

The FERC Permitting and Review Process

Atlantic States Marine Fisheries Commission
65th Annual Meeting
Atlantic Beach, North Carolina

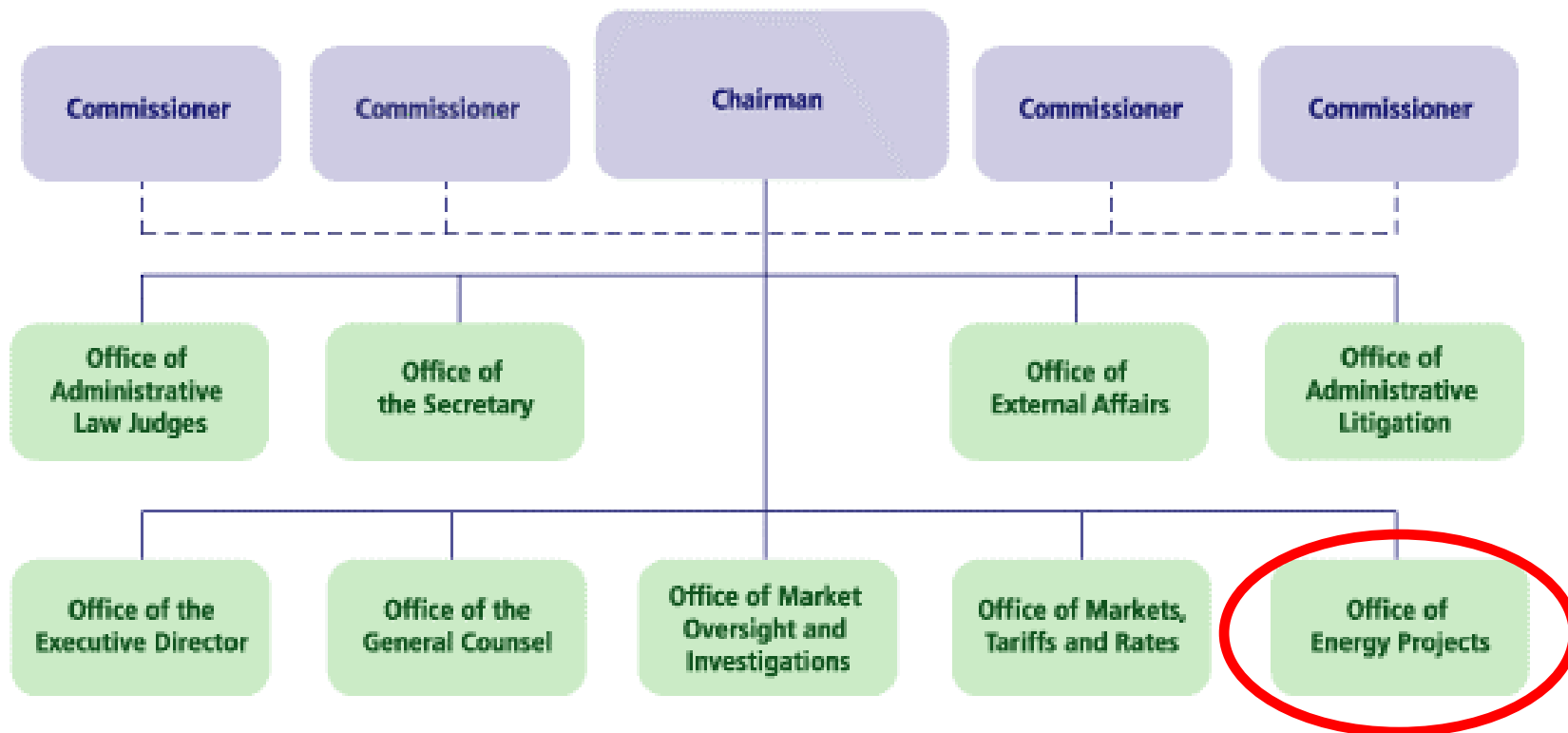


Medha Kochhar
Office of Energy Projects
Federal Energy Regulatory Commission
October 24, 2006

FERC Organizational Structure



Federal Energy Regulatory Commission



Office of Energy Projects - Functions



- OEP has the engineering and environmental expertise to:
 - authorize new gas facilities, including LNG
 - authorize and monitor hydroelectric projects, and
 - analyze energy infrastructure needs and policies.
- OEP focuses on:
 - project siting and development,
 - balancing environmental and other concerns,
 - ensuring compliance,
 - safeguarding the public, and
 - providing infrastructure capacity information.

Section 3 - Imports/Exports (LNG Terminal)



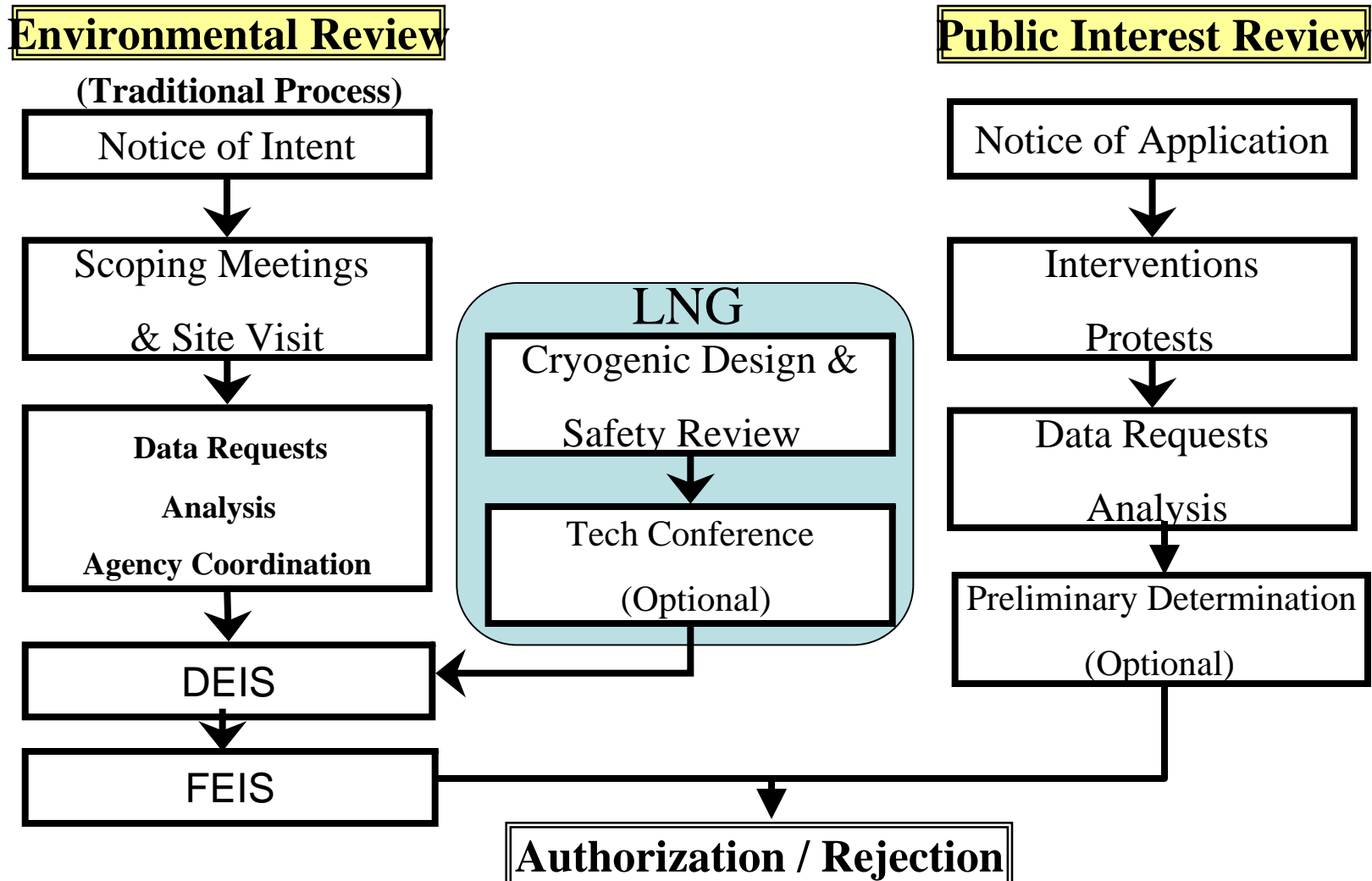
Any entity that proposes to site, construct and operate or modify facilities used to import or export gas must file an application pursuant to Section 3 of the NGA and file for the issuance of a Presidential Permit.

Section 7(c) Certificate (pipeline)



- FERC Staff conducts a full review of proposal including construction and operational impacts, engineering, rate, accounting, and market analysis
- Environmental review is included in an EIS

FERC Review Process



Commission's Pre-Filing Process



- LNG applicants are required to use the Pre-filing Process
- More interactive NEPA process
- Earlier, more direct involvement by FERC staff, other agencies, landowners
- Goal of “no surprises”
- Promotes early identification and resolution of issues
- Facilitates state agency and community involvement
- Time savings realized only if we are working together with stakeholders
- FERC staff is an advocate of the Process, not the Project

The EIS



- Is prepared by the Commission's staff
- **Will evaluate environmental impacts of proposed action**
- Will address:
 - **Alternatives**
 - **Social/Economic Impacts**
 - **Environmental Impacts**
 - **Safety**



Interagency Involvement



-
- Federal Cooperating Agencies: the COE, USCG, USFWS, NMFS (NOAA Fisheries), and USDOT-OPS
 - We encourage state agencies to participate in Pre-Filing Process and to be cooperating agencies
 - We rely heavily on state agencies to provide input on issues of significance
 - Local knowledge is critical

Federal and State Approvals



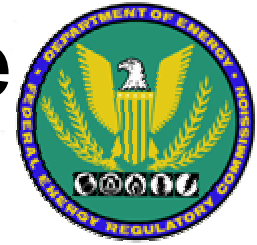
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- FERC – NGA Approval
 - DOT/OPS – Pipeline Safety
 - Coast Guard – LOR (Vessel Operating Plan, Safety & Security Zone)
 - Corps of Engineers – Dredging, Wetland Impacts, Alternative Sites
 - NMFS/FWS – Endangered Species Act
 - EPA/State Air Quality Agency– Clean Air Act (CAA), New Source Review
 - State Coastal Zone Consistency Determination
 - State Agency Requirements (401 WQC)
 - SHPO – Section 106 Review under National Historic Preservation Act

How To Stay Involved and Improve the Analysis



-
- Provide timely information that clearly states your concerns
 - Support your positions with facts
 - **eSubscription** automatically provides you with notification of filings, document summaries, and direct links to the documents
 - register for this service at:
<http://www.ferc.gov/esubscribenow.htm>

Why Does FERC Prepare the EIS?



-
- Regulatory Requirements
 - National Environmental Policy Act (NEPA)
 - Council on Environmental Quality (CEQ) regulations for implementing NEPA
 - FERC regulations for implementing NEPA
 - EIS is an element of the Commission's review of the project
 - EIS is not a decision document

LNG Terminals 2 Primary Issues



• Safety

• Environment



Federal Jurisdiction: Offshore vs. Onshore Terminals



Onshore Terminals

FERC approval authority under
the Natural Gas Act



Source: http://www.excelerateenergy.com/energy_bridge.php

Offshore Terminals

U.S. Maritimes Administration
and U.S. Coast Guard under the
Deepwater Port Act

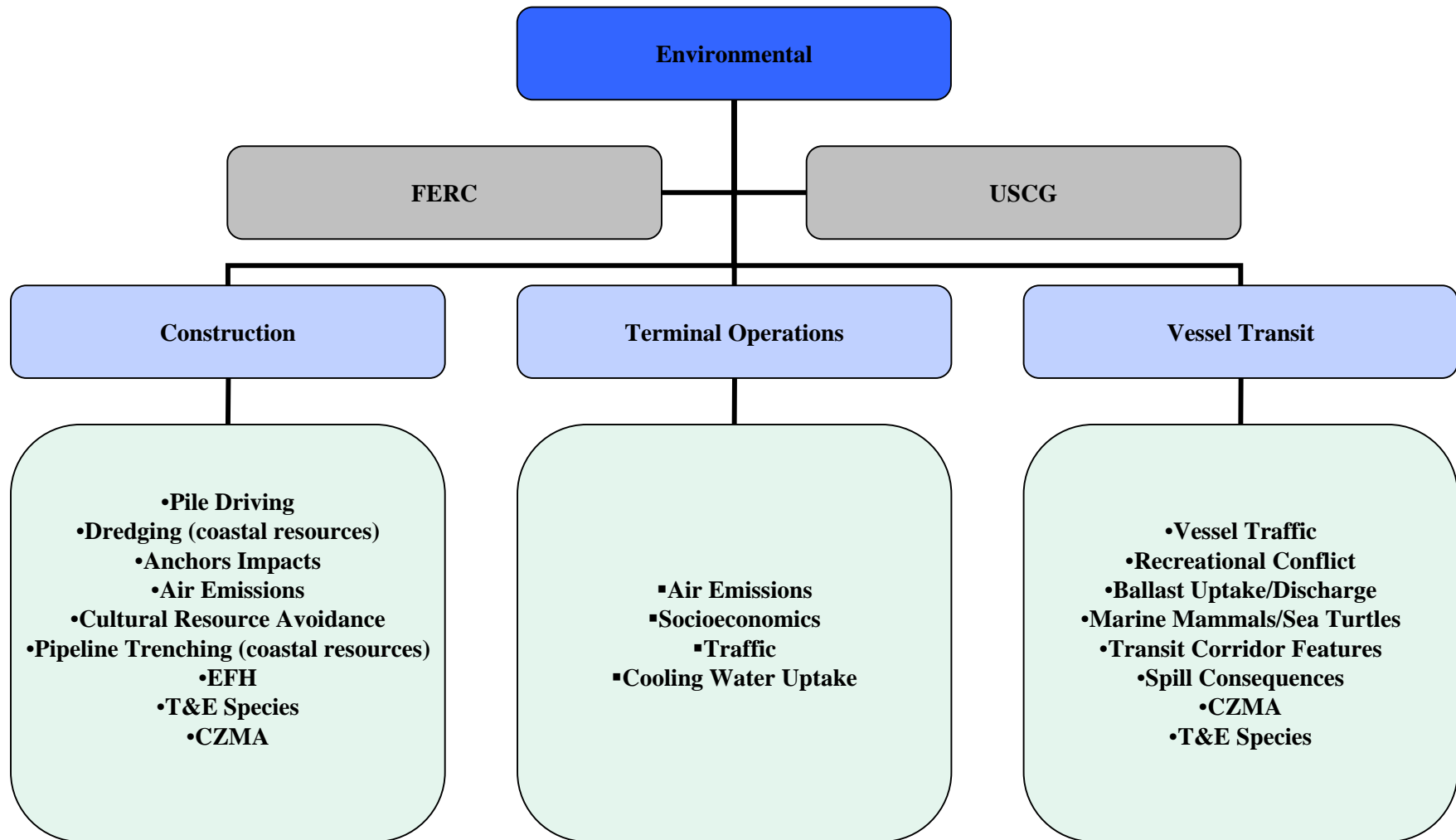
The Energy Policy Act of 2005 – LNG Highlights –



-
- Mandatory PF Rulemaking
 - Lead agency for NEPA, Federal Authorizations, and establish an expeditious schedule
 - FERC's exclusive siting authority does not impact State's authority under CZMA, CWA, and CAA
 - Consultation with designated State Safety agency
 - Consultation with DoD
 - Emergency response plan prior to construction



Assessing Impacts to the Environment





Construction Impacts

IMPACT	POSSIBLE MITIGATION
Pile Driving	<i>Use of bubble curtains</i>
Dredging	<i>Avoidance of resources/Use of appropriate methods</i>
Anchor Impacts	<i>Mid-line buoys/DPS vessels</i>
Air Emissions	<i>Low sulfur fuels</i>
Cultural Resources	<i>Surveys/Avoidance</i>
Pipeline Trenching	<i>Wetland and Waterbodies Construction Procedures</i>
EFH	<i>Avoidance/Seasonal restrictions</i>
T&E Species	<i>Avoidance/Seasonal restrictions</i>



Operational Impacts

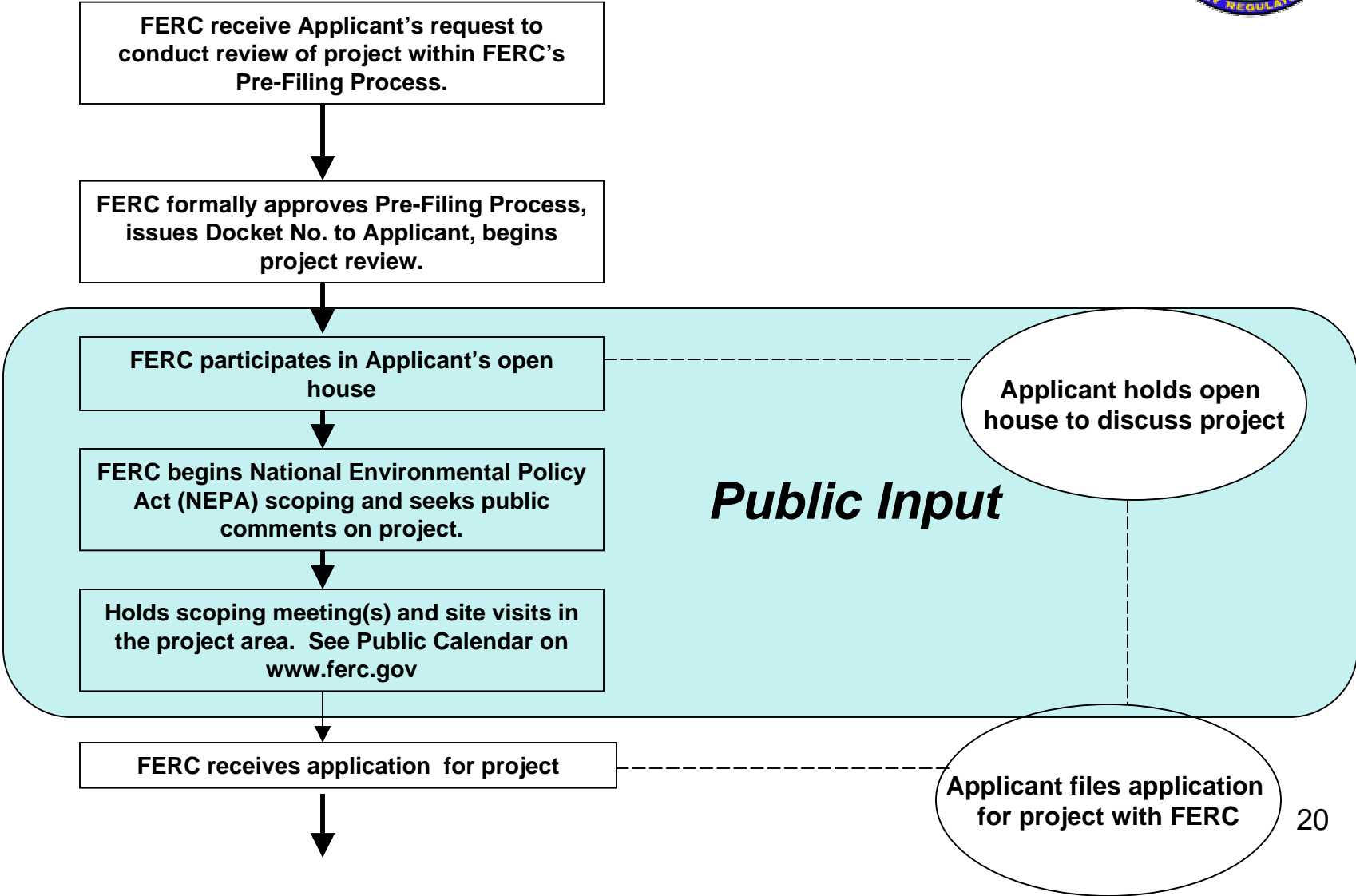
IMPACT	POSSIBLE MITIGATION
Recreational Conflicts	<i>Management of safety/security zones</i>
Vessel Transit Safety	<i>Use of safety/security zones</i>
Mammal/Turtle Strikes	<i>Protection Plans/Speed Restrictions</i>
Ballast & Cooling Water Uptake	<i>Possible intake depth and rate modifications – Cold Ironing vs. safety</i>
Visual Impacts	<i>Design and color compatibility</i>
Air Emissions	<i>Best Available Control Technology – Use of Alternate Ship Fuels - Cold Ironing vs. safety</i>

State/Local Role Unchanged

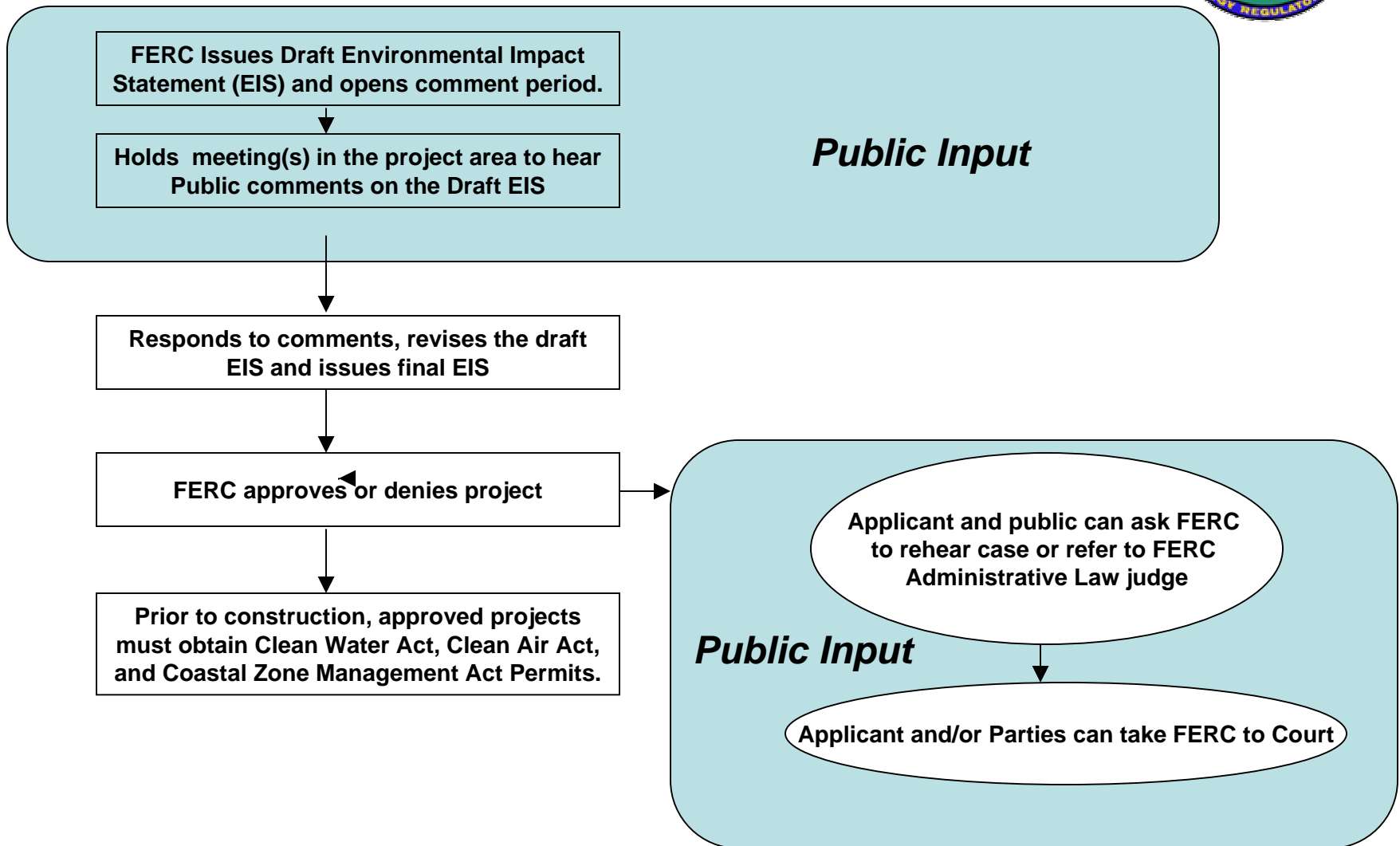


-
- Consistency Review under the CZMA
 - 401 WQC under the CWA
 - Other permits
 - Cooperating Agency providing review of advanced versions of the EIS

FERC Environmental Review Process and Opportunities for Public Input



FERC Environmental Review Process and Opportunities for Public Input (*continued*)



Contact Information



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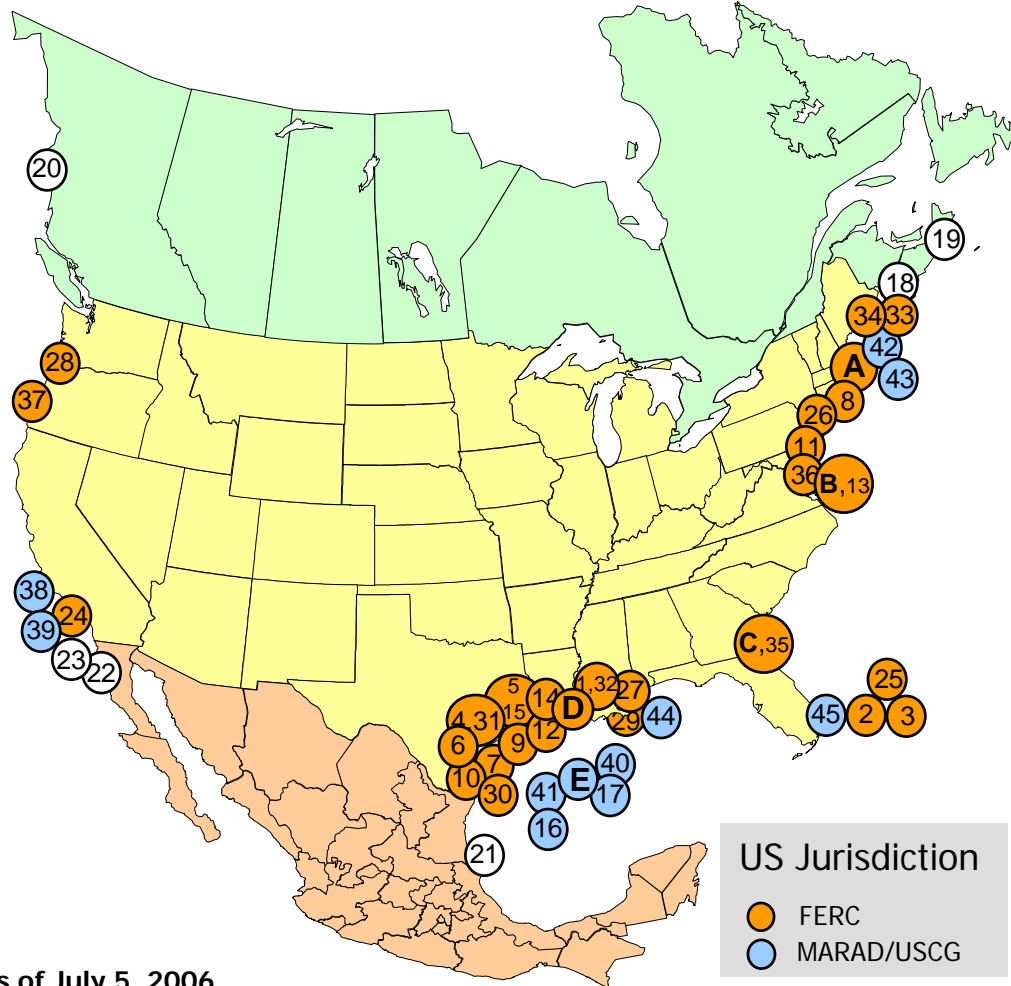
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*Thank you. We look forward to working with
you on future LNG projects.*

The End

Existing and Proposed North American LNG Terminals



As of July 5, 2006

* US pipeline approved; LNG terminal pending in Bahamas

** Construction suspended

Office of Energy Projects

CONSTRUCTED

- A. Everett, MA : 1.035 Bcfd (SUEZ/Tractebel - DOMAC)
- B. Cove Point, MD : 1.0 Bcfd (Dominion - Cove Point LNG)
- C. Elba Island, GA : 1.2 Bcfd (El Paso - Southern LNG)
- D. Lake Charles, LA : 2.1 Bcfd (Southern Union - Trunkline LNG)
- E. Gulf of Mexico: 0.5 Bcfd (Gulf Gateway Energy Bridge - Excelerate Energy)

APPROVED BY FERC

- 1. Hackberry, LA : 1.5 Bcfd (Cameron LNG - Sempra Energy)
- 2. Bahamas : 0.84 Bcfd (AES Ocean Express)*
- 3. Bahamas : 0.83 Bcfd (Calypso Tractebel)*
- 4. Freeport, TX : 1.5 Bcfd (Cheniere/Freeport LNG Dev.)
- 5. Sabine, LA : 2.6 Bcfd (Sabine Pass Cheniere LNG)
- 6. Corpus Christi, TX: 2.6 Bcfd (Cheniere LNG)
- 7. Corpus Christi, TX : 1.1 Bcfd (Vista Del Sol - ExxonMobil)
- 8. Fall River, MA : 0.8 Bcfd (Weaver's Cove Energy/Hess LNG)
- 9. Sabine, TX : 2.0 Bcfd (Golden Pass - ExxonMobil)
- 10. Corpus Christi, TX: 1.0 Bcfd (Ingleside Energy - Occidental Energy Ventures)
- 11. Logan Township, NJ : 1.2 Bcfd (Crown Landing LNG - BP)
- 12. Port Arthur, TX: 3.0 Bcfd (Sempra)
- 13. Cove Point, MD : 0.8 Bcfd (Dominion)
- 14. Cameron, LA: 3.3 Bcfd (Creole Trail LNG - Cheniere LNG)
- 15. Sabine, LA: 1.4 Bcfd (Sabine Pass Cheniere LNG - Expansion)

APPROVED BY MARAD/COAST GUARD

- 16. Port Pelican: 1.6 Bcfd (Chevron Texaco)
- 17. Louisiana Offshore : 1.0 Bcfd (Gulf Landing - Shell)

CANADIAN APPROVED TERMINALS

- 18. St. John, NB : 1.0 Bcfd (Canaport - Irving Oil)
- 19. Point Tupper, NS : 1.0 Bcfd (Bear Head LNG - Anadarko)
- 20. Kitimat, BC: 0.61 Bcfd (Galveston LNG)

MEXICAN APPROVED TERMINALS

- 21. Altamira, Tamulipas : 0.7 Bcfd (Shell/Total/Mitsui)
- 22. Baja California, MX : 1.0 Bcfd (Energy Costa Azul - Sempra)
- 23. Baja California - Offshore : 1.4 Bcfd (Chevron Texaco)

PROPOSED TO FERC

- 24. Long Beach, CA : 0.7 Bcfd, (Mitsubishi/ConocoPhillips - Sound Energy Solutions)
- 25. Bahamas : 1.0 Bcfd, (Seafarer - El Paso/FPL)
- 26. LI Sound, NY: 1.0 Bcfd (Broadwater Energy - TransCanada/Shell)
- 27. Pascagoula, MS: 1.5 Bcfd (Gulf LNG Energy LLC)
- 28. Bradwood, OR: 1.0 Bcfd (Northern Star LNG - Northern Star Natural Gas LLC)
- 29. Pascagoula, MS: 1.3 Bcfd (Casotte Landing - ChevronTexaco)
- 30. Port Lavaca, TX: 1.0 Bcfd (Calhoun LNG - Gulf Coast LNG Partners)
- 31. Freeport, TX: 2.5 Bcfd (Cheniere/Freeport LNG Dev. - Expansion)
- 32. Hackberry, LA : 1.15 Bcfd (Cameron LNG - Sempra Energy - Expansion)
- 33. Pleasant Point, ME : 2.0 Bcfd (Quoddy Bay, LLC)
- 34. Robbinston, ME: 0.5 Bcfd (Downeast LNG - Kestrel Energy)
- 35. Elba Island, GA: 0.9 Bcfd (El Paso - Southern LNG)
- 36. Baltimore, MD: 1.5 Bcfd (AES Sparrows Point - AES Corp.)
- 37. Coos Bay, OR: 1.0 Bcfd (Jordan Cove Energy Project)

PROPOSED TO MARAD/COAST GUARD

- 38. Offshore California : 1.5 Bcfd (Cabrillo Port - BHP Billiton)
- 39. Offshore California : 0.5 Bcfd, (Clearwater Port LLC - Northernstar NG LLC)
- 40. Offshore Louisiana : 1.0 Bcfd (Main Pass McMoRan Exp.)
- 41. Gulf of Mexico: 1.5 Bcfd (Beacon Port Clean Energy Terminal - ConocoPhillips)
- 42. Offshore Boston: 0.4 Bcfd (Neptune LNG - Tractebel)
- 43. Offshore Boston: 0.8 Bcfd (Northeast Gateway - Excelerate Energy)
- 44. Gulf of Mexico: 1.4 Bcfd (Bienville Offshore Energy Terminal - TORP)
- 45. Offshore Florida: ? Bcfd (SUEZ Calypso - SUEZ LNG)

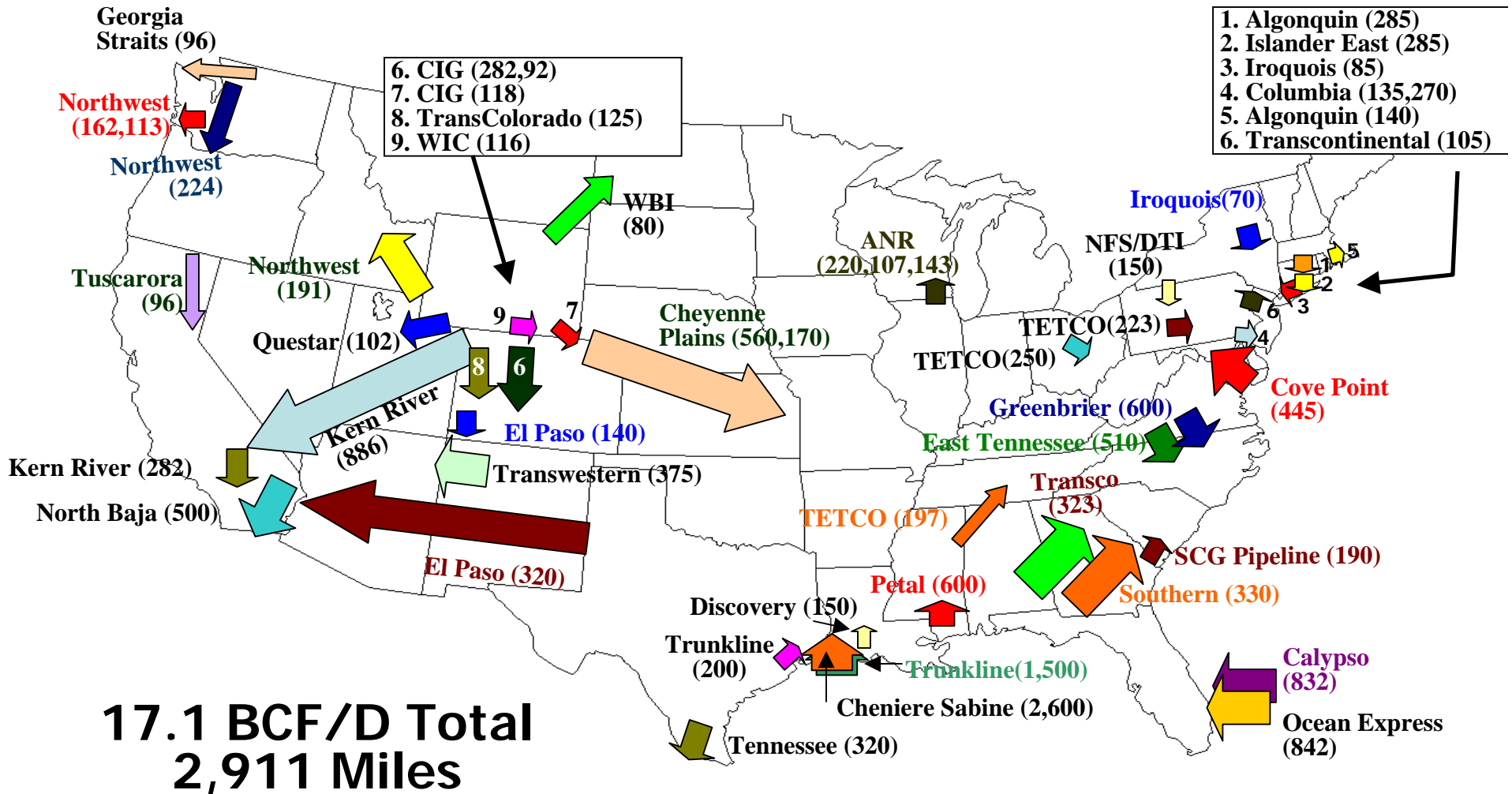
The Environmental Report

(13 Resource Reports)

1. General Project Description
2. Water Use & Quality
3. Fish, Wildlife & Vegetation
4. Cultural Resources
5. Socioeconomics
6. Geological Resources
7. Soils
8. Land Use, Recreation, & Aesthetics
9. Air & Noise Quality
10. Alternatives
11. Reliability & Safety
12. PCB Contamination (for pipelines only)
13. LNG Engineering & Design Details (CEII)

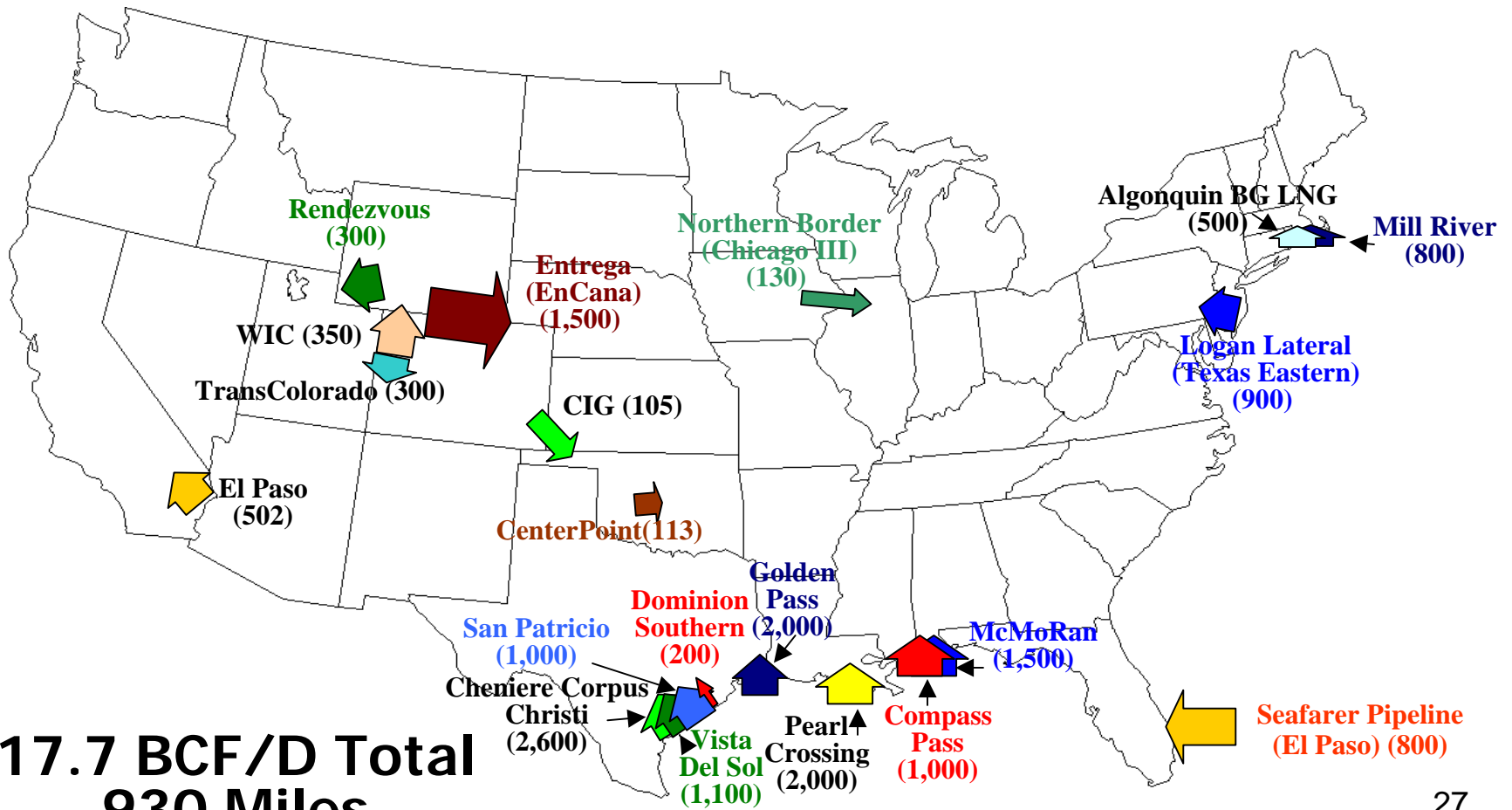
Natural Gas Demand is Driving New Pipeline Construction

January 2002 to March 2005



And Future Expansion Major Pipeline Projects

Pending (MMcf/d)
March 2005



Why All This Activity?

- Gas consumption in the power generation sector is predicted to grow substantially
- Between 1998 and 2003, over 200 gigawatts of new gas-based generation units were constructed (Interstate Natural Gas Association of America, 2004)
- Current gas production from within the U.S. and Canada is gradually declining while demand is increasing

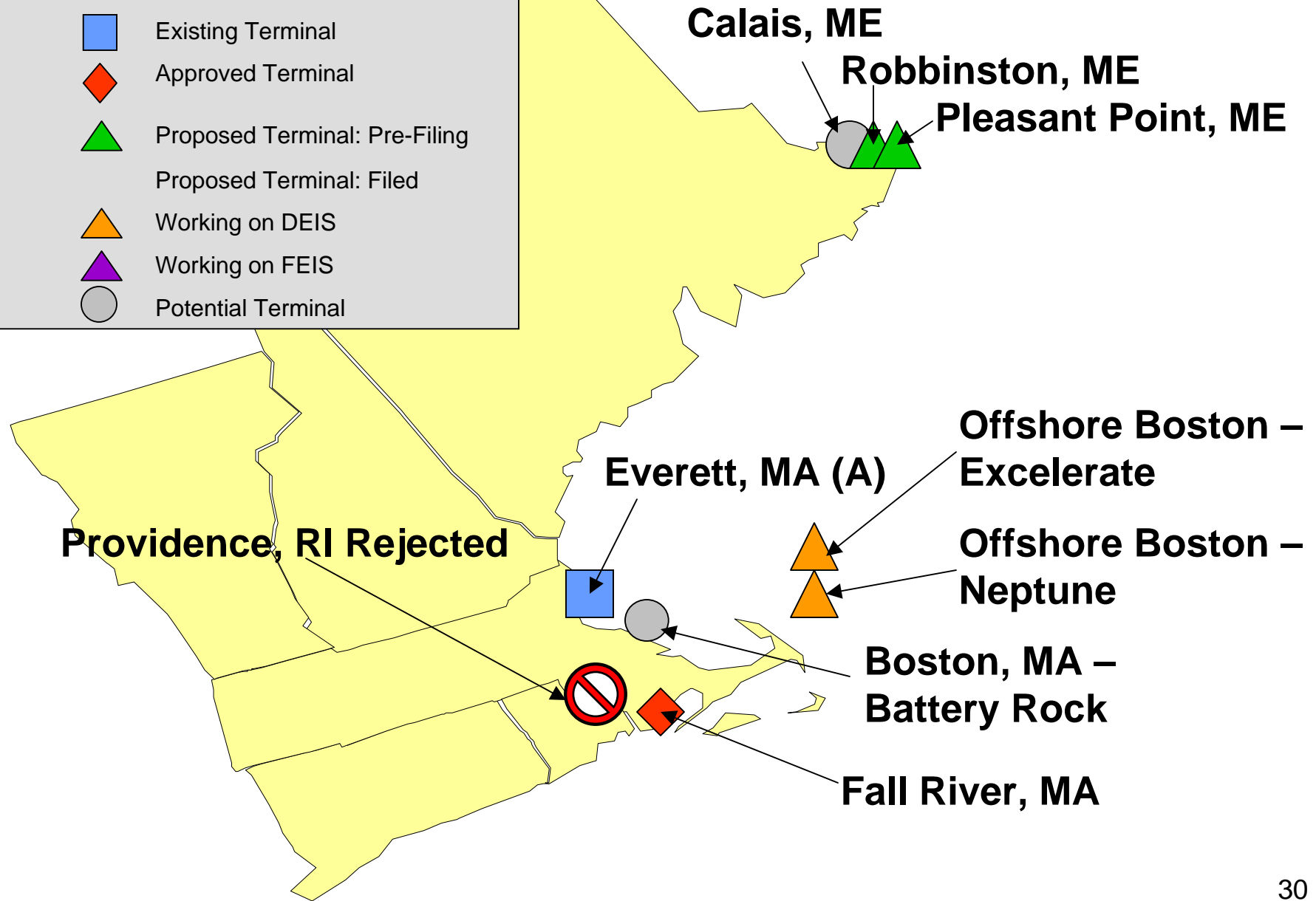
LNG Will Help Meet Demands

- **Natural gas is the current economic/environmental fuel of choice.**
- **96% of natural gas reserves are outside North America and may be accessed as LNG.**

North East LNG Terminals

Legend:

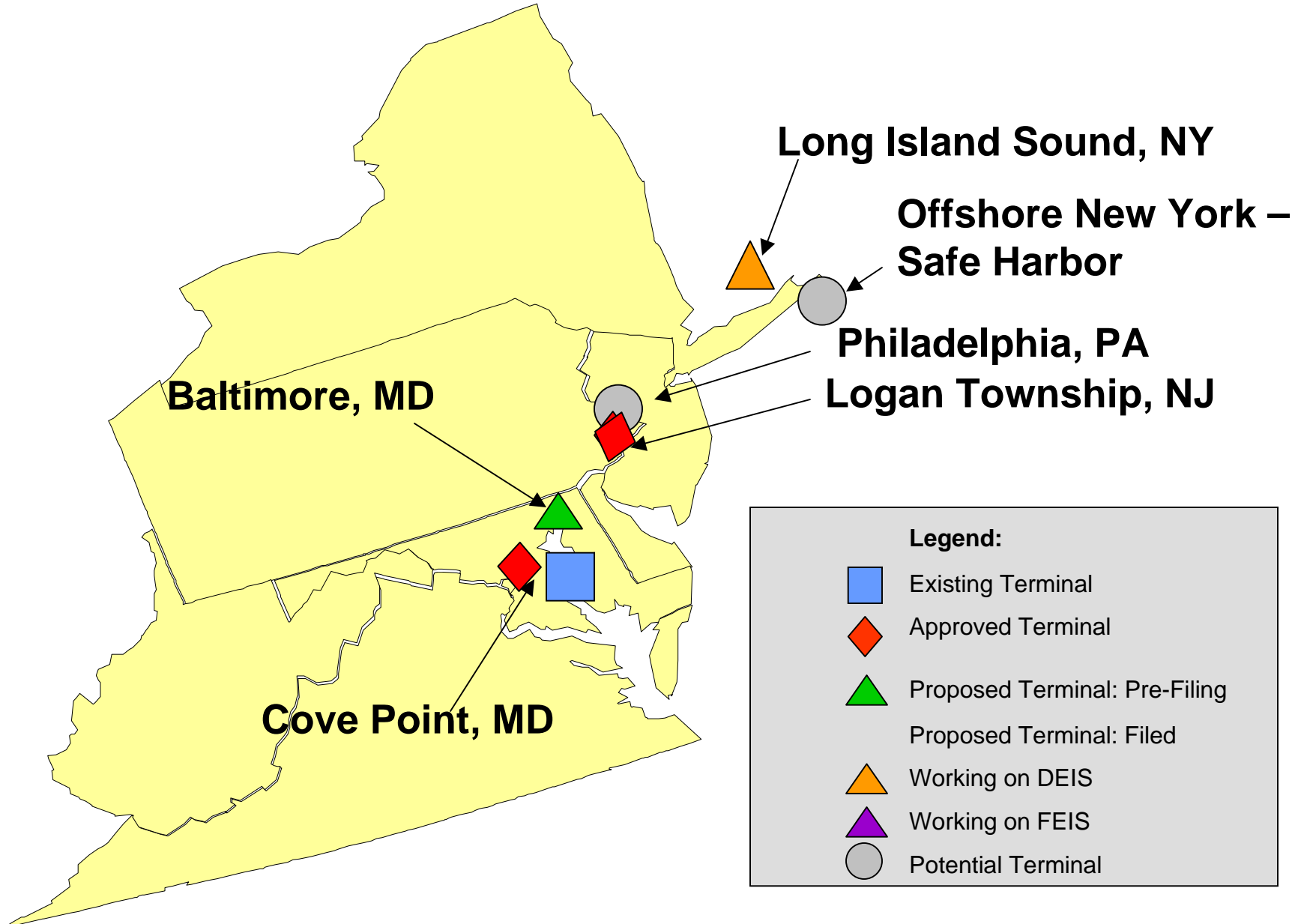
- Existing Terminal
- Approved Terminal
- Proposed Terminal: Pre-Filing
- Proposed Terminal: Filed
- Working on DEIS
- Working on FEIS
- Potential Terminal



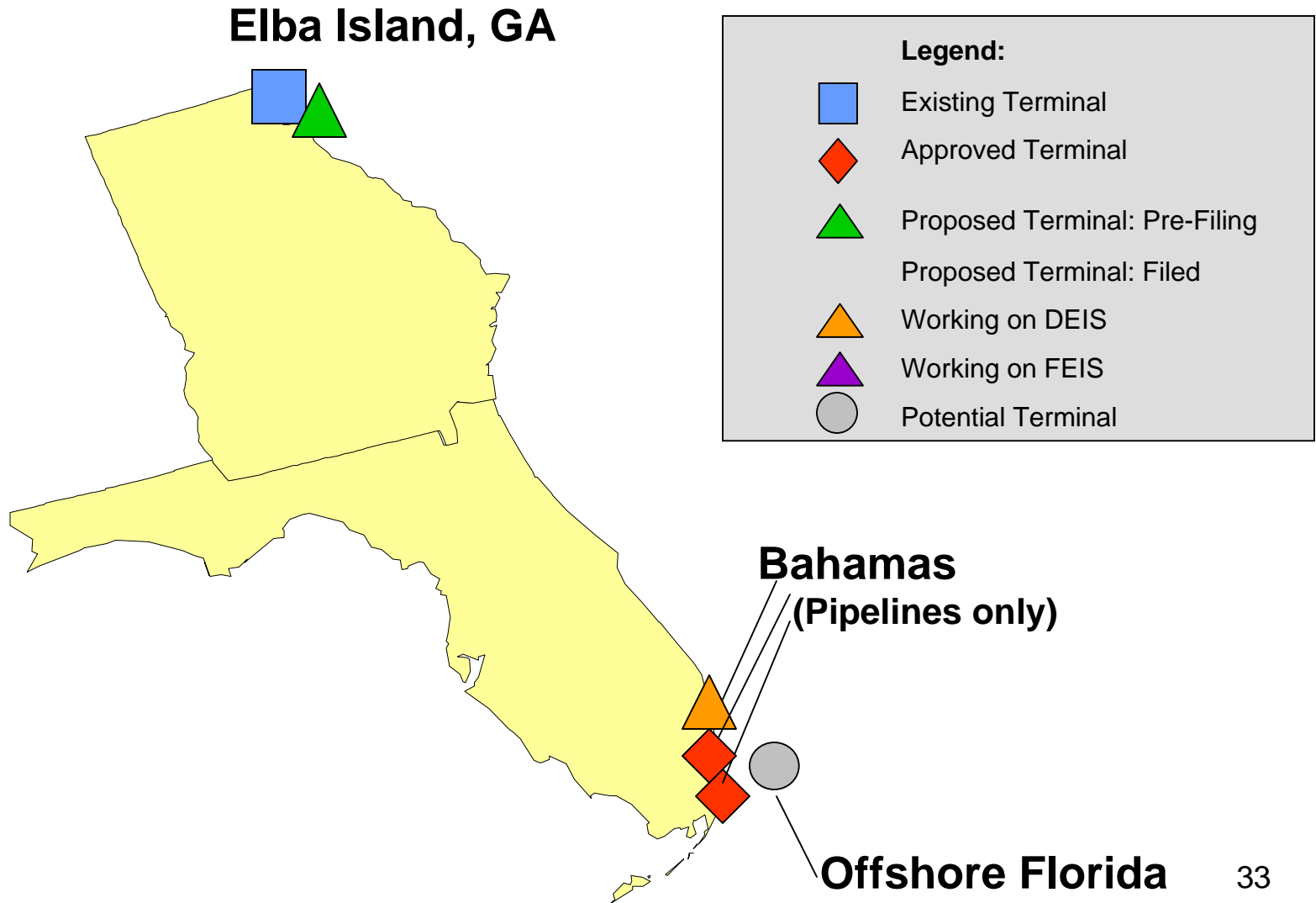
Mid-Atlantic LNG Terminals



Mid-Atlantic LNG Terminals



South East LNG Terminals



LNG Terminal Siting Issues

- Safety
- Market Demand
- Existing Marine Facilities
- Existing Pipeline or End User Infrastructure
- Take Away Capacity of Pipeline(s)
- Federal and State approvals

Energy Policy Act of 2005 - LNG

State and Local Considerations

- Governor shall appoint a state agency for consultation
- FERC must consult with this agency
- State may file a safety advisory report and FERC must review and respond
- State agency may conduct safety inspections
- FERC order must require an Emergency Response Plan which includes a cost-sharing plan

Opportunities for Public Involvement

The FERC Process:

- We Issue Notice of the Application
- Project Sponsor Sends Landowner Notification Package
- SCOPING = We Issue Notice of Intent to Prepare the NEPA Document
- Public Meeting(s)

Public Input:

- File an Intervention
- Contact the project sponsor w/questions, concerns; contact FERC
- Send letters expressing concerns about environmental impact
- Attend scoping meetings



Opportunities for Public Involvement (continued)

The FERC Process:

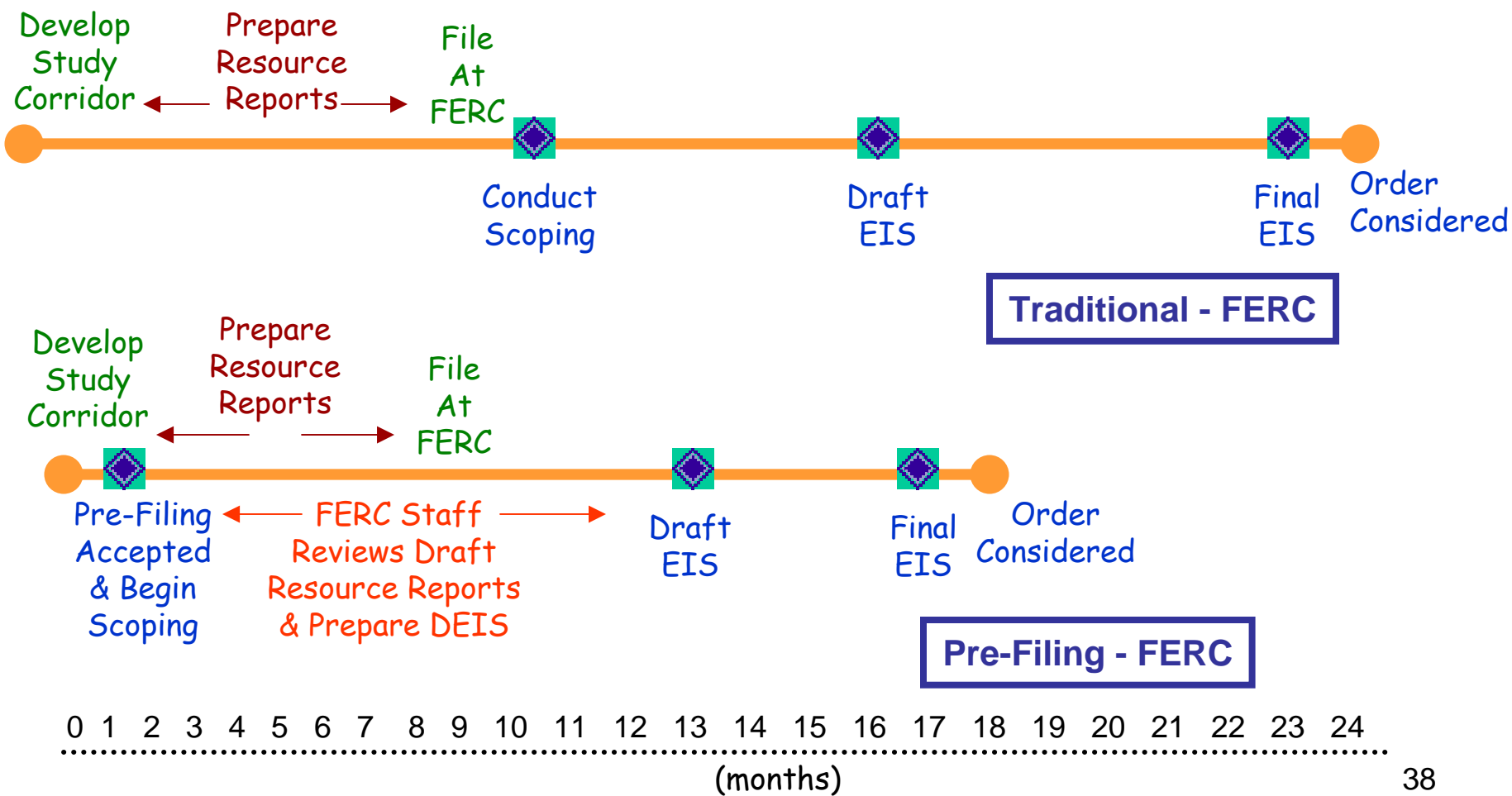
- Issue Notice of Availability of the DEIS
- Public Meetings on DEIS
- Issue a Commission Order

Public Input:

- File comments on the adequacy of DEIS
- Attend public meetings to give comments on DEIS
- Interveners can file a request for Rehearing of a Commission Order

Standard Timelines

Traditional vs. Pre-Filing Process



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The EIS Schedule

- Draft EIS dates highly dependent on timely submittals by the applicants
- FERC will work closely with other federal and state agencies to resolve outstanding issues
- Draft EIS is normally issued about 4 months after the application is filed
- Final EIS is normally issued about 4 months after the Draft EIS
- FERC must receive Waterway Suitability Report from the U.S. Coast Guard prior to issuance of Final-EIS

Phases of Project Review

- Project Preparation
 - The applicant working on its own
- Pre-Filing
 - FERC staff working with the applicant and stakeholders before the filing of an application
- Application Review
 - FERC staff working with the applicant and stakeholders after the filing of an application
- Post-Authorization
 - FERC staff working with the applicant and stakeholders to ensure compliance with conditions to the FERC approval

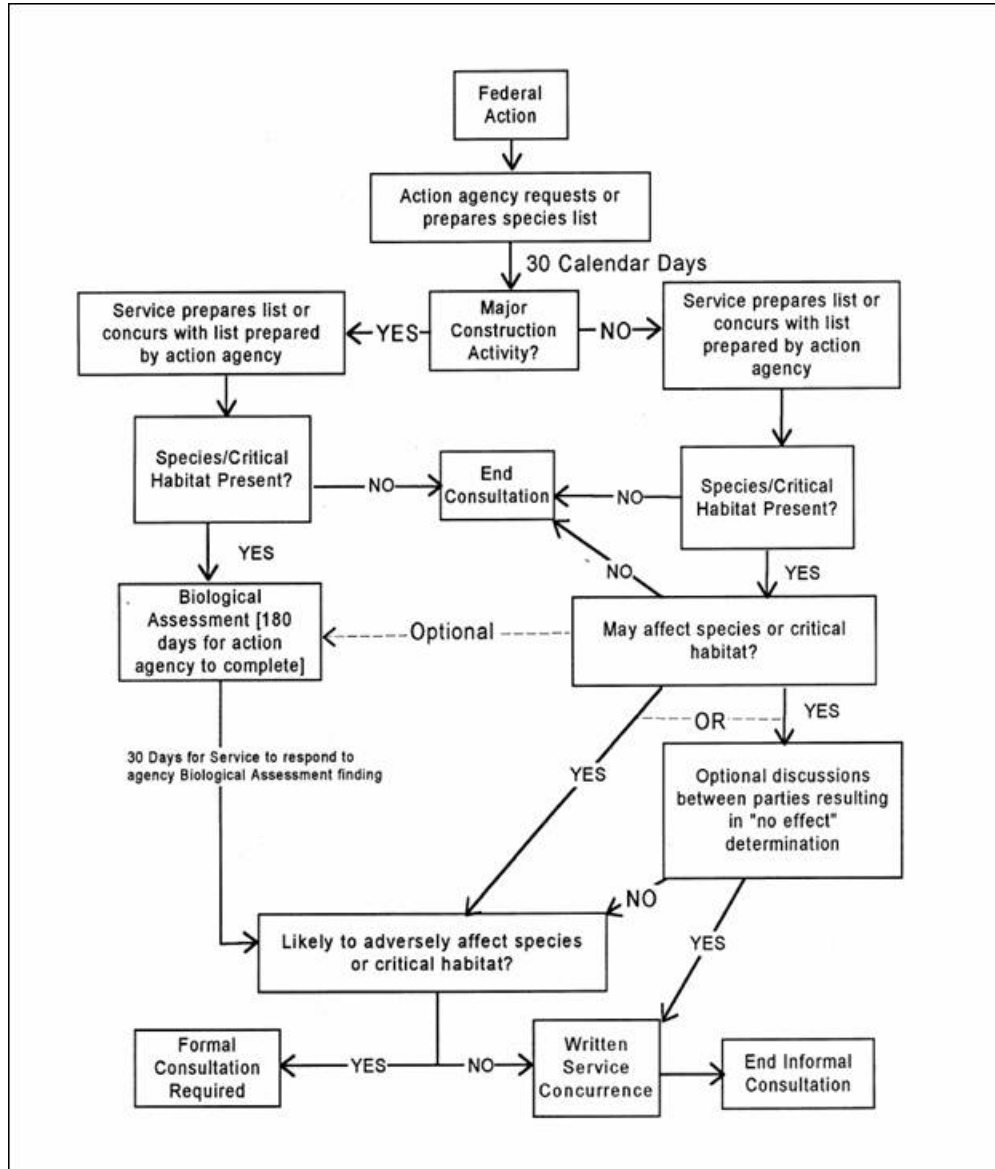
FERC Staff Pre-Filing Activities

- Identify affected parties:
 - landowners
 - agencies
 - other stakeholders
- Facilitate identification of issues
- Identify study needs
- Facilitate resolution of issues
- Issue scoping notice
- Examine alternatives
- Arrange and attend site visits and meetings
- Initiate preparation of preliminary NEPA document
- Review draft resource reports

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FERC Projects - ESA Consultation



Interagency Review of LNG Safety Issues

- Feb. 2004 – Interagency Agreement among FERC, Coast Guard, and DOT
- May 2004 – FERC ABSG Report - Models for Calculating Site-Specific Hazards
- Dec. 2004 – DOE Sandia Report - Guidance on Risk Analysis and Safety Implications of a Large LNG Spill Over Water
- 2005 – Integration of Coast Guard within FERC's Project Review – Waterway Suitability