TABLE OF CONTENTS

Weaver's Cove LNG Project
Final Environmental Impact Statement

VOLUME I — Page

TABLE OF CONTENTS i
LIST OF APPENDICES v
LIST OF TABLES vi
LIST OF FIGURES ix
ACRONYMS AND ABBREVIATIONS xi

EXECUTIVE SUMMARY ES-1
PROJECT IMPACTS ES-2
ALTERNATIVES CONSIDERED ES-10
PUBLIC INVOLVEMENT AND AREAS OF CONCERN ES-12
MAJOR CONCLUSION ES-14

1.0 INTRODUCTION 1-1
1.1 PURPOSE AND SCOPE OF THIS STATEMENT 1-2
1.2 COORDINATION OF NEPA/MEPA REVIEW 1-3
1.3 PROJECT PURPOSE AND NEED 1-5
1.4 PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS 1-9
1.5 PUBLIC AND AGENCY OUTREACH CONDUCTED BY WEAVER'S COVE ENERGY 1-11
1.6 PUBLIC REVIEW AND COMMENT 1-16
1.7 NONJURISDICTIONAL FACILITIES 1-19

2.0 DESCRIPTION OF PROPOSED ACTION 2-1
2.1 EXISTING FACILITIES 2-1
2.2 PROPOSED PROJECT 2-1
2.2.1 LNG Terminal 2-1
2.2.1.1 Ship Unloading Facility (Marine Terminal) 2-1
2.2.1.2 LNG Storage Tank 2-5
2.2.1.3 Vaporization System 2-7
2.2.1.4 Vapor Handling System 2-7
2.2.1.5 Air Injection System 2-7
2.2.1.6 Truck Loading Stations 2-8
2.2.1.7 Boat Ramp 2-8
2.2.2 LNG Ships 2-8
2.2.3 Pipeline Facilities 2-12
2.3 LAND REQUIREMENTS 2-12
2.3.1 LNG Terminal 2-12
2.3.2 Pipeline Facilities 2-15
2.4 CONSTRUCTION PROCEDURES 2-17
2.4.1 LNG Terminal 2-18
2.4.1.1 LNG Storage and Process Facilities 2-18
2.4.1.2 Ship Unloading Facility 2-25
2.4.1.3 Dredging and Dredge Disposal 2-25

TABLE OF CONTENTS (cont'd)

2.4.2 Pipeline Facilities....2-29
2.4.2.1 General Construction Techniques....2-29
2.4.2.2 Special Construction Techniques....2-32
2.5 CONSTRUCTION SCHEDULE....2-34
2.6 ENVIRONMENTAL COMPLIANCE, INSPECTION, AND MITIGATION MONITORING....2-35
2.7 OPERATION AND MAINTENANCE PROCEDURES....2-35
2.7.1 LNG Terminal....2-35
2.7.2 Pipeline Facilities....2-36
2.8 SAFETY CONTROLS....2-36
2.8.1 LNG Terminal Facilities....2-36
2.8.1.1 Spill Impoundment System....2-37
2.8.1.2 Fire and Hazard Detection System....2-38
2.8.1.3 Fire and Hazard Control System....2-39
2.8.1.4 Firewater System....2-40
2.8.1.5 Emergency Shutdown System....2-41
2.8.2 Pipeline Facilities....2-41
2.8.2.1 Corrosion Protection and Detection Systems....2-41
2.8.2.2 Emergency Response Procedures....2-41
2.9 FUTURE PLANS AND ABANDONMENT....2-41

3.0 ALTERNATIVES....3-1
3.1 NO ACTION OR POSTPONED ACTION....3-1
3.2 SYSTEM ALTERNATIVES....3-5
3.2.1 Existing and Proposed Onshore LNG Facilities in New England....3-6
3.2.1.1 Distrigas LNG Facility - Everett, Massachusetts....3-7
3.2.1.2 KeySpan LNG Facility - Providence, Rhode Island....3-9
3.2.1.3 Proposed LNG Projects in Maine....3-11
3.2.2 Proposed Offshore LNG Facilities in New England....3-11
3.2.2.1 Neptune LNG and Northeast Gateway Projects – Gloucester, Massachusetts....3-13
3.2.2.2 Broadwater LNG Facility – Long Island Sound....3-21
3.2.3 Proposed or Existing Sources of Natural Gas Outside of New England....3-23
3.2.3.1 United States/Gulf Coast Sources of Natural Gas....3-25
3.2.3.2 Canadian Sources of Natural Gas....3-26
3.2.4 Existing or Proposed System Alternative Conclusions....3-27
3.3 LNG TERMINAL SITE ALTERNATIVES....3-28
3.3.1 Regional Review....3-28
3.3.2 Port Review....3-31
3.3.2.1 Coastal Ports....3-31
3.3.2.2 Offshore Ports....3-31
3.3.3 Specific Port and Site Review....3-32
3.4 LNG TERMINAL LAYOUT ALTERNATIVES....3-50
3.5 PIPELINE ALTERNATIVES....3-51
3.5.1 G-1 Lateral Interconnect (Eastern Pipeline Alternative)....3-53
3.5.2 G-4 Lateral Interconnect (Southern Pipeline Alternative)....3-54
3.5.3 G-20 Lateral Interconnect (Northern Pipeline)....3-54
3.5.4 G-22 Lateral Interconnect (Western Pipeline)....3-62
3.6 DREDGING AND DREDGE DISPOSAL ALTERNATIVES....3-70

TABLE OF CONTENTS (cont'd)

3.6.1 Alternative Dredging Methods 3-70
3.6.2 Dredge Disposal Alternatives 3-73

4.0 ENVIRONMENTAL ANALYSIS 4-1
4.1 GEOLOGY 4-2
4.1.1 Geologic Setting and Bedrock Units....4-2
4.1.2 Physiography and Surficial Geology 4-2
4.1.3 Mineral Resources 4-4
4.1.4 Geologic Hazards....4-4
4.1.4.1 Seismic-related Hazards 4-6
4.1.4.2 Load-Bearing Capacity 4-8
4.1.4.3 Slope Instability 4-9
4.1.4.4 Flooding....4-10
4.1.5 Paleontological Resources 4-10
4.2 SOILS AND SEDIMENTS 4-11
4.2.1 Soil Resources....4-11
4.2.2 Sediments....4-15
4.3 WATER RESOURCES 4-53
4.3.1 Groundwater 4-53
4.3.2 Surface Water 4-62
4.4 WETLANDS 4-78
4.5 VEGETATION....4-91
4.6 WILDLIFE AND AQUATIC RESOURCES 4-94
4.6.1 Wildlife Resources....4-94
4.6.2 Aquatic Resources 4-96
4.7 THREATENED, ENDANGERED, AND OTHER SPECIAL STATUS SPECIES ...4-123
4.7.1 Federally Listed Threatened and Endangered Species 4-123
4.7.2 State-listed Species 4-126
4.8 LAND USE, RECREATION, AND VISUAL RESOURCES 4-128
4.8.1 Land Use....4-128
4.8.1.1 LNG Terminal 4-128
4.8.1.2 Pipeline Facilities....4-129
4.8.2 Consistency with Existing Land Use Plans, Policies, Designations, and Guidelines 4-133
4.8.3 Existing Residences and Planned Developments 4-140
4.8.3.1 LNG Terminal 4-140
4.8.3.2 Pipeline Facilities....4-145
4.8.4 Coastal Zone Management 4-149
4.8.4.1 Massachusetts 4-149
4.8.4.2 Rhode Island 4-158
4.8.5 Hazardous Waste Sites....4-164
4.8.6 Recreation, Public Interest, and Special Use Areas 4-164
4.8.6.1 Designated Recreation and Public Interest Areas 4-164
4.8.6.2 General Recreation and Special Uses 4-168
4.8.7 Visual Resources....4-172
4.8.7.1 LNG Terminal 4-172
4.8.7.2 Pipeline Facilities....4-174
4.9 SOCIOECONOMICS....4-177
4.9.1 Population, Economy, and Employment 4-177

TABLE OF CONTENTS (cont'd)

4.9.2 Housing 4-179
4.9.3 Public Services 4-179
4.9.4 Transportation and Traffic 4-181
4.9.5 Property Values 4-190
4.9.6 Tax Revenues 4-192
4.9.7 Environmental Justice 4-192
4.10 CULTURAL RESOURCES 4-199
4.10.1 Results of the Cultural Resources Surveys 4-199
4.10.2 Native American Consultation 4-206
4.10.3 Unanticipated Discoveries 4-206
4.10.4 Compliance with the NHPA 4-206
4.11 AIR QUALITY AND NOISE 4-208
4.11.1 Air Quality 4-208
4.11.2 Noise 4-221
4.12 RELIABILITY AND SAFETY 4-230
4.12.1 LNG Hazards 4-231
4.12.2 Cryogenic Design and Technical Review 4-232
4.12.3 Storage and Retention Systems 4-238
4.12.4 Siting Requirements - Thermal and Dispersion Exclusion Zones 4-244
4.12.5 Marine Safety 4-251
4.12.5.1 Narragansett Bay and the Ports of Fall River and Somerset 4-259
4.12.5.2 Requirements for LNG Ship Operations 4-267
4.12.5.3 LNG Ship Safety 4-274
4.12.6 LNG Truck Safety 4-280
4.12.7 Terrorism and Security Issues 4-284
4.12.8 Pipeline Facilities 4-285
4.12.8.1 Safety Standards 4-286
4.12.8.2 Pipeline Accident Data 4-289
4.12.8.3 Impact on Public Safety 4-291
4.12.9 Additional Safety Issues Identified in Scoping 4-293
4.12.10 Conclusions on Safety Issues 4-295
4.13 CUMULATIVE IMPACTS 4-297

5.0 CONCLUSIONS AND RECOMMENDATIONS 5-1
5.1 SUMMARY OF THE STAFF'S ENVIRONMENTAL ANALYSIS 5-1
5.2 FERC STAFF'S RECOMMENDED MITIGATION 5-19

APPENDICES

VOLUME II - APPENDICES

APPENDIX A	FINAL EIS DISTRIBUTION LIST FOR THE WEAVER'S COVE LNG PROJECT
APPENDIX B	MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS CERTIFICATES
APPENDIX C	COMMENTS RECEIVED DURING THE SCOPING PROCESS
APPENDIX D	TYPICAL RIGHT-OF-WAY CROSS SECTIONS
APPENDIX E	UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN
APPENDIX F	WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES
APPENDIX G	VISUAL IMPACT ANALYSIS
APPENDIX H	SECTION 61 FINDINGS
APPENDIX I	REFERENCES
APPENDIX J	LIST OF PREPARERS
APPENDIX K	COMMENTS RECEIVED ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT
APPENDIX L	TIER III SAMPLING PLAN
APPENDIX M	WETLAND MITIGATION PLAN
APPENDIX N	SUBJECT INDEX

TABLES

Number	Title	Page
1.2-1	Cross Reference Index for MEPA Requirements	1-5
1.4-1	Major Permits, Approvals, and Consultations for the Weaver's Cove LNG Project	1-12
1.6-1	Primary Issues Identified and Comments Received During the Public Scoping Process for the Weaver's Cove LNG Project	1-20
2.3.2-1	Summary of Land Requirements Associated with Construction and Operation of the Pipeline Facilities for the Weaver's Cove LNG Project	2-16
2.4.1-1	Summary of Dredge Volume and Area Estimates	2-25
2.8.1-1	Federal Siting and Design Requirements for LNG Facilities	2-37
2.8.1-2	Proposed Locations of Smoke, Combustible Gas, and UV/IR Flame Detectors at the LNG Terminal	2-39
2.8.1-3	Proposed Locations of Fire Protection Equipment at the LNG Terminal	2-40
3.1-1	Comparison of Air Emissions from Burning Fossil Fuels	3-5
3.2.2-1	Estimated Air Emissions from LNG	3-20
3.2.3 -1	Recently Approved LNG	3-24
3.2.3-2	Comparison of Air Emissions Associated With Transporting Natural Gas Via Pipeline From the Gulf of Mexico Versus Vaporizing LNG in New England	3-25
3.2.4-1	Existing and Proposed System Alternatives Compared to the Weaver's Cove LNG Project	3-29
3.3.3-1	Environmental Comparison of the Terminal Site Alternatives to the LNG Terminal Site Proposed by Weaver's Cove Energy	3-38
3.5.1-1	Environmental Comparison of the Eastern Pipeline Alternative to the Proposed Routes	3-53
3.5.3-1	Environmental Comparison of the Northern Highway Alternative to the Proposed Northern Pipeline Route	3-55
3.6.2-1	Summary of Dredging and Disposal Alternatives	3-74
3.6.2-2	Effects of Multiple Dredges and Time-of-Year Restrictions on the Proposed Dredging Schedule	3-77
4.2.1-1	Acreage of Soil Characteristics for the Proposed Pipeline Rights-of-Way	4-12
4.2.2-1	Statistical Analysis of Dredged Sediment Chemical Constituents from the Federal Channel Downstream of the Braga Bridge	4-25
4.2.2-2	Statistical Analysis of Dredged Sediment Chemical Constituents from the Federal Channel Upstream of the Braga Bridge	4-27
4.2.2-3	Statistical Analysis of Dredged Sediment Chemical Constituents from the Turning Basin Area	4-30
4.2.2-4	Comparison of Chemical Constituents in Proposed Dredged Sediments from the Dredging Segment Upstream of the Braga Bridge and Cores from the East Channel Segment Sampled by the OZCM	4-38
4.2.2-5	Background Concentrations and MCP Residential Standards for PAHs and Metals Relative to the Dredged Sediment	4-44
4.2.2-6	Comparison of Proposed Dredged Sediment with Existing Soils at the Proposed LNG Terminal Site and DEP Reportable Concentrations and Accepted Background Concentrations for Urban Fill Material	4-46
4.3.1-1	Contaminated Sites and Underground Storage Tanks Located Within 0.25 Mile of the Pipeline Facilities	4-61
4.3.2-1	Waterbodies Crossed by the Northern and Western Pipeline Routes	4-64
4.3.2-2	Water Quality Classifications of Mount Hope Bay and the Lower Taunton River	4-65
4.3.2-3	List of 303(d) Waters in the Project Area	4-67
4.4-1	Vegetated Wetlands Located on the LNG Terminal Site	4-79

TABLES (cont'd)

Number	Title	Page
4.4-2	Wetland Crossings Along the Pipeline Routes	4-87
4.5-1	Acreage of Vegetative Communities Affected by Construction of the Proposed LNG Terminal	4-91
4.5-2	Acreage of Vegetative Communities Affected by Construction of the Proposed Pipeline Facilities	4-93
4.6.2-1	Estimated Annual Ichthyoplankton Numbers Potentially Entrained by Ballast Water Intakes from LNG Ships on the Taunton River	4-109
4.6.2-2	Major EFH Categories for Managed Species in the Project Area	4-116
4.6.2-3	Summary of Potential Impacts on Specific Life Stages of Federally Managed Fish Species	4-118
4.7-1	Special Status Species Potentially Occurring in the Vicinity of the Weaver's Cove LNG Project	4-124
4.8.1-1	Land Area Affected by the Construction and Operation of the Proposed LNG Terminal	4-128
4.8.1-2	Land Uses Crossed by the Proposed Pipeline Facilities	4-130
4.8.1-3	Acres of Land Affected by Construction and Operation of the Pipeline Facilities for the Weaver's Cove LNG Project	4-132
4.8.3-1	Churches, Schools, and Health Care-Related Facilities Located within 1 Mile of the Proposed LNG Terminal	4-141
4.8.3-2	Residences Located Within 50 Feet of the Construction Work Area for the Pipeline Facilities Associated With the Weaver's Cove LNG Project	4-146
4.8.4-1	Draft Outline of Coastal Consistency Issues Related to Massachusetts Office of Coastal Zone Management Policies	4-151
4.8.4-2	Draft Outline of Coastal Consistency Issues Related to Rhode Island Coastal Resources Management Policies	4-159
4.9.1-1	Existing Socioeconomic Conditions for the Weaver's Cove LNG Project	4-177
4.9.2-1	2000 Housing Characteristics for the Project Area	4-179
4.9.2-2	Temporary Accommodations Available in the Project Area	4-179
4.9.4-1	Existing Traffic Volume and Impacts of Bridge Closures	4-184
4.9.4-2	Estimated LNG Ship Transit Time Associated with the Weaver's Cove LNG Project	4-188
4.9.7-1	Racial/Ethnic Statistics for the Project Area	4-195
4.9.7-2	Economic Statistics for the Project Area	4-195
4.11.1-1	Ambient Air Quality Standards	4-208
4.11.1-2	Existing Ambient Air Concentrations	4-209
4.11.1-3	Emission Source Information	4-210
4.11.1-4	Operating Air Emissions Summary for Proposed LNG Terminal	4-211
4.11.1-5	Total NO_x and VOC Emissions for the Weaver's Cove LNG Project	4-214
4.11.1-6	DEP NO_x and VOC Emission Budgets for the Weaver's Cove LNG Project	4-214
4.11.1-7	Estimated Peak Daily and Total Construction Vehicle Tailpipe Emissions	4-217
4.11.1-8	Estimated Air Emissions from the LNG Ships and Tugs	4-218
4.11.1-9	Potential Air Quality Impacts from Operation of the Proposed LNG Terminal	4-220
4.11.2-1	Noise Sensitive Areas Near the Proposed LNG Terminal Site	4-222
4.11.2-2	Existing Noise Levels at the Closest Noise Sensitive Areas (dBA)	4-225
4.11.2-3	Noise Levels from Various Construction Equipment/Activities	4-226
4.11.2-4	Anticipated Noise Levels (dBA) and Sound Transmission Losses at the Proposed LNG Terminal	4-228
4.11.2-5	Estimated Noise Impact from Proposed LNG Terminal	4-228
4.12.4-1	Impoundment Areas	4-247

TABLE OF CONTENTS (cont'd)

4.12.4-2 Thermal Exclusion Zones....4-248
4.12.5-1 Bridges Along the Proposed LNG Ship Route....4-260
4.12.5-2 Minimum Striking Speed to Penetrate LNG Cargo Tanks....4-276
4.12.5-3 LNG Spills on Water....4-279
4.12.6-1 LNG Truck Loadings at the Distrigas LNG Terminal....4-281
4.12.6-2 LNG Truck Accident Summary....4-283
4.12.8-1 Natural Gas Service Incidents by Cause....4-290
4.12.8-2 Outside Forces Incidents by Cause (1970-1984)....4-290
4.12.8-3 External Corrosion by Level of Control (1970-1984)....4-291
4.12.8-4 Annual Average Fatalities - Natural Gas Transmission and Gathering Systems....4-292
4.12.8-5 Nationwide Accidental Deaths....4-292
4.13-1 Past, Present, and Future Projects That Could Cumulatively Impact Resources of Concern Near the Weaver's Cove LNG Project....4-298

FIGURES

Number	Title	Page
2.1-1	2003 Aerial Photograph of Proposed LNG Terminal Site	2-2
2.2-1	General Project Location	2-3
2.2.1-1	Proposed LNG Terminal Site Plan	2-4
2.2.1-2	Conceptual Design of LNG Storage Tank	2-6
2.2.3-1	Proposed Northern Pipeline Route	2-13
2.2.3-2	Proposed Western Pipeline Route	2-14
2.4.1-1	Proposed Ground Surface Elevation on Southern Parcel	2-20
2.4.1-2	Conceptual Typical Cross Sections	2-21
2.4.1-3	Computer-Generated Image of Proposed LNG Terminal	2-24
2.4.1-4	Proposed Dredging Areas	2-26
2.4.2-1	Typical Pipeline Construction Sequence	2-30
3.2.1-1	New England Pipeline Systems and Existing/Proposed/Planned LNG Facilities	3-8
3.2.2-1	Northeast Gateway and Neptune LNG locations	3-14
3.3.1-1	New England Pipeline Systems and Coastal Ports	3-30
3.3.3-1	Boston Harbor – LNG Terminal Site Alternative	3-36
3.3.3-2	Brayton Point – LNG Terminal Site Alternative	3-37
3.3.3-3	Providence Harbor – LNG Terminal Site Alternative	3-44
3.3.3-4	Quonset Point – LNG Terminal Site Alternative	3-46
3.3.3-5	Coddington Cove/Melville – LNG Terminal Site Alternative	3-48
3.3.3-6	New London – LNG Terminal Site Alternative	3-49
3.5-1	Pipeline Route Alternatives	3-52
3.5.3-1	Northern Parcel Variation	3-57
3.5.3-2	River Street Variation	3-59
3.5.3-3	Golf Course Variation	3-61
3.5.4-1	Taunton River Variations	3-66
3.5.4-2	Jaffrey Street Variations	3-68
3.5.4-3	Ferncroft / Dwelly Road Variation	3-71
3.6.2-1	Rhode Island Sound Disposal Site (Site 69b)	3-79
4.1-1	Bedrock Geology in Project Area	4-3
4.1-2	Surficial Geology in Project Area	4-5
4.2.2-1	Sediment Core Locations Weaver's Cove Energy's Sampling Program	4-17
4.2.2-2	Sediment Core Locations in the East Channel Office of Coastal Zone Management's Sampling Program	4-36
4.2.2-3	Comparisons of Average Concentrations in Sediment and Soil Samples	4-49
4.3-1	Groundwater Plume of Light Non-Aqueous Phase Liquid Petroleum Product	4-55
4.3.2-1	Lower Taunton River / Mount Hope Bay State Surface Water Quality Classifications	4-66
4.3.2-2	Massachusetts and Rhode Island 303(d) Listed Waters	4-68
4.3.2-3	Proposed Stormwater Management System	4-75
4.4-1	Field-Delineated Wetlands and Other State Wetland Resource Areas	4-80
4.4-2	Vegetated Wetland Areas Affected by the Proposed LNG Terminal	4-81
4.4-3	Proposed Wetland Mitigation Areas	4-90
4.8.2-1	Planning Areas as Shown in the 2002 Municipal Harbor Plan	4-138
4.9.7-1	Environmental Justice Communities in the Vicinity of the LNG Terminal and Navigation Channel	4-194
4.11.2-1	Area Topographic Map	4-223
4.11.2-2	Noise Sensitive Areas	4-224
H.1	Examples of Single Containment Tanks	4-240

TABLE OF CONTENTS (cont'd)

H.3 Examples of Double Containment Tanks 4-241
H.4 Examples of Full Containment Tanks 4-242
4.12.5-1 Proposed LNG Ship Route 4-255
4.13-1 Select Past, Present, or Future Activities/Projects Located Along the Taunton River 4-302

ACRONYMS AND ABBREVIATIONS

ABSG	ABSG Consulting Inc.
AC	alternating current
ACEC	Areas of Critical Environmental Concern
ACEEE	American Council for an Energy Efficient Economy
ACHP	Advisory Council on Historic Preservation
AET	Apparent Effects Threshold
AL-CCC	Aquatic Life Criterion Continuous Concentration
AL-CMC	Aquatic Life Criteria Maximum Concentration
Algonquin	Algonquin Gas Transmission Company
APE	area of potential effects
AQCRs	Air Quality Control Regions
ASA	Applied Science Associates
ASTs	aboveground storage tanks
ATWS	additional temporary workspace
BA	biological assessment
BACT	Best Available Control Technology
Bcf	billion cubic feet
Bcfd	billion cubic feet per day
BFHYDRO	boundary-fitted hydrodynamic model
BG LNG	BG LNG Services, L.L.C.
bgs	below ground surface
BRA	Boston Redevelopment Authority
Btu	British thermal unit
Btu/ft^2-hr	British thermal unit per feet squared per hour
BUAR	Massachusetts Board of Underwater Archaeology
C	Celsius
C2D	Concept2Delivery
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAD	Confined Aquatic Disposal
CCMP	Narragansett Bay Comprehensive Conservation and Management Plan
CDF	Confined Disposal Facility
CEDS	Comprehensive Economic Development Strategy
CEII	Critical Energy Information Infrastructure
CEQ	Council on Environmental Quality
Certificate	Certificate of Public Convenience and Necessity
CFR	Code of Federal Regulations
cfs	cubic feet per second
ChevronTexaco	ChevronTexaco Corporation
CIA	Massachusetts Commission on Indian Affairs
Class I	Mandatory Federal Class I
CMR	Code of Massachusetts Regulations
CO	carbon monoxide
CO_2	carbon dioxide
Coast Guard	U.S. Coast Guard
COC	contaminant of concern
COE	U.S. Army Corps of Engineers
Commission	Federal Energy Regulatory Commission
CRMC	Rhode Island Coastal Resources Management Council

CSO	Combined Sewer Overflow
CWA	Clean Water Act
CZMA	Coastal Zone Management Act of 1972
CZMP	Coastal Zone Management Program
DAQC	Division of Air Quality Control
dBA	decibels of the A-weighted scale
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DEM	Rhode Island Department of Environmental Management
DEP	Massachusetts Department of Environmental Protection
DFW	Massachusetts Division of Fish and Wildlife
Distrigas	Distrigas of Massachusetts, L.L.C.
DMF	Massachusetts Division of Marine Fisheries
DO	dissolved oxygen
DOE	U.S. Department of Energy
DOER	Massachusetts Division of Energy Resources
DOT	U.S. Department of Transportation
DPA	designated port area
EA	Environmental Assessment
eastern Massachusetts	EMA
EFH	Essential Fish Habitat
EFSB	Massachusetts Energy Facility Siting Board
EI	environmental inspector
EIA	Energy Information Administration
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
El Paso	El Paso Global LNG
EN 1473	European Standard for LNG Facilities
ENF	Environmental Notice Form
EOEA	Massachusetts Executive Office of Environmental Affairs
EPA	U.S. Environmental Protection Agency
EPH	extractable petroleum hydrocarbon
ERL	Effects Range-Low
ERM	Effects Range-Median
ESA	Endangered Species Act of 1973
ESD	emergency shutdown
Excelerate	Excelerate Energy L.L.C.
F	Fahrenheit
FAA	Federal Aviation Administration
FAIR Plan	Fair Access to Insurance Requirements Plan
FERC	Federal Energy Regulatory Commission
FERC Plan	FERC's Upland Erosion Control, Revegetation and Maintenance Plan
FERC Procedures	FERC's Wetland and Waterbody Construction and Mitigation Procedures
Fish Run	Banks of or Land Under the Ocean, Ponds, Streams, Rivers, Lakes, or Creeks that Underlie an Anadromous/Catadromous Fish Run
FPC	Federal Power Commission
FSO	Facility Security Officer
FSRU	floating, storage, and regasification unit

ft^2	square feet
ft^3	cubic feet
ft/sec	feet per second
FWS	U.S. Fish and Wildlife Service
Gas Tanker Code	*International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk*
g	gravity
GBS	gravity-based structure
Governors Conference Report	New England Governors by the Power Planning Committee of the New England Governors' Conference, Inc.
gpm	gallons per minute
HAP	hazardous air pollutant
Harbor Plan	Fall River Harbor and Downtown Economic Development Plan
HCAs	high consequence areas
HDD	horizontal direction drill
HEL	highly erodible land
hp	horsepower
HUD	U.S. Department of Housing and Urban Development
IMO	International Maritime Organization
Iroquois	Iroquois Gas Transmission Company
ISCST3	industrial source complex short term version 3
KeySpan	KeySpan LNG, L.L.C.
kw	kilowatt
kw/m^2	kilowatts per square meter
kPa	kilopascals
L_{90}	sound level that is exceeded more than 90 percent of the time
L_{day}	daytime sound level
L_{dn}	day-night sound level
$L_{eq(24)}$	24-hour equivalent sound level
LNAPL	light non-aqueous phase liquid
LNG	liquefied natural gas
L_{night}	nighttime sound level
LPG	Liquefied Petroleum Gas
LSP	Licensed Site Professional
m	meters
m^3	cubic meters
m^3/hr	cubic meters per hour
MAAQS	Massachusetts Ambient Air Quality Standards
MACT	Maximum Achievable Control Technology
MAOP	maximum allowable operating pressure
MAPC	Metropolitan Area Planning Council
M&N	Maritimes & Northeast Pipeline, L.L.C.
MARSEC	Maritime Security
MassGIS	Massachusetts Geographic Information System
MassHighway	Massachusetts Highway Department
Master Plan	Comprehensive Master Plan for Fall River
MBDS	Massachusetts Bay Disposal Site
MBTA	Massachusetts Bay Transportation Authority

MCE	Maximum Considered Earthquake
MCP	Massachusetts Contingency Plan
Memorandum	Memorandum of Understanding on Natural Gas Transportation Facilities
MEPA	Massachusetts Environmental Policy Act
mg/L	milligrams per liter
MHC	Massachusetts Historical Commission
MLLW	mean lower low water
MMBtu/d	million British thermal units per day
MMBtu/hr	million British thermal units per hour
MMcfd	million cubic feet per day
MMLP	Merchants Mills Limited Partnership
MMPA	Marine Mammal Protection Act
MNI	Moffatt and Nichol International
MOU	Memorandum of Understanding
MP	milepost
mph	miles per hour
MRI	Marine Research, Inc.
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSI	Marine Safety International
MSL	mean sea level
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NE Report	New England Gas Infrastructure Report
NEPA	National Environmental Policy Act
Neptune LNG	Neptune LNG, L.L.C.
NESHAPs	National Emission Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Association
NFPA 59A	Standards for the Production, Storage, and Handling of LNG
NGA	Natural Gas Act
NHPA	National Historic Preservation Act
nm	nautical mile
NMFS	National Marine Fisheries Service
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NO_2	nitrogen dioxide
NOI	*Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Weaver's Cove LNG Project, Request for Comments on Environmental Issues, and Notice of Joint Public Scoping Meeting*
NO_x	nitrogen oxides
NPC	National Petroleum Council
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources 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
O_3	ozone

OBE	Operating Basis Earthquake
OCPC	Old Colony Planning Council
OCRM	Office of Coastal and Ocean Resource Management
OCZM	Massachusetts Office of Coastal Zone Management
OEP	Office of Energy Projects
OHM	oil and hazardous materials
OPS	Office of Pipeline Safety
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbon
PAL	Public Archaeology Laboratory
Pb	lead
PCB	polychlorinated biphenyl
PD	Preliminary Determination on Non-Environmental Issues
PEL	Probable Effects Level
PGA	peak ground acceleration
PHEL	potentially highly erodible land
PHMSA	Pipeline and Hazardous Materials Safety Administration
PLEM	pipeline end manifold
PM_{10}	particulate matter less than 10 microns in diameter
PNGTS	Portland Natural Gas Transmission System
PORTS	Physical Oceanographic Real Time Systems
ppb	parts per billion
ppm	parts per million
ppt	parts per thousand
PSA	Purchase and Sale Agreement
PSD	Prevention of Significant Deterioration
PSHA	probabilistic seismic hazard assessment
psia	pounds per square inch
psig	pounds per square inch gauge
Quest	Quest Consultants, Inc
RICRMP	Rhode Island Coastal Resources Management Program
RISDS	Rhode Island Sound Disposal Site
RPG	rocket propelled grenade
RPT	rapid phase transition
RSPA	Research and Special Programs Administration
SAIC	Science Applications International Corporation
Sandia Report	*Guidance on Risk Analysis and Safety Implications of a Large Liquefied Natural Gas (LNG) Spill Over Water*
SAP	sediment sampling and analysis plan
SCR	Selective Catalytic Reduction
Shell Oil	Shell Oil Company
SHPO	State Historic Preservation Office
SILs	Significant Impact Levels
SIPs	state implementation plans
SMB	Southeastern Massachusetts Bioreserve
SML	sound monitoring location
SO_2	sulfur dioxide
SOLAS	*International Convention for the Safety of Life at Sea*
Somerset LNG	Somerset LNG, L.L.C.

SOPUS	Shell Oil Products United States
SPCC Plan	Spill Prevention, Containment and Countermeasure Plan
SRP	Special Review Procedure
SRPEDD	Southeastern Regional Planning and Economic Development District
SSDOSE	Suspended Sediment Dose model
SSE	Safe Shutdown Earthquake
SSFATE	Suspended Sediment Fate
STU	Stormwater Treatment Units
TB-10	turning basin core 10
Tcf	trillion cubic feet
TCLP	toxicity characteristic leaching procedure
Tennessee Gas	Tennessee Gas Pipeline Company
TMDL	Total Maximum Daily Load
TNT	trinitrotoluene
tpy	tons per year
Tractabel	Tractabel LNG North America, L.L.C.
TSA	Transportation Security Administration
TSS	total suspended solids
TWS	temporary workspace
UCL	Upper Confidence Limits
USC	United States Code
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
USTs	underground storage tanks
UV/IR	ultraviolet/infrared
VOC	volatile organic compound
WPA	Massachusetts Wetlands Protection Act
WSR Act	Wild and Scenic Rivers Act