on residences. For residences within 50 feet of the construction work area, Islander East would prepare and file site-specific construction plans for our^{1/} review.

Construction and operation of the Islander East Pipeline Project would result in temporary and permanent alteration of wildlife habitat, as well as direct impact on wildlife such as disturbance, displacement, or mortality. The clearing of forest land for construction and operation of the pipeline would result in a change of forested wildlife habitats to herbaceous and shrub cover habitat types. After construction, the temporary construction right-of-way and extra work areas in previously

^{1/} "We," "us," and "our" refer to the environmental staff of the Office of Energy Projects, part of the Commission staff.

forested areas would be allowed to revegetate naturally and would eventually return to preconstruction conditions. In upland areas, the construction work area would be reseeded immediately following construction. The project would permanently affect a total of about 77.4 acres of forested areas, including upland forest and forested wetlands within the permanent right-of-way, that would be converted from forest habitat and maintained as herbaceous and shrub cover for operation of the pipeline.

The pipeline route proposed by Islander East would require a total of 18 waterbody crossings (excluding Long Island Sound). Three waterbodies are located in temporary extra workspaces and would not be crossed. None of these waterbodies are considered major (i.e., equal to or wider than 100 feet at the proposed crossing location). Islander East proposes to use horizontal directional drilling to cross the Peconic and Carmans River. The other waterbodies would be crossed using flumes or dam and pump crossing construction methods.

The Islander East Pipeline Project would cross a total of 41 wetlands with a total crossing length of about 3.5 miles. Construction would temporarily disturb about 30.6 acres of wetlands, of which 26.9 acres would be in the temporary construction right-of-way and 3.66 acres would be maintained as permanent right-of-way. Forested, or a mixture of forest and other wetland cover types, comprise about 24.5 acres or 80 percent of the wetlands disturbed. Islander East would monitor wetlands for up to 5 years to ensure that wetlands affected by the proposed project are properly restored and successfully revegetated. Some wetland impacts are unavoidable when constructing a linear facility. Islander East would avoid and minimize impacts using special construction procedures. In addition, a wetland mitigation package is under development with the affected states and the U.S. Army Corps of Engineers.

Islander East proposes to implement its Erosion and Sediment Control Plan (ESC Plan) that, if implemented with our additional recommendations, would provide a level of environmental protection that is equal to or greater than that provided by the FERC staff's *Upland Erosion Control, Revegetation and Maintenance Plan* and *Wetland and Waterbody Construction and Mitigation Procedures*.

The Islander East Pipeline Project would cross approximately 298.6 acres of bottom habitat in Long Island Sound. An additional 2,808 acres of the Sound bottom would be impacted by anchor cable sweep. Because a linear crossing of Long Island Sound from Connecticut to Long Island must cross hard bottom and live bottom, some impact to this habitat would be unavoidable. Avoidance of additional live bottom areas has been incorporated into the proposed route. Further mitigation strategies are under development and would be completed prior to construction.

Six federally-listed endangered or threatened species were identified that could potentially occur in the counties along the project route and offshore. These species include the endangered leatherback sea turtle, Kemp's ridley sea turtle, roseate tern, the threatened loggerhead sea turtle, bald eagle, and the piping plover. All have been eliminated from further discussion based on their transient habits (i.e., migratory or highly mobile of large territories); that they are unlikely to adversely respond to temporary or permanent impacts associated with the proposed facilities; or lack of suitable habitat along the project route area. These six species would not be affected by the proposed project.

Additionally, 35 other special status species were identified as potentially occurring in the vicinity of the proposed project area. Islander East has surveyed the proposed route for special status species. Where individuals have been identified or suitable habitat exists, Islander East has proposed mitigation measures.

Twenty-nine of these species have been eliminated from further concern based on the transient habits of these species or lack of suitable habitat along the proposed project route. Islander East would continue to consult with the Connecticut Department of Environmental Protection and the New York State Department of Environmental Conservation regarding the remaining state-listed species.

Islander East has conducted cultural resource surveys for a majority of the project area. However, there are still locations, such as where survey access has been denied, and the submerged anchor spread, that have not been surveyed or where the State Historic Preservation Officers (SHPOs) have not yet commented about potential effects on historic properties. We have recommended that construction be deferred until all additional cultural resource surveys and evaluation reports, and any necessary treatment plans have been submitted to the appropriate parties; the comments of the SHPOs on the reports and plans have been filed at the FERC; the Advisory Council on Historic Preservation has been given an opportunity to comment; and we have reviewed and approved all reports and plans, and provided Islander East with written notification to proceed.

Alternatives Considered

We reviewed the no action or postponed action alternative, which would involve not building or deferring construction of the proposed facilities. In reaching its final decision, the Commission will review both the environmental and non-environmental record in deciding whether to issue a Certificate of Public Convenience and Necessity. We also evaluated project system alternatives, route alternatives, and route variations.

We evaluated six system alternatives, one of which, the ELI System Alternative, is based on Iroquois' ELI Extension Project. The second is based on Tennessee's planned Connecticut-Long Island Lateral Project. The third is based on other existing or planned systems in New York or New Jersey and the fourth is based on the local distribution company's (KeySpan) existing facilities. We also considered two other system alternatives (the One-Pipe System Alternative and the Long Island System Alternative) both of which would carry the total volumes of the ELI Extension Project and the Islander East Project.

We have determined that one of these system alternatives, the ELI System Alternative, is environmentally preferable because it has a shorter Long Island Sound crossing, avoids more shellfish leases, and would only have air quality and noise impacts onshore in Connecticut. The impacts on Long Island would be identical to the Islander East Project. However, we also recognize that there are other policy-related consideration and/or factors that may make this alternative less desirable. These considerations are beyond the scope of this document.

Eight route alternatives were identified in section 4.3. Seven of the route alternatives identified were rejected and eliminated from further consideration because they did not offer any significant environmental benefits over the proposed project route. We have recommended that the

Calverton State Route 25 Route Alternative be incorporated into the proposed route because it is shorter and avoids creating a greenfield right-of-way through one new and one planned subdivision. The one drawback to this route alternative is that it crosses an additional 16 acres of the Core Preservation Area (CPA) of the Central Pine Barrens. However, it crosses the CPA adjacent to a highway.

Twenty-one route variations were identified and evaluated in section 4.4. Based on our review we recommended that 18 of these variations be incorporated into the proposed route to minimize impacts on landowners in Connecticut and New York; wetlands and surface waterbodies, and Branford Land Trust property in Connecticut; and the Core Preservation Area of the Central Pine Barrens in New York. The other three route variations were found to offer no significant advantage over the proposed route.

Public Comments and Areas of Concern

On July 3, 2001, the FERC issued a *Notice of Intent to Prepare an Environmental Assessment for the Islander East Pipeline Project and Request for Comments on Environmental Issues* (NOI). The NOI was sent to individuals and organizations, including Federal, state, county, and local agencies; state and local conservation organizations and elected officials (Federal and state representatives and senators); local newspapers and libraries; property owners along the proposed route of the pipeline; and individuals. More than 70 letters or interventions were received from concerned landowners, state and local agencies, townships, and environmental groups. The FERC subsequently issued a *Notice of Site Visit and Summary of Scoping Issues; Notice of Intent to Prepare an Environmental Impact Statement* on October 4, 2001. The FERC also stated in the notice that any additional comments received that did not arise during the scoping period from the original NOI, which ended on August 3, 2001, and during the site visits would be addressed in the EIS.

The site visits were conducted in Long Island, New York on October 16, 2001, and in Connecticut on October 18, 2001. A separate meeting with Federal, state and local agencies was held in Connecticut on October 17, 2001. An additional site visit was conducted on February 20, 2002, to review alternatives.

Issues identified during the public scoping period and site visits included project purpose; construction techniques; blasting; topsoil segregation and restoration; spread of noxious weeds; impacts on private wells, septic systems, and public water supply; Long Island Sound impacts; fish, shellfish, and benthic communities impacts; loss of habitat; preservation of native plant and unique vegetative communities; impacts on endangered and threatened species; loss of wetland habitat and restoration procedures; impacts on open space, Central Pine Barrens, Branford Land Trust areas, and Thimble Islands; aesthetic and visual impacts from tree clearing; noise impacts; safety; loss of property values; traffic impacts; landowner concerns; cumulative impacts; and alternatives.

The FERC issued a *Notice of Availability of the Draft Environmental Impact Statement for the Proposed Islander East Pipeline Project* (NOA) on March 29, 2002. In the NOA, FERC requested comments on the Draft EIS and specific comments on system alternatives identified and evaluated in this document.

During the Draft EIS public comment period (April 5 to May 20, 2002), two public comment meetings were held in Long Island, New York and Connecticut. These meetings provided interested groups and individuals the opportunity to present oral comments for the environmental impacts described in the Draft EIS. Statements were made by 56 persons at the public meetings. During the public comment period for the Draft EIS, we received comment letters from 6 Federal agencies, 8 state agencies, 1 county, 4 local municipalities, and 82 groups and individuals, and Islander East. Comments on the Draft EIS and staff responses to these comments appear in Volume II of this document. Appropriate sections of the Final EIS have been revised in response to public comments and additional information provided by the applicant. These changes from the Draft EIS are indicated by a vertical sideline bar in the Final EIS.

Major Conclusions

We conclude that there is an environmentally preferable alternative to the Islander East Pipeline Project. There are a number of major considerations which the Commission would need to balance in determining whether the alternative should be imposed instead of Islander East. Nonetheless, with the use of Islander East's proposed mitigation and adoption of our recommended mitigation measures, construction and operation of the proposed facilities would have limited adverse environmental impact. The impacts would be most significant during the construction period. As part of our analysis, we have developed specific mitigation measures that we believe to be appropriate and reasonable for construction and operation of the proposed project. We believe these measures would substantially reduce the environmental impact of the project.

The primary reasons for our decision are:

- About 83 percent of the new pipeline would either overlap or be adjacent to existing pipeline, powerline, railroad, and road rights-of-way, reducing the need to establish new utility corridors;
- Islander East would use its ESC Plan, as modified by our recommendations, to mitigate impacts on soils, wetlands, waterbodies, and other important resources;
- An environmental inspection and mitigation program would ensure compliance with all mitigation measures that become conditions of certification;
- The appropriate consultations with the U.S. Fish and Wildlife Service, SHPOs in Connecticut and New York, and the Advisory Council on Historic Preservation, if required, would be completed before Islander East would be allowed to start construction in any given area; and
- Specialized offshore construction procedures would substantially reduce impacts on live bottom areas.

1.0 INTRODUCTION

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared this environmental impact statement (EIS) to assess the environmental impacts associated with the construction of facilities proposed by the Algonquin Gas Transmission Company (Algonquin or AGT) and Islander East Pipeline Company, L.L.C. (Islander East) and referred to in this Final EIS as the Islander East Pipeline Project.

On June 15, 2001, Islander East and Algonquin filed applications with the Commission in Docket Nos. CP01-384-000 and CP01-387-000, under Section 7(c) of the Natural Gas Act (NGA) and Part 157 of the Commission's regulations for Certificates of Public Convenience and Necessity (Certificate) to construct and operate various pipeline and compressor facilities in Connecticut, Long Island Sound (Sound), and New York. Algonquin proposes to uprate 27.4 miles of 10- and 16-inch-diameter pipelines and construct a compressor station with 12,028 horsepower (hp). Islander East proposes to construct 50.4 miles of new 24-inch-diameter pipeline and other associated auxiliary facilities. The new pipeline would cross 22.6 miles offshore (in the Sound) and 27.8 miles onshore.

1.1 PROJECT PURPOSE AND NEED

The purpose of the Islander East Pipeline Project is to initially provide 285,000 dekatherms per day (Dth/d) of natural gas to energy markets in Connecticut, Long Island, and New York City.

Islander East states that the proposed project would initially deliver natural gas to meet the load of new gas-fired electric generating plants as well as older, existing facilities that may convert to natural gas. The project would also supply enough natural gas to heat approximately 600,000 homes and meet local gas distribution company growth on Long Island and in New York City. Additional capacity and higher gas pressures would also be available for use in the expanding Connecticut market. Islander East also states that the proposed facilities would fully integrate market access between New England and New York, and would enhance access to virtually every major natural gas supply basin in North America, including recently developed and expanding natural gas reserves near Sable Island off the coast of Nova Scotia, through proposed interconnections with the Maritimes & Northeast Pipeline, L.L.C.

On September 15, 1999, the Commission issued a Policy Statement to provide guidance as to how it would evaluate proposals for certificating new construction. The Policy Statement established criteria for determining whether there is a need for a proposed project and whether the project would serve the public interest. Further, the Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. In evaluating new pipeline construction, the Commission's goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers of the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain.

On December 19, 2001, the Commission issued a Preliminary Determination on Non-Environmental Issues (PD) for this project. The PD indicates that the authorization of construction and operation of the proposed facilities would be in the public convenience and necessity under

Section 7(c) of the NGA. However, final action on the Certificate would not occur until after the environmental review is completed, all environmental matters have been properly addressed, and a final order is issued by the Commission. The issuance of a PD does not prejudice any further action by the Commission.

1.2 PURPOSE AND SCOPE OF THIS STATEMENT

The FERC is the Federal agency responsible for evaluating applications filed for authorization to construct and operate interstate natural gas pipeline facilities. Certificates are issued under Section 7(c) of the NGA and Part 157 of the Commission's regulations if the FERC determines that the project is required by the public convenience and necessity.

We^{1/} prepared this EIS to assess the environmental impacts associated with the construction and operation of facilities proposed by Islander East and Algonquin. This document has been prepared to comply with the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations for implementing NEPA [Title 40 Code of Federal Regulations (CFR) Parts 1500-1508], and the Commission's regulations (Title 18 CFR Part 380).

Our principal purposes in preparing this EIS are to:

- identify and assess potential impacts on the natural and human environment that would result from the implementation of the proposed project;
- assess reasonable alternatives to the proposed action that would avoid or minimize adverse effects on the environment;
- identify and recommend specific mitigation measures to minimize environmental impacts; and
- encourage and facilitate public involvement in identifying significant environmental impacts.

1.3 PUBLIC REVIEW AND COMMENT

The FERC issued a *Notice of Intent to Prepare an Environmental Assessment for the Islander East Pipeline Project and Request for Comments on Environmental Issues* (NOI) on July 3, 2001. The NOI stated that FERC would prepare either an environmental assessment (EA) or EIS for the proposed project. In the NOI, we solicited public comments to identify significant environmental issues that would be used in deciding whether an EA or EIS would be prepared. The NOI was sent to individuals and organizations, including Federal, state, county, and local agencies; state and local conservation organizations, and elected officials (Federal and state representatives and senators); local newspapers and libraries; property owners along the proposed route of the pipeline; and other individuals.

^{1/} "We," "us," and "our" refer to the environmental staff of the Office of Energy Projects (OEP), part of the Commission staff.

More than 70 letters or interventions were received from concerned landowners, state and local agencies, townships, and environmental groups. The FERC subsequently issued a *Notice of Site Visit and Summary of Scoping Issues; Notice of Intent to Prepare an Environmental Impact Statement* on October 4, 2001. In the notice, FERC stated that we would conduct site visits in the project area and any interested parties were invited to attend and address their issues of concern. The FERC also stated in the notice that any additional comments received that did not arise during the scoping period from the original NOI, which ended on August 3, 2001, and during the site visits would be addressed in the EIS.

The site visits were conducted on Long Island, New York on October 16, 2001, and in Connecticut on October 18, 2001. A separate meeting with Federal, state and local agencies was held on October 17, 2001, in Connecticut. An additional site visit was conducted on February 20, 2002, to review alternatives. Table 1.3-1 summarizes the issues and concerns identified by the public and agencies during the scoping period, and identifies the Draft EIS section in which the comments were addressed.

The FERC issued a *Notice of Availability of the Draft Environmental Impact Statement for the Proposed Islander East Pipeline Project* (NOA) on March 29, 2002. In the NOA, FERC requested comments on the Draft EIS and specific comments on system alternatives identified and evaluated in this document. The NOA stated that public meetings would be held in Connecticut and New York, with the location and date/time announced in a future notice. FERC stated that we would accept comments on the Draft EIS thru May 2002.

During the Draft EIS public comment period (April 5 to May 20, 2002), two public comment meetings were held in Long Island, New York and Connecticut. These meetings provided interested groups and individuals the opportunity to present oral comments for the environmental impacts described in the Draft EIS. The public comment meetings were held in Middle Island, New York (May 7, 2002) and Branford, Connecticut (May 8, 2002). Transcripts of each meeting and the written comments received are part of the public record for the Islander East Pipeline Project.

Statements were made by 56 persons at the public meetings. During the public comment period for the Draft EIS, we received comment letters from 6 Federal agencies, 8 state agencies, 1 county, 4 local municipalities, and 82 groups and individuals, and Islander East. Comments on the Draft EIS and staff responses to these comments appear in Volume II of this document. A summary of the comments received is provided in table 1.3-2. Appropriate sections of the Final EIS have been revised in response to public comments and additional information provided by the applicant. These changes from the Draft EIS are indicated by a vertical sideline bar in the Final EIS.

Frequently Raised Issues

Environmental issues raised during the public scoping and Draft EIS comment periods are addressed in the Final EIS. Other issues were raised that are not environmental issues, e.g., need for the project, the use of eminent domain, and monetary compensation methods. Although we recognize that these issues are very important to the commentor and affect the public's interest in the project, they lie beyond the scope of the EIS. However, we have provided some information on these items.

TABLE 1.3-1
Issues Identified From Comments Received During the Public Scoping Process for the
Islander East Pipeline Project

Issue	Comments	Draft EIS Section Where Comment is Addressed
General	Project purpose, public notice, support/opposition to pipeline, construction techniques, construction schedule	1.2, 1.3, 2.3, 2.6, and 3.10
Geology	Blasting of granite, drilling through granite, rock removal	2.3, and 3.1
Soils	Topsoil segregation and restoration, erosion, agricultural impacts, residential lawn impacts	2.3, 3.2, and 3.8
Water Resources	Groundwater, water quality, private water wells, waterbody construction and restoration procedures, septic systems impacts, public water supply impacts, Long Island Sound impacts	2.3 and 3.3
Fish, Benthic Communities, and Wildlife	Impacts to fish, shellfish, and benthic communities, habitat loss, wildlife preserves, ecologically significant spawning and nesting areas, timing of construction and breeding seasons, commercial fisheries industry impacts	3.4
Vegetation	Native plant conservation, impacts to trees/vegetation, expansion of invasive plants	3.5 and 3.8
Endangered and Threatened Species	Impacts to threatened and endangered species, surveys, piping plover impacts	3.6
Wetlands	Wetland construction and restoration procedures, salt marsh and tidal wetland impacts, impact to wetlands of Carmans and Peconic Rivers, Branford Inland Wetlands Commission requirements, wetland mitigation	2.3 and 3.7
Land Use and Visual Resources	Land use compatibility. Residential construction and restoration procedures, aesthetic and visual impacts, development/farming restrictions, coastal zone management consistency, proximity to school and residences, impacts on open space	2.3 and 3.8
Recreation and Public Interest Areas	Impacts to New York State Central Pine Barrens, Thimble Islands impacts, Connecticut recreation areas for shellfishing, Wading River Marsh, Branford Land Trust areas, unauthorized all-terrain vehicle use of rights-of-way	3.8
Cultural Resources	Branford Steam Railroad, All Saints Cemetery, review of all inaccessible areas and archaeological sites	3.9
Socioeconomics	Property values, traffic impacts, increased development, tourism, industrialization of the area, local government services impacts	3.8 and 3.10
Air Quality and Noise	Compressor station noise and emissions, construction emissions impacts, noise mitigation, blasting noise, and horizontal directional drilling noise	3.11
Reliability and Safety	Onshore and offshore safety issues, pipeline maintenance, pipeline explosions, general safety, safety along railroad right-of-way, local fire department training	2.3 and 3.12
Cumulative Impacts	Cumulative impacts associated with multi-utility development, impacts of proposed cable and competing pipelines	3.13
Alternatives	System alternatives, route alternatives, route variations	4.2, 4.3, and 4.4

TABLE 1.3-2
Issues Identified From Comments Received During the Public Review Period for the
Islander East Pipeline Project

Issue	Comments	Final EIS Section Where Comment is Addressed
General	Project purpose, public notice, support/opposition to pipeline, construction techniques, construction schedule	1.2, 1.3, 2.3, 2.6, and 3.10
Geology	Marine blasting, drilling through granite, rock removal	2.3, and 3.1
Soils	Topsoil segregation and restoration, erosion, agricultural impacts	2.3, 3.2, and 3.8
Water Resources	Groundwater, water quality, private water wells, waterbody construction and restoration procedures, public water supply impacts, Long Island Sound impacts	2.3 and 3.3
Fish, Benthic Communities, and Wildlife	Impacts to fish, shellfish, and benthic communities, habitat loss, wildlife preserves, ecologically significant spawning and nesting areas, timing of construction and breeding seasons, commercial fisheries industry impacts	3.4
Vegetation	Native plant conservation, impacts to trees/vegetation, expansion of invasive plants	2.4, 3.5 and 3.8
Endangered and Threatened Species	Impacts to threatened and endangered species, surveys, piping plover impacts	3.6
Wetlands	Wetland construction and restoration procedures, salt marsh and tidal wetland impacts, impact to wetlands of Carmans and Peconic Rivers, Branford Inland Wetlands Commission requirements, wetland mitigation	2.3 and 3.7
Land Use and Visual Resources	Land use compatibility. Residential construction and restoration procedures, aesthetic and visual impacts, development/farming restrictions, coastal zone management consistency, proximity to school and residences, impacts on open space	2.3, 2.4 and 3.8
Recreation and Public Interest Areas	Impacts to New York State Central Pine Barrens, Thimble Islands impacts, Connecticut recreation areas for shellfishing, Wading River Marsh, Branford Land Trust areas, unauthorized all-terrain vehicle use of rights-of-way	3.8, 4.3 and 4.4
Cultural Resources	Branford Steam Railroad, All Saints Cemetery, review of all inaccessible areas and archaeological sites, Thimble Islands and National Register	3.9
Socioeconomics	Property values, traffic impacts, increased development, tourism, industrialization of the area, local government services impacts	3.8 and 3.10
Air Quality and Noise	Compressor station noise and emissions, construction emissions impacts, noise mitigation, blasting noise, and horizontal directional drilling noise	3.11
Reliability and Safety	Onshore and offshore safety issues, pipeline maintenance, pipeline explosions, general safety, safety along railroad right-of-way, local fire department training	2.3 and 3.12
Cumulative Impacts	Cumulative impacts associated with multi-utility development, impacts of proposed cable and competing pipelines	3.13
Alternatives	System alternatives, route alternatives, route variations	4.2, 4.3, and 4.4

Public and Government Agency Concern

The towns of Branford and North Haven in Connecticut, and Brookhaven and Wading Creek on Long Island, New York, raised objections to the project based primarily on potential impacts to the environment and property owners. The Connecticut Attorney General's Office, the Central Pine Barrens Commission, and the Connecticut Department of Environmental Protection (CTDEP) filed numerous comments about Connecticut onshore and offshore impacts, and potential impacts on the Central Pine Barrens and the Core Preservation Area on Long Island in response to the project. Concerns also were raised by some local governments that were related to zoning and future encroachment issues.

Project Location

Several commentors preferred other alternatives, including ones away from their communities. Several commentors did not like the location of the Sound crossing location or the Connecticut Sound entrance point. Some requested we examine routes that follow more existing lines, roads or the Tilcon Railroad Corridor.

Landowner Issues

Many commentors expressed concerns related to proximity to homes, loss of land, possible restrictions on use of right-of-way for farming activities, property devaluation, safety, noise pollution from construction activities and the directional drill near homes (especially near Juniper Point, Connecticut). Other concerns included septic system impacts from poor drainage or direct damage due to construction; drinking water well disruption or contamination; blasting impacts to the granite bedrock in the area and potential for foundation cracking or affecting existing groundwater contamination migration; safety and noise impacts near a school; previous damage from the Algonquin pipeline installation; and unauthorized all-terrain vehicle usage along the pipeline right-of-way.

Tidal and Inland Ecological Impacts

Several commentors were concerned about the potential for impacts to tidal and inland wetlands and wildlife preserves including the Central Pine Barrens in New York, impacts to surface water and groundwater drainage, invasive species introduction, wildlife impacts and soil erosion/sedimentation impacts from tree and upland buffer removal. Other concerns related to impacts on threatened and endangered species/need for surveys of such species, impacts to potential tidal restoration projects planned near the Connecticut Sound entrance point, impacts from use of herbicides/pesticides, and impacts to the Thimble Islands.

Human and Socioeconomic Impacts

Concerns were raised regarding tourism and recreational impacts to local towns, economic and social impacts, proximity to railroad (new open corridor and safety concerns), and procedures for handling a gas emergency (concern that some volunteer fire departments could not handle a gas emergency). Concerns about impacts to public lands preserved for open spaces or beaches in the affected towns, future zoning/development issues, noise impacts from clearing tree screening along Interstate 95, and scenic highways/visual impacts were also expressed.

Long Island Sound Ecological Impacts

A number of comments expressed concern about impacts to the ecosystem of the Sound including impacts to shellfish grounds, lobsters, and commercial fishing; impacts to lobster and bottom fish migration (especially if the pipeline is partially exposed); and directional drilling impacts on shellfish beds in the event of a frac-out or a spill. In addition, issues were raised about spawning and nesting windows, impacts from anchoring and cable sweep from barges, general water quality degradation, and a preference for complete burial of the underwater pipeline.

Various Concerns

Various other issues raised by the public and agencies included a lack of trust that the companies would do the mitigation they have stated, and the apprehension that additional industrialization in the area may occur with a new corridor. Other commentors stated that they wanted the other two projects that would cross the Sound (Iroquois filed as Docket No. CP02-52-000, and Tennessee Gas Pipeline Company [Tennessee], yet to be filed) to be evaluated at the same time and considered as alternatives. Cumulative impacts, cultural resources, and air quality impacts also need to be analyzed.

1.4 SCOPE OF NONJURISDICTIONAL FACILITY ANALYSIS

Under Section 7(c) of the NGA, FERC is required to consider as part of a decision to certificate jurisdictional facilities, all factors bearing on the public convenience and necessity. The jurisdictional facilities for the Islander East Pipeline Project include the mainline, lateral, and aboveground facilities. These are discussed in detail in section 2.1. In addition, Islander East provided information regarding the facilities required by its customers for this project. These facilities are not under the Commission's jurisdiction and involve two planned power plants and one local natural gas distribution company on Long Island, New York. A description of each nonjurisdictional facility is included in section 2.7.

The Commission has adopted a four-factor procedure developed by the U.S. Army Corps of Engineers (COE) to determine whether there is sufficient Federal control and responsibility over a project as a whole to warrant environmental analysis of related nonjurisdictional facilities. These factors include:

- (i) Whether or not the regulated activity comprises "merely a link" in a corridor type project (e.g., a transportation or utility transmission project);
- (ii) Whether there are aspects of the nonjurisdictional facility in the immediate vicinity of the regulated activity that affects the location and configuration of the regulated activity;
- (iii) The extent to which the entire project would be within the FERC's jurisdiction; and
- (iv) The extent of cumulative Federal control and responsibility.

With regard to factor one, the jurisdictional facilities (i.e., the Islander East Pipeline Project) are clearly a link in this natural gas project. The project would provide a new transportation system

between the producers of the gas and the end users. Algonquin and Islander East are common carriers of natural gas, and as such serve only to transport the gas for the end user. They do not sell the gas to the end user. Therefore, this factor does not favor examining the nonjurisdictional facilities.

With respect to factor two, the location of the nonjurisdictional facilities have had little impact on the location and configuration of the Islander East Pipeline Project. The number of route variations that are possible clearly shows that the Islander East Pipeline Project's and the nonjurisdictional company facilities only need to interconnect. Islander East's facilities have been designed to provide the capacity for customers in eastern Long Island, New York. However, there is nothing about the design of Islander East's facilities which have been uniquely influenced by the location or configuration of the nonjurisdictional facilities. This factor, therefore, does not favor examining the nonjurisdictional facilities.

Under factor three, which weighs the extent to which the entire project would be within the Commission's jurisdiction, the nonjurisdictional facilities are not regulated by the FERC and may not require any other Federal permit. Therefore, this factor weighs against extending the scope of the environmental review.

With respect to factor four, all of the nonjurisdictional facilities are being planned by independent companies. The financial obligations and responsibilities associated with each project rest solely with each sponsor, and the cumulative Federal control is minimal. This factor weighs against extending the review to include nonjurisdictional facilities.

In conclusion, overall consideration of the four factors suggests that the Commission's control and responsibility over the nonjurisdictional facilities is not sufficient to become a Federal action. Nevertheless, construction of customer facilities and reasonably foreseeable projects related to the proposed Islander East Pipeline Project are addressed in the cumulative impact analysis in section 3.13 of this EIS.