

March 2002
FERC/EIS - 0143D

Islander East Pipeline Project

Draft Environmental Impact Statement

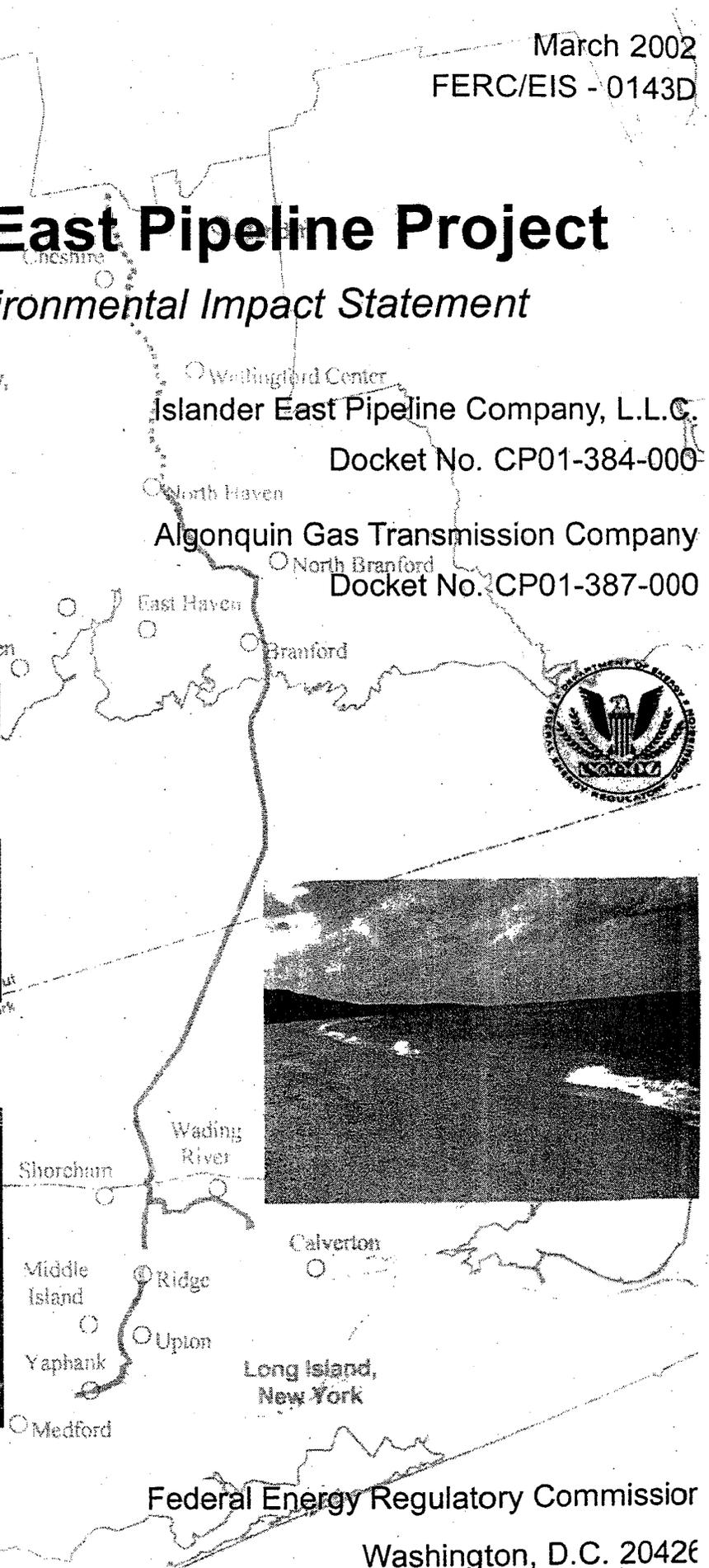
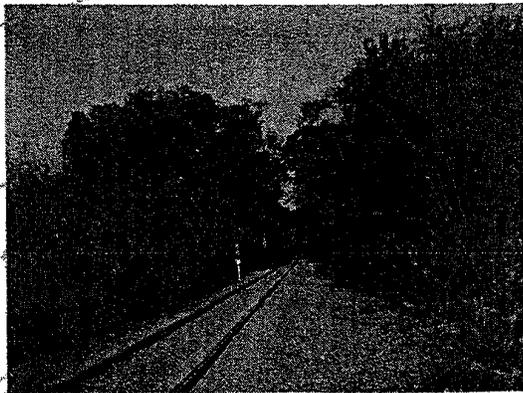
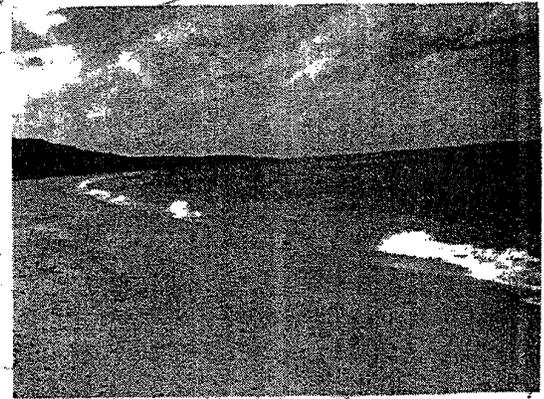
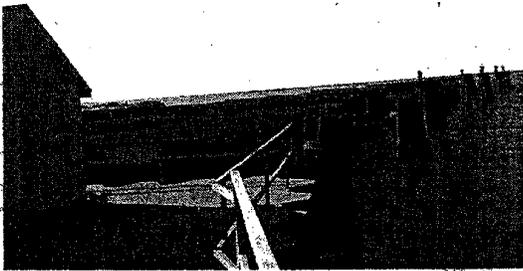
New Haven County,
Connecticut

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:
OEP/DEER/Gas Branch 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 draft environmental impact statement (EIS) on natural gas pipeline facilities proposed by Islander East Pipeline Company, L.L.C. and Algonquin Gas Transmission Company in the above-referenced dockets. The application and other supplemental filings in these dockets are available for viewing on the FERC internet website (www.ferc.gov). Click on the "RIMS" link, select "Docket #" from the RIMS menu, and follow the instructions.

The draft 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 have limited adverse environmental impact. The draft EIS also evaluates alternatives to the proposal, including system alternatives, route alternatives, and route variations.

The draft EIS addresses the potential environmental effects of the construction and operation of the following facilities in New Haven County, Connecticut and Suffolk County, New York:

- a new 12,028 horsepower Cheshire Compressor Station north of Cheshire, Connecticut in New Haven County run by Algonquin Gas Transmission Company;
- the removal of two launchers from an existing Algonquin mainline valve and interconnect facility northeast of Cheshire, Connecticut by Algonquin;
- retest and upgrade along the C-1 and C-1L lines of about 27.4 miles of existing Algonquin mainline from Cheshire Compressor Station to North Haven, Connecticut;
- an anomaly investigation along the C-1 lines of about 0.1 mile of existing Algonquin mainline from Cheshire Compressor Station to North Haven, Connecticut;
- about 44.8 miles of new 24-inch-diameter Islander East Pipeline from the North Haven Meter Station just south of North Haven, Connecticut to the KeySpan Energy and ;
- about 5.6 miles of new 24-inch diameter pipeline (the Calverton Lateral) from the Islander East Pipeline near Wading River, New York, through the Towns of Brookhaven and Riverhead, New York to a planned power plant in Calverton, New York; and

- a new meter station within the North Haven Meter Station Site, just south of North Haven, Connecticut;
- a new meter station in Brookhaven, New York and in Calverton, New York at the terminus of the Islander East Pipeline and the Calverton Lateral, respectively; and
- five new mainline valves along the proposed pipeline route (two in Connecticut and three in New York).

The purpose of the Algonquin and Islander East project is to provide transportation service for 285,000 dekatherms per day of natural gas from supply areas in the northeast United States to energy markets in Connecticut; Long Island, New York; and New York City.

Comment Procedures and Public Meetings

Any person wishing to comment on the EIS may do so. To ensure consideration prior to a Commission decision on the proposal, it is important that we receive your comments before the date specified below. **Please carefully follow these instructions to ensure that your comments are received in time and are properly recorded:**

- Send an original and two copies of your comments to:

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First St., N.E., Room 1A
Washington, D.C. 20426;
- Reference Docket Nos. CP01-384-000 and CP01-387-000
- Label one copy of your comments for the attention of Gas Group 2, PJ-11.2.
- **Mail your comments so that they will be received in Washington, DC on or before May 19, 2002.**

Comments may also be filed electronically via the Internet in lieu of paper. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's website at <http://www.ferc.gov> under the "e-Filing" link and the link to the User's Guide. Before you can file comments you will need to create an account by clicking on "Login to File" and then "New User Account."

Due to recent events, we cannot guarantee that we will receive mail on a timely basis from the U.S. Postal Service, and we do not know how long this situation will continue. However, we continue to receive filings from private mail delivery services, including messenger services in a reliable manner. **The Commission encourages electronic filing of any comments on this draft EIS.** We will include all comments that we receive within a reasonable time frame in our environmental analysis of this project.

We will announce in a future notice, the location and time of one local public meeting in Connecticut and one in New York to receive comments on the draft EIS.

Interested groups and individuals are encouraged to attend and present oral comments on the environmental impacts described in the draft EIS. Transcripts of the meetings will be prepared.

After these comments are reviewed, any significant new issues are investigated, and modifications are made to the draft EIS as necessary, a final EIS will be published and distributed by the staff. The final EIS will contain the staff's responses to timely comments received on the draft EIS.

Comments will be considered by the Commission but will not serve to make the commentor a party to the proceeding. Any person seeking to become a party to the proceeding must file a motion to intervene pursuant to Rule 214 of the Commission's Rules of Practices and Procedures (18 CFR 385.214).

Anyone may intervene in this proceeding based on this draft EIS. You must file your request to intervene as specified above.^{1/} **You do not need intervenor status to have your comments considered.**

The draft 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 draft EIS are available from the Public Reference and Files Maintenance Branch identified above. In addition, the draft 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 draft EIS; public libraries; newspapers; and parties to this proceeding.

Additional information about the proposed project is available from the Commission's Office of External Affairs at (202) 208-1088 or on the FERC website (www.ferc.gov) using the "RIMS" link to information in the docket numbers. Click on the "RIMS" link, select "Docket #" from the RIMS menu, and follow the instructions. For assistance with access to RIMS, the RIMS helpline can be reached at (202) 208-2222.

Similarly, the "CIPS" link on the FERC internet website provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rulemakings. From the FERC Internet website, click on the "CIPS" link, select "DOCKET #" from the CIPS menu, and follow the instructions. For assistance with access to CIPS, the CIPS helpline can be reached at (202) 208-2222.

Magalie R. Salas
Secretary

^{1/} Interventions may also be filed electronically via the Internet in lieu of paper. See the previous discussion on filing comments electronically.

Islander East Pipeline Project

March 2002

Draft Environmental Impact Statement

TABLE OF CONTENTS

| | |
|---|------------|
| Table of Contents | i |
| List of Tables | v |
| List of Figures | vii |
| Acronyms and Abbreviations | viii |
| Executive Summary | ES-1 |
| 1.0 INTRODUCTION | 1-1 |
| 1.1 Project Purpose and Need | 1-1 |
| 1.2 Purpose and Scope of this Statement | 1-2 |
| 1.3 Public Review and Comment | 1-2 |
| 1.4 Scope of Nonjurisdictional Facility Analysis | 1-5 |
| 2.0 PROPOSED ACTION | 2-1 |
| 2.1 Proposed Facilities | 2-1 |
| 2.2 Land Requirements | 2-1 |
| 2.2.1 Onshore | 2-1 |
| 2.2.2 Offshore | 2-8 |
| 2.3 Construction Procedures | 2-9 |
| 2.3.1 General Onshore Construction Procedures | 2-10 |
| 2.3.1.1 Right-of-Way Survey | 2-10 |
| 2.3.1.2 Clearing and Grading | 2-10 |
| 2.3.1.3 Trenching | 2-12 |
| 2.3.1.4 Pipe Stringing, Bending, and Welding | 2-12 |
| 2.3.1.5 Installation and Backfilling | 2-12 |
| 2.3.1.6 Hydrostatic Testing | 2-12 |
| 2.3.1.7 Cleanup and Restoration | 2-13 |
| 2.3.2 Special Onshore Construction Techniques | 2-13 |
| 2.3.2.1 Agricultural Areas | 2-13 |
| 2.3.2.2 Residential, Commercial, and Industrial Areas | 2-13 |
| 2.3.2.3 Steep Slopes | 2-14 |
| 2.3.2.4 Blasting | 2-14 |
| 2.3.2.5 Roads and Railroads | 2-14 |
| 2.3.2.6 Other Utility Lines | 2-15 |
| 2.3.2.7 Wetlands | 2-15 |
| 2.3.2.8 Waterbodies | 2-17 |
| 2.3.2.9 Algonquin Pipelines Retest | 2-24 |
| 2.3.2.10 Anomaly Investigations | 2-24 |
| 2.3.3 Typical Offshore Construction Procedures | 2-25 |
| 2.3.3.1 Lay Barges | 2-25 |
| 2.3.3.2 Bury Barge | 2-27 |
| 2.3.4 Special Offshore Construction Procedures | 2-27 |
| 2.3.4.1 Connecticut Mainland Approach | 2-27 |
| 2.3.4.2 Long Island Mainland Approach | 2-32 |
| 2.3.4.3 Blasting | 2-37 |
| 2.3.4.4 Foreign Utility Lines | 2-37 |

Table of Contents

| | | |
|---------|--|------|
| 2.3.5 | Aboveground Facilities Construction Procedures | 2-37 |
| 2.3.5.1 | Compressor Station | 2-37 |
| 2.3.5.2 | Meter Stations | 2-38 |
| 2.3.5.3 | Mainline Valves | 2-38 |
| 2.3.5.4 | Launcher Relocation | 2-38 |
| 2.3.6 | Safety Controls | 2-38 |
| 2.3.6.1 | Pipeline Construction and Design | 2-39 |
| 2.3.6.2 | Compressor Station Design and Construction | 2-39 |
| 2.3.6.3 | Pipeline Equipment and Control | 2-40 |
| 2.3.6.4 | Operation and Maintenance | 2-40 |
| 2.3.6.5 | Emergency Plan | 2-41 |
| 2.3.6.6 | Liaison Procedures with Local Authorities | 2-41 |
| 2.4 | Operation and Maintenance Procedures | 2-42 |
| 2.4.1 | Pipeline Facilities | 2-42 |
| 2.4.1.1 | Routine Vegetation Clearing | 2-42 |
| 2.4.1.2 | Pipeline Integrity Surveys | 2-43 |
| 2.4.1.3 | Erosion Repair and Control | 2-43 |
| 2.4.1.4 | Pipe Coating Inspections | 2-43 |
| 2.4.2 | Aboveground Facilities | 2-43 |
| 2.5 | Future Plans and Abandonment | 2-44 |
| 2.6 | Permits and Approvals | 2-44 |
| 2.7 | Nonjurisdictional Facilities | 2-46 |
| 2.7.1 | Brookhaven Energy Project | 2-46 |
| 2.7.2 | AES Long Island Project | 2-48 |
| 2.7.3 | KeySpan Energy Delivery Long Island | 2-50 |
| 3.0 | ENVIRONMENTAL ANALYSIS | 3-1 |
| 3.1 | Geology | 3-1 |
| 3.1.1 | Physiography | 3-1 |
| 3.1.1.1 | Existing Environment | 3-1 |
| 3.1.1.2 | Environmental Consequences | 3-3 |
| 3.1.2 | Mineral and Paleontological Resources | 3-5 |
| 3.1.2.1 | Existing Environment | 3-5 |
| 3.1.2.2 | Environmental Consequences | 3-5 |
| 3.1.3 | Geologic Hazards | 3-5 |
| 3.1.3.1 | Existing Environment | 3-6 |
| 3.1.3.2 | Environmental Consequences | 3-8 |
| 3.2 | Soils | 3-9 |
| 3.2.1 | Existing Environment | 3-9 |
| 3.2.2 | Environmental Consequences | 3-12 |
| 3.3 | Water Resources | 3-19 |
| 3.3.1 | Groundwater | 3-19 |
| 3.3.1.1 | Existing Environment | 3-19 |
| 3.3.1.2 | Environmental Consequences | 3-24 |
| 3.3.2 | Surface Water | 3-26 |
| 3.3.2.1 | Existing Environment | 3-26 |
| 3.3.2.2 | Environmental Consequences | 3-29 |
| 3.3.3 | Long Island Sound | 3-33 |
| 3.3.3.1 | Existing Environment | 3-33 |
| 3.3.3.2 | Environmental Consequences | 3-36 |

| | | |
|----------|---|-------|
| 3.4 | Fish, Benthic Communities, and Wildlife | 3-46 |
| 3.4.1 | Fisheries Resources | 3-46 |
| 3.4.1.1 | Existing Environment | 3-46 |
| 3.4.1.2 | Environmental Consequences | 3-47 |
| 3.4.2 | Wildlife | 3-58 |
| 3.4.2.1 | Existing Environment | 3-58 |
| 3.4.2.2 | Environmental Consequences | 3-59 |
| 3.5 | Vegetation | 3-60 |
| 3.5.1 | Existing Environment | 3-60 |
| 3.5.2 | Environmental Consequences | 3-62 |
| 3.6 | Endangered and Threatened Species | 3-64 |
| 3.6.1 | Federally Listed or Proposed Endangered or Threatened Species | 3-64 |
| 3.6.2 | Other Special Status Species | 3-66 |
| 3.6.3 | General Construction and Operation Impact | 3-67 |
| 3.6.4 | Site-Specific Impact | 3-67 |
| 3.6.4.1 | Federally Listed or Proposed Endangered or Threatened Species | 3-67 |
| 3.6.4.2 | Other Special Status Species | 3-70 |
| 3.7 | Wetlands | 3-71 |
| 3.7.1 | Existing Environment | 3-71 |
| 3.7.2 | Environmental Consequences | 3-73 |
| 3.8 | Land Use, Recreation, and Visual Resources | 3-77 |
| 3.8.1 | Land Use | 3-77 |
| 3.8.1.1 | Existing Environment | 3-77 |
| 3.8.1.2 | Environmental Consequences | 3-79 |
| 3.8.2 | Residential and Commercial/Industrial Areas | 3-84 |
| 3.8.2.1 | Existing Environment | 3-84 |
| 3.8.2.2 | Environmental Consequences | 3-85 |
| 3.8.3 | Recreational and Public Interest Areas | 3-90 |
| 3.8.3.1 | Existing Environment | 3-90 |
| 3.8.3.2 | Environmental Consequences | 3-100 |
| 3.8.4 | Coastal Zone Management | 3-105 |
| 3.8.5 | Visual Resources | 3-106 |
| 3.8.5.1 | Existing Environment | 3-106 |
| 3.8.5.2 | Environmental Consequences | 3-107 |
| 3.9 | Cultural Resources | 3-110 |
| 3.10 | Socioeconomics | 3-113 |
| 3.10.1 | Region of Influence | 3-113 |
| 3.10.2 | Population and Housing | 3-114 |
| 3.10.3 | Employment and Income | 3-115 |
| 3.11 | Air Quality and Noise | 3-121 |
| 3.11.1 | Air Quality | 3-121 |
| 3.11.1.1 | Existing Environment | 3-122 |
| 3.11.1.2 | Environmental Consequences | 3-123 |
| 3.11.2 | Noise | 3-124 |
| 3.11.2.1 | Existing Environment | 3-125 |
| 3.11.2.2 | Environmental Consequences | 3-125 |

Table of Contents

| | | |
|-------------------|--|-------|
| 3.12 | Reliability and Safety | 3-127 |
| 3.12.1 | Safety Standards | 3-127 |
| 3.12.2 | Pipeline Accident Data | 3-130 |
| 3.12.3 | Impact on Public Safety | 3-133 |
| 3.13 | Cumulative Impacts | 3-134 |
| 4.0 | ALTERNATIVES | 4-1 |
| 4.1 | No Action or Postponed Action Alternative | 4-1 |
| 4.2 | System Alternatives | 4-2 |
| 4.2.1 | One-Pipe System Alternative | 4-3 |
| 4.2.2 | ELI System Alternative | 4-13 |
| 4.2.3 | Long Island System Alternative | 4-19 |
| 4.2.4 | Tennessee Connection-Long Island Lateral Project System Alternative | 4-20 |
| 4.3 | Route Alternatives | 4-20 |
| 4.3.1 | Replacement Route Alternative (MP 0.0 to 6.1) | 4-22 |
| 4.3.2 | Sachem Head Route Alternative (MP 7.6 to 17.9) | 4-22 |
| 4.3.3 | Short Beach Route Alternative (MP 2.9 to 16.2) | 4-24 |
| 4.3.4 | Option 2 and Option 3 Offshore Route Alternatives (MP 10.9 to 16.2) | 4-27 |
| 4.3.5 | Calverton Lateral Route Alternative (MP CA 0.5 to CA 3.3) | 4-29 |
| 4.3.6 | Calverton State Route 25 Route Alternative (MP 37.8 to MP CA 5.6) | 4-31 |
| 4.3.7 | New Haven (Amtrak) Route Alternative | 4-34 |
| 4.4 | Route Variations | 4-35 |
| 4.4.1 | Pine Orchard Variation (MP 9.6 to 10.8) | 4-35 |
| 4.4.2 | Pond Variation | 4-38 |
| 4.4.3 | County Park Variation (MP CA 1.1 to CA 1.9) | 4-40 |
| 4.4.4 | William Floyd Parkway Variation (MP 41.4 to 41.8) | 4-42 |
| 4.4.5 | Other Site-Specific Variations | 4-43 |
| 4.5 | Aboveground Facility Alternatives | 4-45 |
| 5.0 | CONCLUSION AND RECOMMENDATIONS | 5-1 |
| 5.1 | Summary of the Staff's Environmental Analysis of the Proposed Action and Alternatives | 5-1 |
| 5.2 | FERC Staff Recommended Mitigation | 5-10 |
| APPENDICES | | |
| Appendix A | Draft EIS Distribution List | A-1 |
| Appendix B | Facility Location Maps | B-1 |
| Appendix C | Right-of-Way Cross-Section Diagrams | C-1 |
| Appendix D | Islander East's Erosion and Sedimentation Control Plan | D-1 |
| Appendix E | Soil Characteristics of the Proposed Route | E-1 |
| Appendix F | Additional Temporary Workspace Requirements | F-1 |
| Appendix G | Water Table Within 4 Feet of Ground Surface | G-1 |
| Appendix H | Site-Specific Sediment Sampling Results | H-1 |
| Appendix I | Essential Fish Habitat Assessment | I-1 |
| Appendix J | List of Preparers | J-1 |
| Appendix K | References | K-1 |

LIST OF TABLES

| | | |
|---------------|--|-------|
| Table 1.3-1 | Issues Identified From Comments Received During the Public Scoping Process for the Islander East Pipeline Project | 1-3 |
| Table 2.1-1 | Pipeline Facilities | 2-1 |
| Table 2.1-2 | Aboveground Facilities | 2-3 |
| Table 2.2-1 | Construction and Permanent Right-of-Way Requirements | 2-4 |
| Table 2.2-2 | Access Roads | 2-7 |
| Table 2.2-3 | Aboveground Facility Land Requirements | 2-8 |
| Table 2.3-1 | Construction Schedule | 2-9 |
| Table 2.6-1 | Permits, Approvals, and Consultations | 2-45 |
| Table 3.1.1-1 | Geologic Features Along the Islander East Pipeline Route | 3-2 |
| Table 3.1.3-1 | Modified Mercalli Intensity | 3-6 |
| Table 3.1.3-2 | Richter Magnitude | 3-7 |
| Table 3.3.1-1 | Federal and State Designated Aquifers Along the Islander East Pipeline Project | 3-21 |
| Table 3.3.1-2 | Contaminated Sites and Landfills Located Within 0.25 Mile of the Islander East Pipeline Project | 3-23 |
| Table 3.3.2-1 | Watersheds Crossed by the Islander East Pipeline Project | 3-27 |
| Table 3.3.2-2 | Waterbodies Crossed by the Islander East Pipeline Project | 3-28 |
| Table 3.3.2-3 | Hydrostatic Test Water Volumes and Fill and Discharge Locations | 3-32 |
| Table 3.3.3-1 | Area of Sound Bottom Disturbed by Proposed Construction Methods | 3-38 |
| Table 3.4.1-1 | Recreational or Commercial Important Fish Species Known to Occur in the Project Area | 3-46 |
| Table 3.4.1-2 | Ten Minute Square Coordinate Designations Along the Islander East Pipeline Project in Long Island Sound | 3-48 |
| Table 3.4.1-3 | Summary of Essential Fish Habitat Designation (All Four Ten Minute Squares) | 3-48 |
| Table 3.6.1-1 | Federally Listed Endangered or Threatened Species That Potentially Occur in the Vicinity of the Islander East Pipeline Project | 3-65 |
| Table 3.6.2-1 | Other Special Status Species That Potentially Occur in the Vicinity of the Islander East Pipeline Project | 3-68 |
| Table 3.7.1-1 | Wetland Crossings | 3-72 |
| Table 3.8.1-1 | Land Uses Crossed by the Existing and Proposed Pipeline (in miles) | 3-78 |
| Table 3.8.1-2 | Land Uses at New Aboveground Facilities | 3-79 |
| Table 3.8.1-3 | Acres Affected by Construction and Operation | 3-80 |
| Table 3.8.2-1 | Residences Within 50 Feet of the Construction Work Area | 3-86 |
| Table 3.8.2-2 | Commercial/Industrial Buildings Within 50 Feet of the Construction Work Area | 3-87 |
| Table 3.8.3-1 | Special Use Areas Crossed by or in the Vicinity of the Islander East Pipeline Project | 3-91 |
| Table 3.8.3-2 | Federal, State, and Locally Owned Land Crossed by the Pipeline Centerline | 3-101 |
| Table 3.8.3-3 | Contaminated Sites and Landfills Located Within 0.25 Mile of the Islander East Pipeline Project | 3-102 |

Table of Contents

| | | |
|----------------|--|-------|
| Table 3.9-1 | Potential NRHP-Eligible Properties That May be Affected by the Islander East Pipeline Project | 3-111 |
| Table 3.9-2 | Cultural Resources Investigations or Reviews Still Needed For the Islander East Pipeline Project | 3-112 |
| Table 3.10.1-1 | Existing Socioeconomic Conditions in the Project Area | 3-114 |
| Table 3.10.1-2 | Housing Characteristics of the Project Area | 3-114 |
| Table 3.10.1-3 | Community Statistics of the Project Area | 3-115 |
| Table 3.10.2-1 | Employment and Income Generated by the Islander East Pipeline Project | 3-117 |
| Table 3.10.2-2 | Local Expenses and Tax Revenue for Facility Operation | 3-118 |
| Table 3.11.1-1 | Estimated Annual Emissions for the Cheshire Compressor Station . | 3-124 |
| Table 3.11.2-1 | Existing Ambient Noise Levels Near the Proposed Cheshire Compressor Station | 3-125 |
| Table 3.11.2-2 | Projected Ambient Noise Levels Near the Proposed Cheshire Compressor Station | 3-126 |
| Table 3.12.2-1 | Natural Gas Service Incidents by Cause | 3-131 |
| Table 3.12.2-2 | Outside Forces Incidents by Cause (1970 - 1984) | 3-132 |
| Table 3.12.2-3 | External Corrosion by Level of Control (1970 - 1984) | 3-133 |
| Table 3.12.3-1 | Annual Average Fatalities-Natural Gas Transmission and Gathering Systems | 3-134 |
| Table 3.12.3-2 | Nationwide Accidental Deaths | 3-134 |
| Table 3.13-1 | Resource Areas Most Likely to be Cumulatively Affected by Ongoing and Reasonably Foreseeable Future Projects | 3-136 |
| Table 4.2.1-1 | Comparison of the Facilities Required for the One-Pipe System Alternative with the Facilities Required for Both the ELI Extension and Islander East Projects | 4-12 |
| Table 4.2.2-1 | Comparison of the Facilities Required for the ELI System Alternative with the Facilities Required for the Islander East Project . | 4-14 |
| Table 4.2.2-2 | Comparison of the Construction and Operational Impacts of the Milford and Cheshire Compressor Stations | 4-18 |
| Table 4.2.3-1 | Comparison of the Long Island System Alternative to Constructing Dual Pipelines on Long Island | 4-20 |
| Table 4.3.1-1 | Summary of Route Alternatives Evaluated | 4-21 |
| Table 4.3.2-1 | Comparison of the Sachem Head Alternative to the Corresponding Segment of the Proposed Route MP 7.6 to MP 17.9 | 4-24 |
| Table 4.3.3-1 | Comparison of the Short Beach Alternative to the Corresponding Segment of the Proposed Route MP 2.9 to 16.2 | 4-25 |
| Table 4.3.4-1 | Comparison of the Option 2 and Option 3 Alternatives to the Corresponding Segment of the Proposed Route MP 10.9 to 16.2 | 4-27 |
| Table 4.3.5-1 | Comparison of the Calverton Lateral Alternative to the Corresponding Segment of the Proposed Route MP CA 0.5 to CA 3.3 | 4-31 |
| Table 4.3.6-1 | Comparison of the Calverton State Route 25 Alternative to the Corresponding Segment of the Proposed Route MP 37.8 to CA 5.6 | 4-34 |
| Table 4.4.1-1 | Comparison of the Pine Orchard Variation to the Corresponding Segment of the Proposed Route MP 9.6 to 10.8 | 4-37 |

| | | |
|---------------|--|------|
| Table 4.4.2-1 | Comparison of the Pond Variation to the Corresponding Segment of the Proposed Route MP 9.7 to 9.85 | 4-38 |
| Table 4.4.3-1 | Comparison of the County Park Variation to the Corresponding Segment of the Proposed Route MP CA 1.1 to CA 1.7 | 4-42 |

LIST OF FIGURES

| | | |
|----------------|---|------|
| Figure 2.1-1 | Islander East Pipeline Project General Project Location | 2-2 |
| Figure 2.3.1-1 | Typical Onshore Construction Sequence | 2-11 |
| Figure 2.3.2-1 | Typical Horizontal Directional Drill Construction | 2-19 |
| Figure 2.3.2-2 | Typical Flume Construction | 2-21 |
| Figure 2.3.2-3 | Typical Wet Trench Construction | 2-23 |
| Figure 2.3.3-1 | Typical Offshore Pipeline Lay Barge | 2-26 |
| Figure 2.3.3-2 | Typical Offshore Pipeline Bury Barge (Subsea Plow) | 2-28 |
| Figure 2.3.3-3 | Islander East Pipeline Project Typical Subsea Plow Trench Cross-Section | 2-29 |
| Figure 2.3.3-4 | Typical Offshore Pipeline Bury Barge (Jetting Sled) | 2-30 |
| Figure 2.3.3-5 | Typical Towed Jet Sled Trench Cross-Section | 2-31 |
| Figure 2.3.4-1 | Typical Onshore to Offshore Horizontal Directional Drill | 2-33 |
| Figure 2.3.4-2 | Typical Offshore Dredge Barge | 2-34 |
| Figure 2.3.4-3 | Typical Dredge Trench Cross-Section | 2-35 |
| Figure 2.3.4-4 | Typical Flotation Trench Cross-Section | 2-36 |
| Figure 2.7.1-1 | Islander East Pipeline Project Brookhaven Energy Project Map | 2-47 |
| Figure 2.7.2-1 | Islander East Pipeline Project AES Long Island Project Map | 2-49 |
| Figure 2.7.3-1 | Islander East Pipeline Project Brookhaven Meter Station | 2-51 |
| Figure 3.3.3-1 | Islander East Pipeline Project Sedimentary Environments Long Island Sound | 3-34 |
| Figure 4.2.1-1 | Islander East Pipeline Project One-Pipe System Alternative (Offshore) | 4-4 |
| Figure 4.2.1-2 | Islander East Pipeline Project One-Pipe System Alternative (Loop) | 4-5 |
| Figure 4.2.2-1 | Islander East Pipeline Project ELI System Alternative | 4-15 |
| Figure 4.3.2-1 | Islander East Pipeline Project Sachem Head Alternative | 4-23 |
| Figure 4.3.3-1 | Islander East Pipeline Project Short Beach Alternative | 4-26 |
| Figure 4.3.4-1 | Islander East Pipeline Project Option 2 and Option 3 Alternatives | 4-28 |
| Figure 4.3.5-1 | Islander East Pipeline Project Calverton Lateral Alternative | 4-30 |
| Figure 4.3.6-1 | Islander East Pipeline Project Calverton State Route 25 Alternative | 4-32 |
| Figure 4.4.1-1 | Islander East Pipeline Project Pine Orchard Variation | 4-36 |
| Figure 4.4.2-1 | Islander East Pipeline Project Pond Variation | 4-39 |
| Figure 4.4.3-1 | Islander East Pipeline Project County Park Variation | 4-41 |
| Figure 4.4.4-1 | Islander East Pipeline Project William Floyd Parkway Variation | 4-44 |

LIST OF ACRONYMS

| | |
|-----------------------|---|
| ACHP | Advisory Council on Historic Preservation |
| 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 |
| 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 |
| ESA | Endangered Species Act |
| ESC Plan | 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 |
| IPCNY | Invasive Plant Council of New York State |

| | |
|-------------------------|---|
| Islander East | Islander East Pipeline Company, LLC |
| kW | kilowatt |
| 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 oxide (nitric oxide plus nitrogen dioxide) |
| 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 |
| NYSDEC | New York State Department of Environmental Conservation |
| O_3 | ozone |
| OCRM | Ocean and Coastal Resource Management |
| OEP | Office of Energy Projects |
| 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 |

Table of Contents

| | |
|-----------------|--|
| ROI | region of impact |
| ROW | right-of-way |
| SCADA | Supervisory Control and Data Acquisition |
| SCCRWA | South Central Connecticut Regional Water Authority |
| 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> |
| TBD | to be determined |
| 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 draft 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 536 acres. Construction in offshore areas would affect 221.4 acres, based on a 80 to 150-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 314.6 acres of land in the states of Connecticut and New York. Of this amount, 291.9 acres would be affected by construction of the pipeline right-of-way, 15.5 acres by construction of aboveground facilities, and 7.2 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 39 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 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 79.6 acres of forested areas, including upland forest and forested wetlands within the permanent right-of-

^{1/}

"We," "us," and "our" refer to the environmental staff of the Office of Energy Projects, part of the Commission staff.

EXECUTIVE SUMMARY

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 14 waterbody crossings (excluding Long Island Sound). Of these, none 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 Carmans River. The other waterbodies would be crossed using flumes or wet trench crossing construction methods.

The Islander East Pipeline Project would cross a total of 43 wetlands with a total crossing length of about 3.6 miles. Construction would temporarily disturb about 32.5 acres of wetlands, of which 28.2 acres would be in the temporary construction right-of-way and 3.9 acres would be maintained as permanent right-of-way. Forested, or a mixture of forest and other wetland cover types, comprise about 26.3 acres or 81 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 221.4 acres of live and hard bottom habitat in Long Island Sound. 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 five species would not be affected by the proposed project.

Additionally, 33 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 the 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, the submerged anchor spread, and shallow offshore areas where remote sensing was not possible, 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 four system alternatives, two of which, the One-Pipe System Alternative and the ELI System Alternative, are based on Iroquois' ELI Extension Project. The third is the Long Island System Alternative, and the fourth is based on Tennessee's planned Connecticut-Long Island Lateral Project. The DEIS contains our preliminary analysis of these four system alternatives. We are asking for your comments on these four system alternatives.

Eight route alternatives were identified in section 4.3. All 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.

Nine route variations were identified and evaluated in section 4.4. Based on our review we recommended that the Pond Variation and the William Floyd Parkway Variation be incorporated into the proposed route. The other five 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

EXECUTIVE SUMMARY

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.

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.

Major Conclusions

We conclude that, 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 Algonquin Gas Transmission Company (Algonquin or AGT) and Islander East Pipeline Company, L.L.C. (Islander East) and referred to in this draft 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 upgrade 27.4 miles of 10- and 16-inch-diameter pipeline 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 (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

1.0 INTRODUCTION

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.

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

^{1/}

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

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 on October 17, 2001, in Connecticut. 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 are addressed.

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

| Issue | Comments | 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 |

Frequently Raised Issues

Environmental issues raised during the public scoping period are addressed in the 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.

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 in response to the project. Concerns also were raised by some local governments concerning zoning and future encroachment issues.

Project Location

Several commentors preferred other alternatives, including ones away from their communities. Several commentors did not like the Sound crossing location nor the Connecticut side of the 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 of threatened and endangered species/desire 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

Several comments received during scoping concerned 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 tree screening clearing at Route 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, 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 in 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.

1.0 INTRODUCTION

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 endusers. Algonquin and Islander East are common carriers of natural gas, and as such serve only to transport the gas for the enduser. They do not sell the gas to the enduser. Therefore, this factor favors 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 weights 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 weights 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 rests solely with each sponsor, and the cumulative Federal control is minimal. This factor weights 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.