Interstate Pipelines | Exploration & Production

Marcellus Shale Advisory Commission Infrastructure Work Group Meeting

El Paso Corporation

Tennessee Gas Pipeline Company

April 11, 2011

El Paso Corporation

El Paso Corporation provides natural gas and related energy products in a safe, efficient, and dependable manner. We own North America's largest interstate natural gas pipeline system.

- Tennessee Gas Pipeline, an El Paso company
- Southern Natural Gas, an El Paso company
- Colorado Interstate Gas, an El Paso company
- elpaso Natural Gas

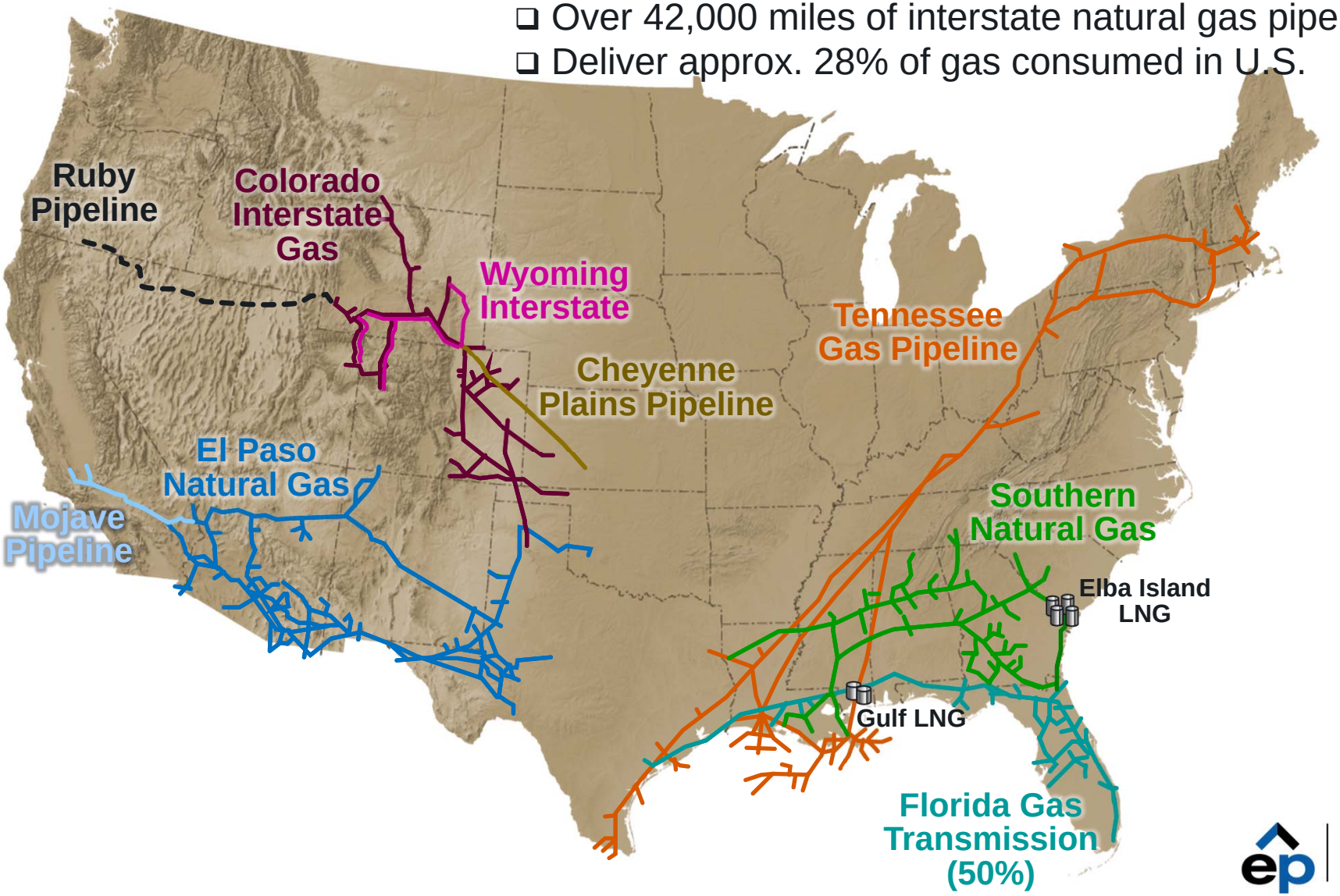
El Paso's Vision Statement

the place to work
the neighbor to have
the company to own

El Paso Corporation

Pipelines

- Over 42,000 miles of interstate natural gas pipeline
- Deliver approx. 28% of gas consumed in U.S.



Interstate Natural Gas Pipelines

- Interstate Commerce
- Natural Gas Act
  - Federal Energy Regulatory Commission
  - Rates, Construction/abandonment, Service
- Public convenience and necessity
  - Market need
  - Environmental impact

Tennessee Gas Pipeline

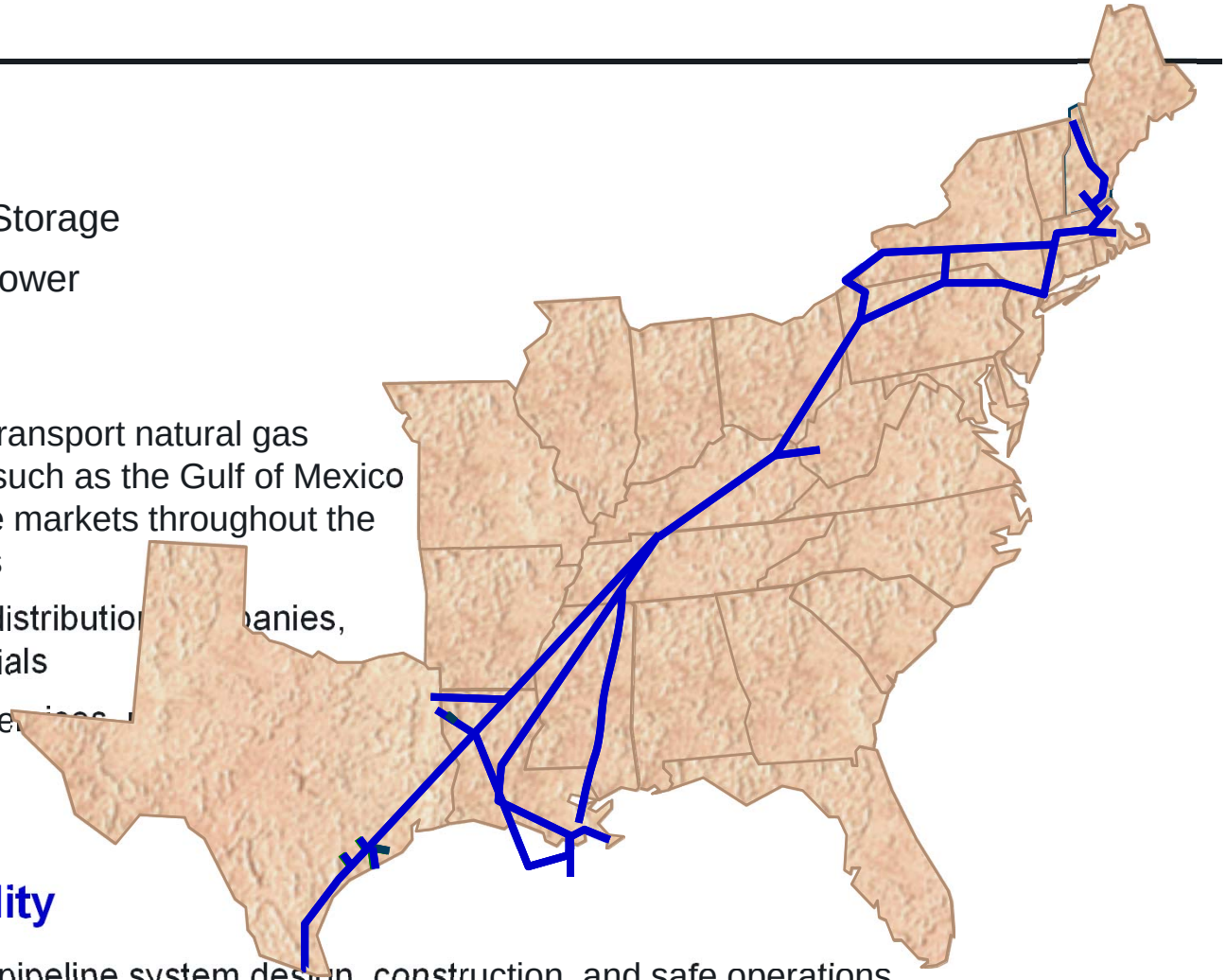
Background

Footprint

- Over 13,700 Miles
- Over 90 Bcf of Working Gas Storage
- 1.4 million certificated horsepower

Business

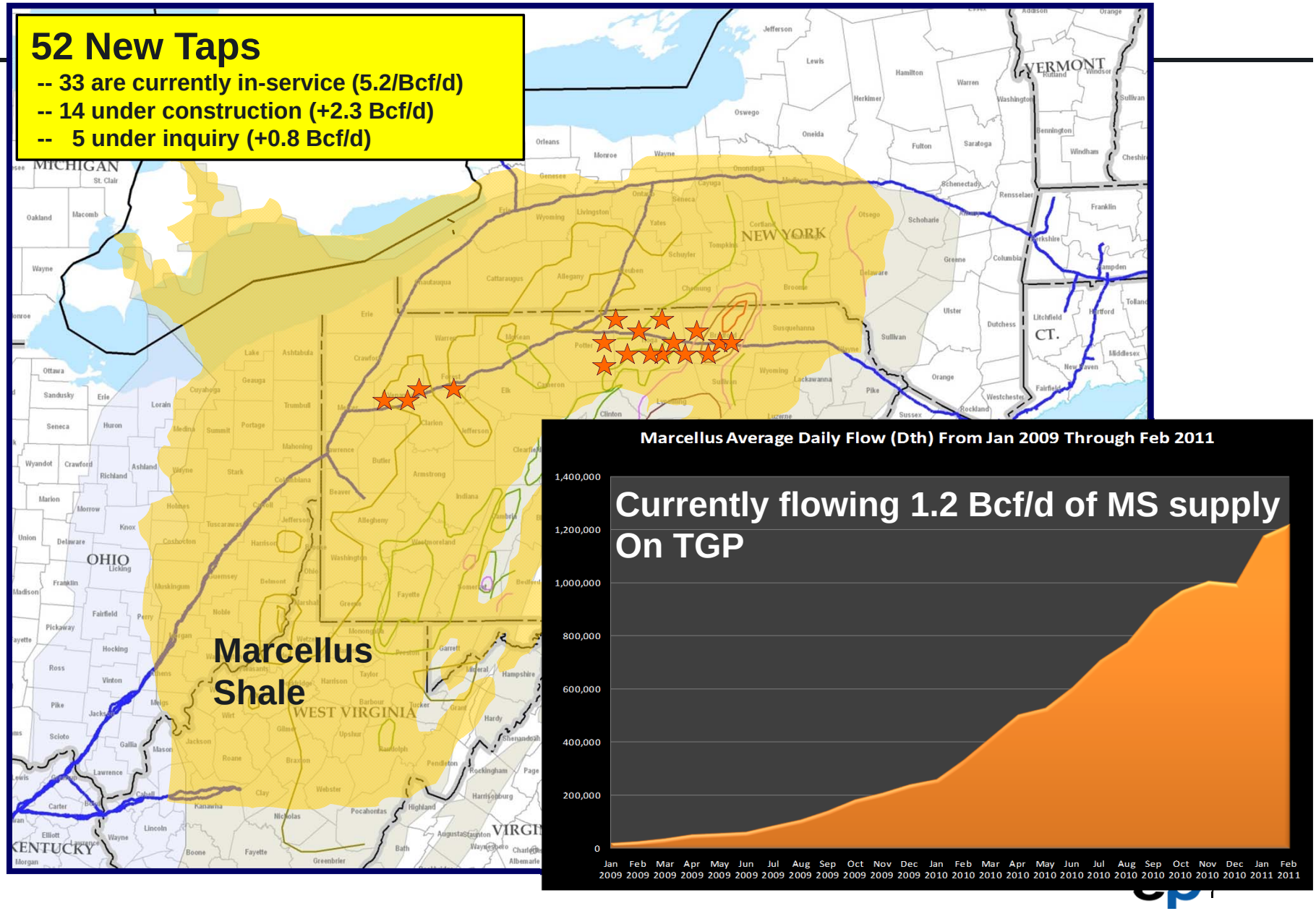
- **Natural Gas Transporter:** Transport natural gas supplies from producing areas such as the Gulf of Mexico and Marcellus Shale to end-use markets throughout the Northeast & MidAtlantic regions
- **Customers**: producers, local distributio[illegible]panies, power generators, large industrials
- **Regulated by FERC:** Tariff se[illegible] new construction activities



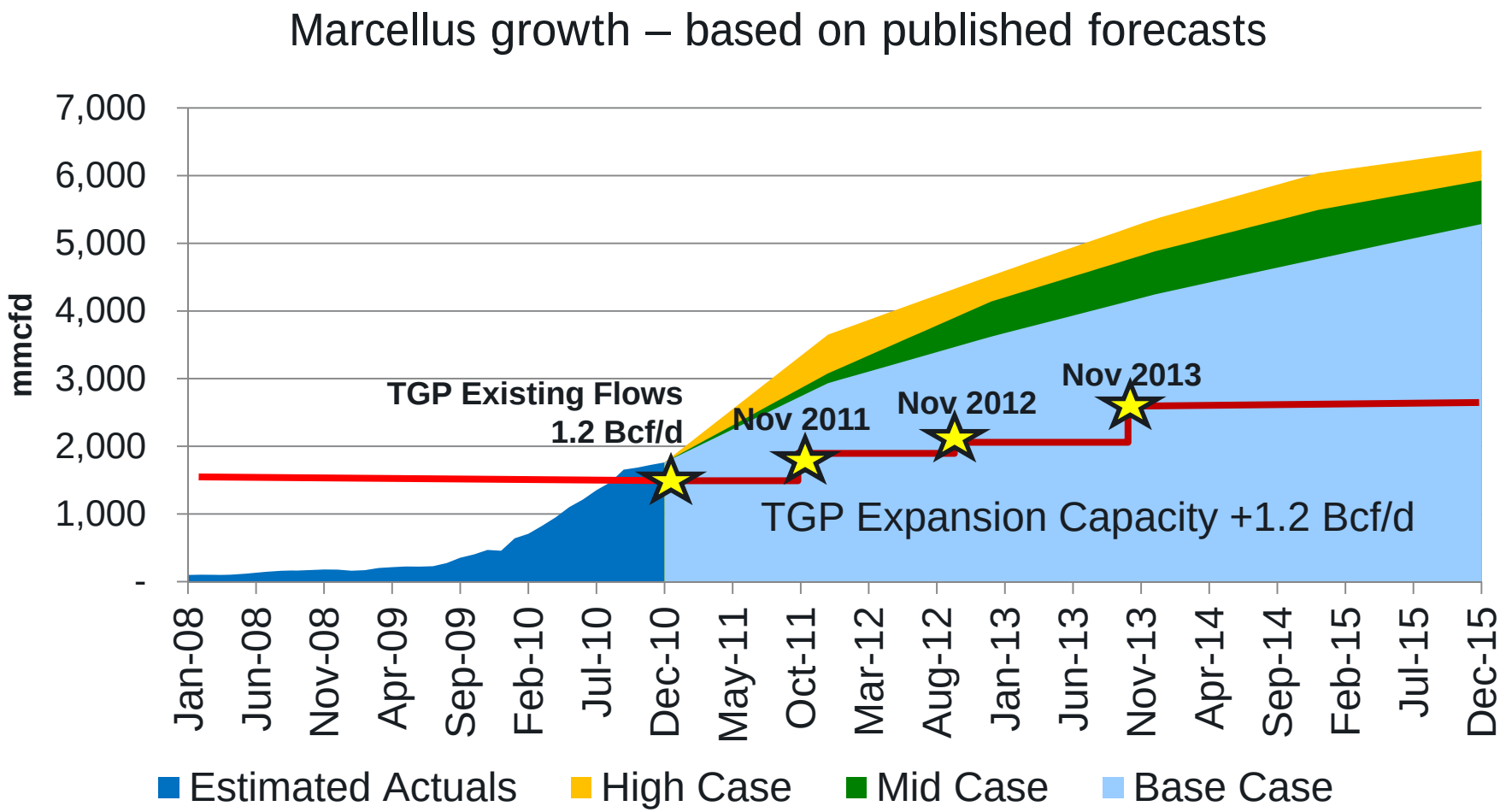
Experience and Reliability

- Over 50 years of experience in pipeline system design, construction, and safe operations
- Industry leading safety programs (pipeline integrity, & people safety) with top quartile performance
- Commitment to strong customer services with safe, reliable operations

TGP / Marcellus Shale Footprint



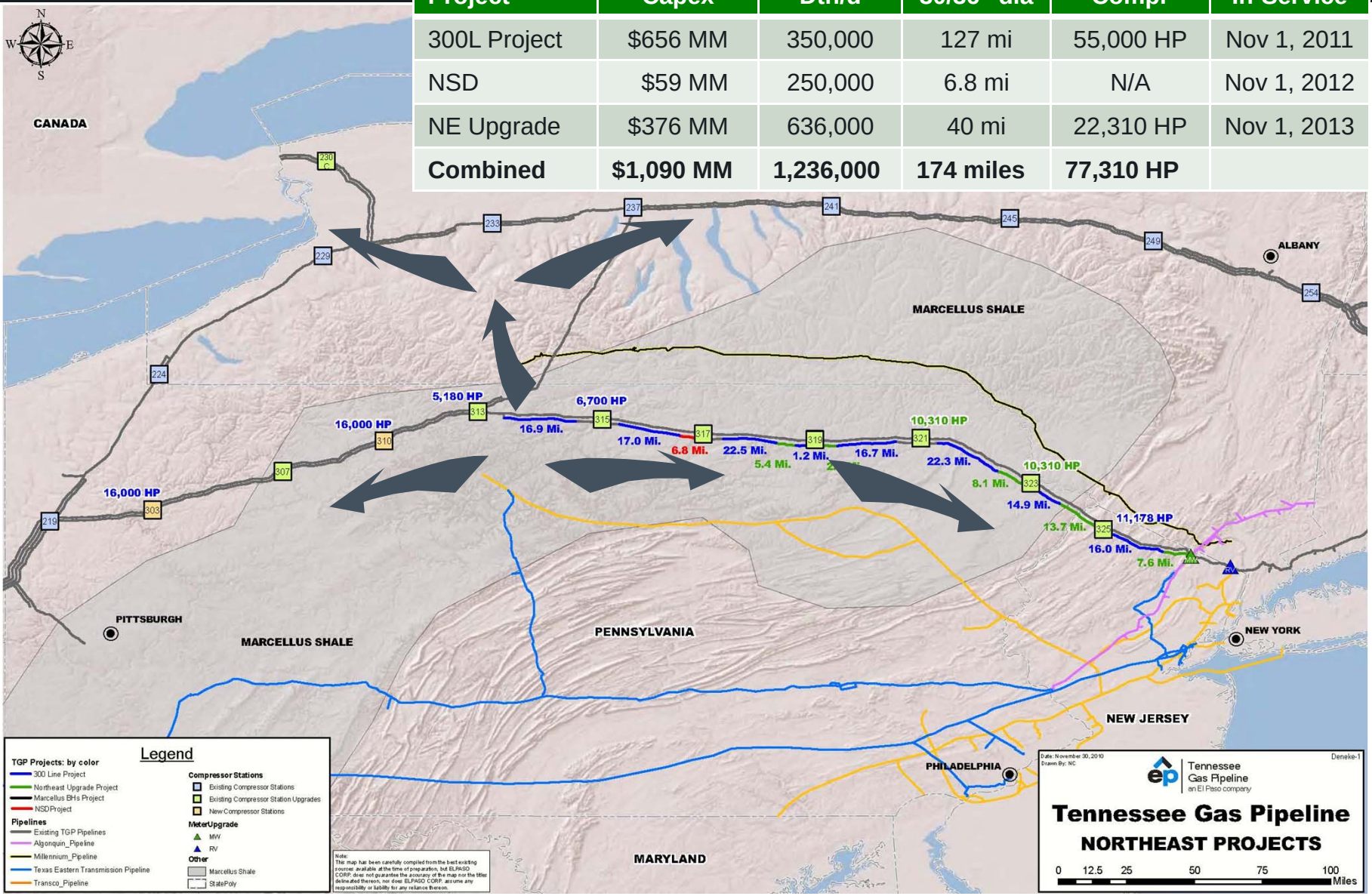
Timing of TGP Expansion Program is important for Marcellus Shale development



TGP – Marcellus Area Expansion Projects

Overview

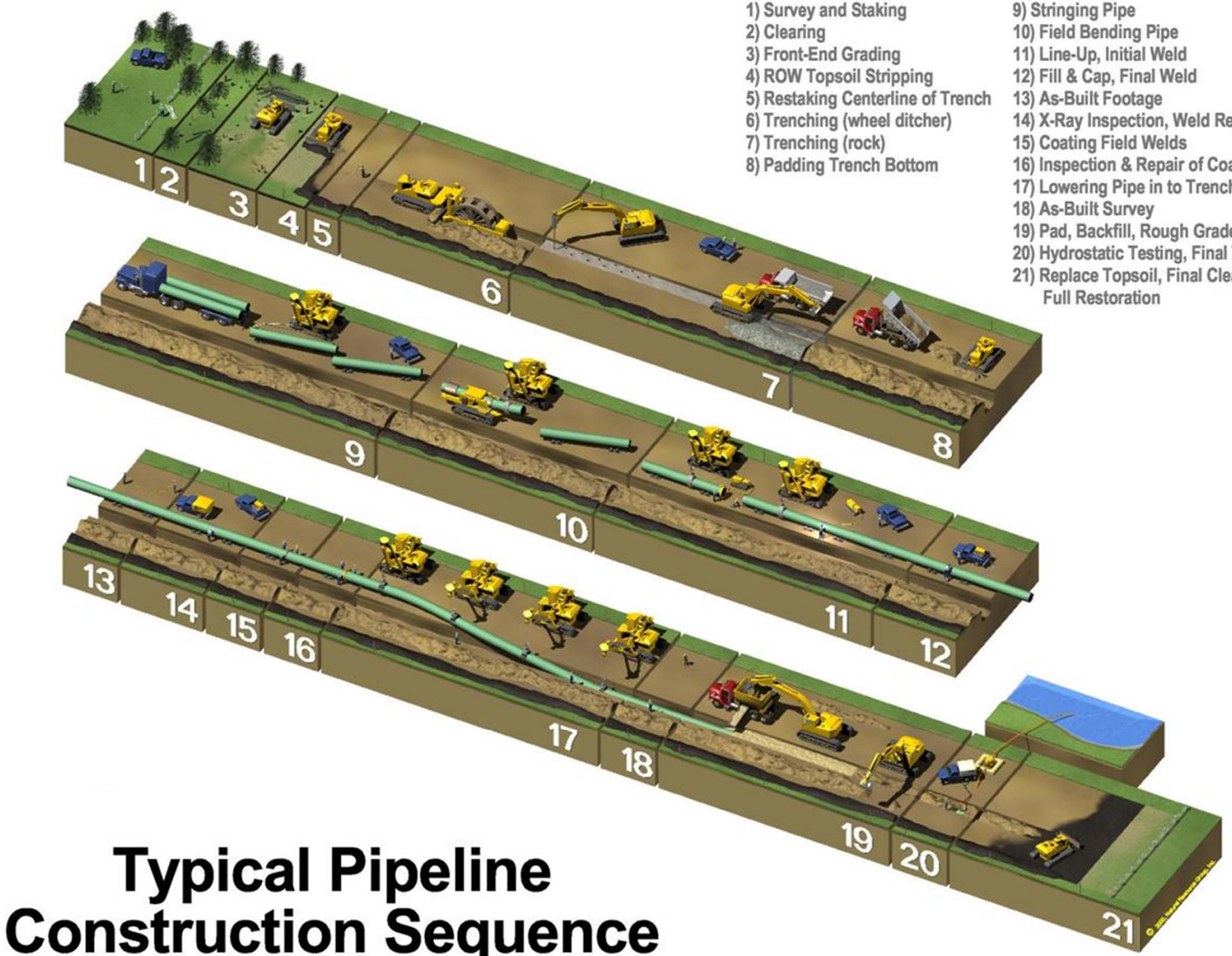
Project	Capex	Capacity Dth/d	Loop Mi 30/36" dia	New Compr	In-Service
300L Project	$656 MM	350,000	127 mi	55,000 HP	Nov 1, 2011
NSD	$59 MM	250,000	6.8 mi	N/A	Nov 1, 2012
NE Upgrade	$376 MM	636,000	40 mi	22,310 HP	Nov 1, 2013
Combined	**$1,090 MM**	**1,236,000**	**174 miles**	**77,310 HP**	



TGP Marcellus Expansion Program Socioeconomic Benefits to Pennsylvania

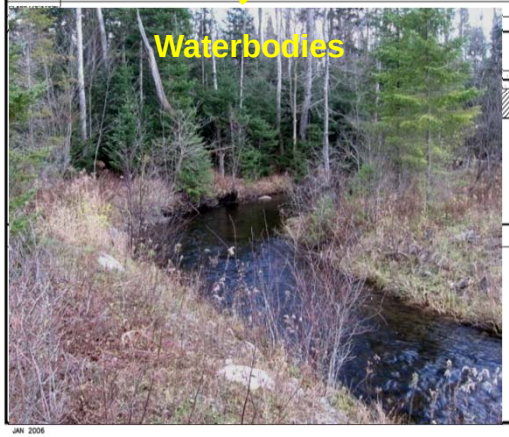
	300 Line Project	NSD Project	N.E. Upgrade Project	Combined
Additional Natural Gas Supply/Capacity	350,000 Dth/d	250,000 Dth/d	636,000 Dth/d	1,236,000 Dth/d
Temporary Jobs[1] (State-wide, both Direct & Indirect)	~4400 jobs / $151.1MM[3]	~435 jobs / $15.0MM[3]	~1100 jobs / $37.8MM[2]	~5935 jobs / $203.9MM
Gross State Product	$205.5MM[3]	$20.3MM[3]	$51.4MM[2]	$277.2MM

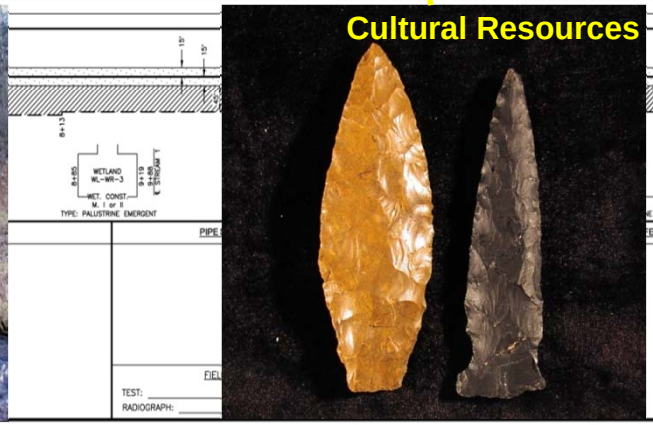
[1] Each job is equivalent to one full-time job lasting a single year.
[2] Lahr, Coughlin, and Felder (2011, March). Economic Analysis of the Northeast Upgrade Project in New Jersey and Pennsylvania. *Edward J. Bloustein School of Planning and Public Policy, Rutgers, The State University of New Jersey*.
[3] Assumes a similar economic analysis completed as done for the Northeast Upgrade Project, while taking into account the difference in estimated capital expenditure within the Commonwealth of Pennsylvania.



Typical Pipeline Construction Sequence

ENVIRONMENTAL SURVEYS





JAN 2006

Clearing and Grading

Erosion Control Installation

Trenching and Pipe Installation

Final Grading and Restoration

Wetland Construction and Restoration

Waterbody Construction and Restoration

Final Revegetation

FERC certificate Process for Interstate Natural Gas Pipelines

- FERC is the lead jurisdictional agency:
  - FERC Prefiling process designed to engage other agencies and stakeholders early
  - Expedited review schedule under federal programs
    - States agencies intended to follow FERC schedule
  - Consolidated record
    - *"The intent of the record and schedule is to reduce redundancy and sequential processing"—FERC Guidance*
  - Public convenience and necessity finding
    - Market need
    - Environmental impact

State Agency participation is expected during the FERC Pre-Filing Process

- More interactive National Environmental Policy Act / permitting process
- Earlier, more direct interaction between FERC, state agencies, landowners, public, others
- Promotes a more proactive upfront issue identification
- Transparency in the pre-filing review process
- Goal is to resolve problems and have “no surprises” after the application is filed

FERC staff is an advocate for the process, not the project

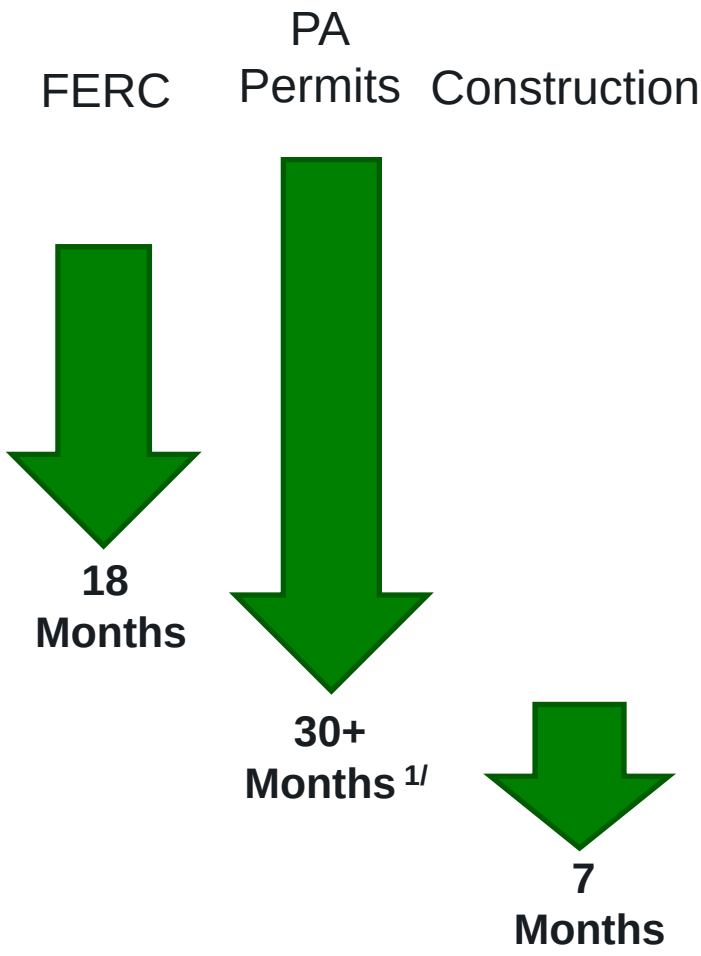
Timely State Permitting is Crucial to achieving Schedule

TGP 300L Project Schedule

112 mi of pipeline looping in PA

Initial PA State Agency Consultations	Aug/Sep-2008
FERC Pre-filing Process Initiated	Oct-2008
FERC Application Submittal	Jul-2009
Filed PA State Permits (Ch 102/105)	Sep/Oct-2009
FERC issues Environmental Assessment	Feb-2010
FERC Certificate issued	May-2010
PA State Permits (Ch 102 & 105)	Pending[1/]
Planned PA Construction Start (pipe loop)	Apr 1, 2011
In-service Date	Nov 1, 2011

1/ PADEP Chapter 102 issued in Feb. 2011; PADEP Chapter 105 is not yet complete as of 4/11/2011

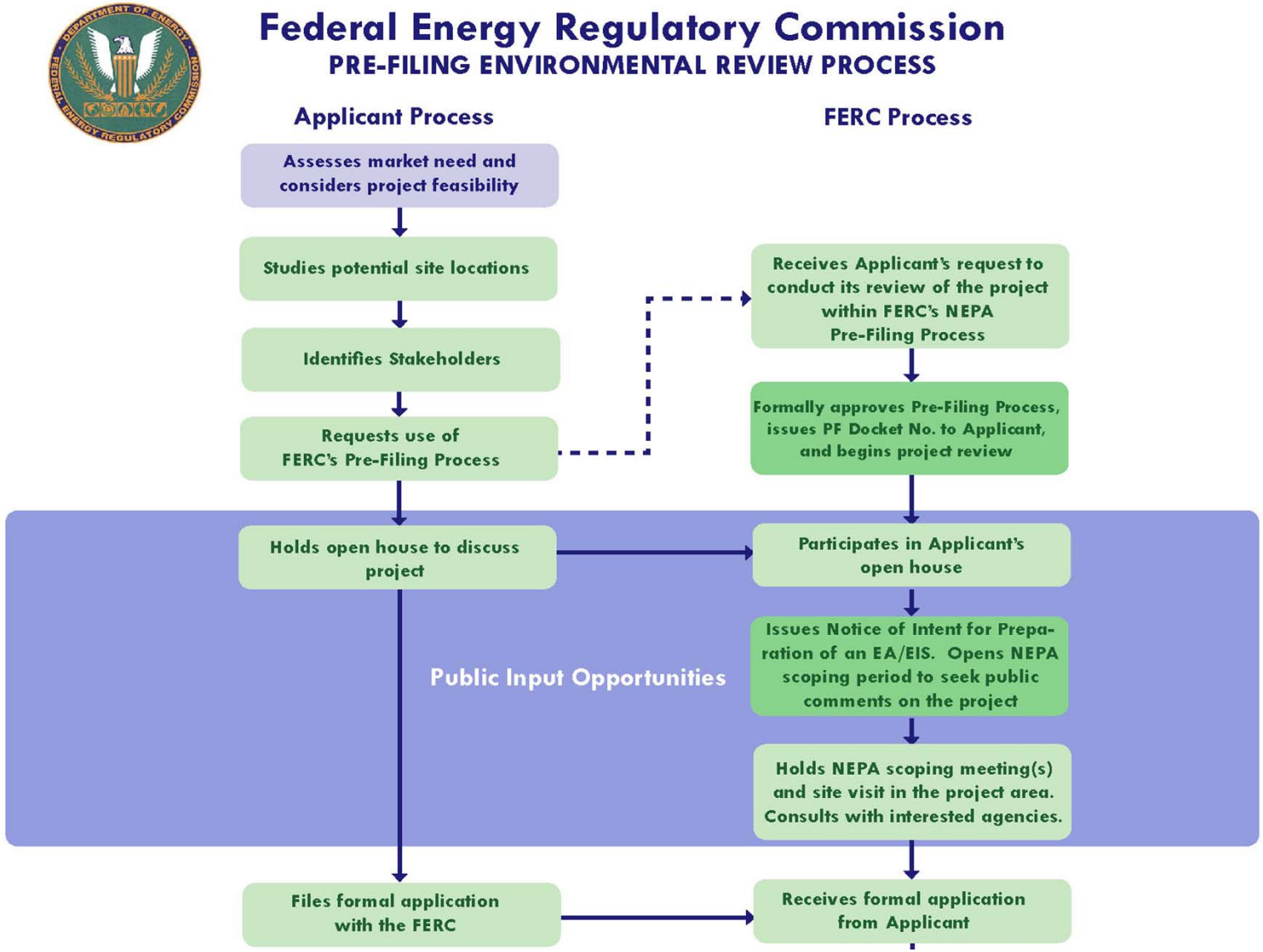


Effective State Involvement in FERC Regulated Projects

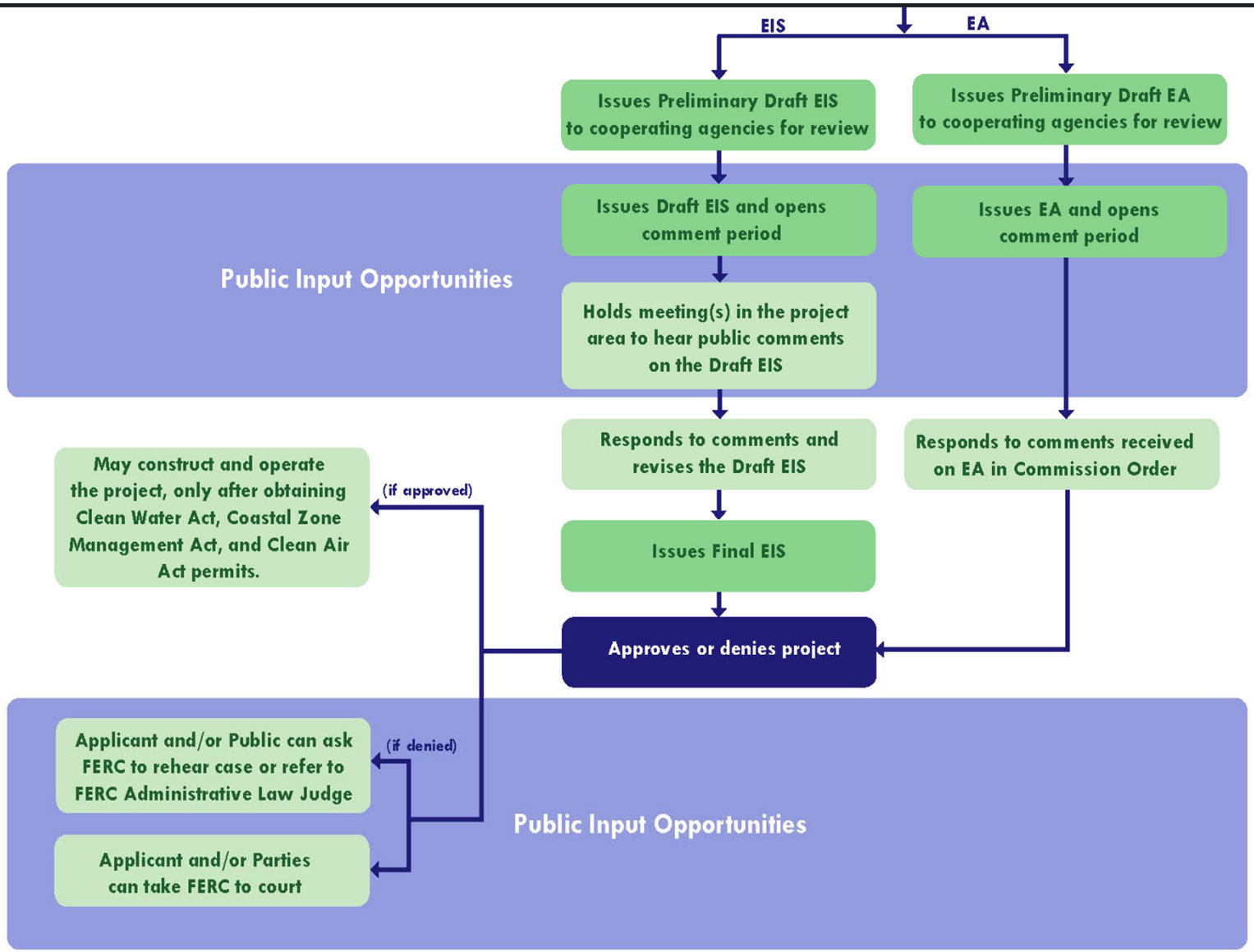
- Participate early in the established FERC process
  - State input on routing, permitting requirements, and schedule needs
  - Establish a consolidated record for the public convenience and necessity finding
  - Avoid redundancy and sequential processing (i.e., “waiting”)
- Establish a more centralized, coordinated state agency program for large scale linear pipeline projects
  - Lead coordination and consistency of regional & county agency reviews, comments, and processes
  - Encourage collaboration for timely state permit action & issuance
- Ensure adequate upfront state resources and planning activities to work within FERC deadlines and overall project schedule
  - Streamlined permit review and action on permit requests
  - Consider applicant funded supplemental 3rd party resources to work independently for the state as needed

APPENDIX

FERC Prefiling Flowchart



FERC Application Flowchart



Expedited Permit Decisions

Unique Regulatory Features

- EPAct 2005 mandates “expeditious completion”
- FERC Application lists each Federal authorization required, including State agency action
- State agencies must report to FERC on information needs and permit timeline within 30 days of receiving a request from pipeline
- FERC will set the schedule for agencies to complete analysis and decision making

“*Whether an agency finds a request complete has no bearing on the agency’s allotted response time*” – Order 687

Expedited Review by U.S. Courts

Unique Regulatory Features

- U.S. Courts of Appeal have original, exclusive jurisdiction to review:
  - action of a State agency to issue, condition, or deny
  - alleged failure to act by a State agency
    - Deadlines must be met to be consistent with federal law
    - Deadlines do not depend on completeness of request
- The Court shall set any action for expedited consideration
- The Court may remand to the agency and set a deadline for the agency to act or abdicate federal delegation

Consolidated Record

Unique Regulatory Features

- The Commission shall file with the U.S. Court of Appeals the consolidated record to which the appeal relates—*Natural Gas Act*
- States should:
  - File requests of applicant with FERC
  - File final decisions with FERC
- *"The intent of the record and schedule is to reduce redundancy and sequential processing"—FERC Guidance*

Eminent Domain/Condemnation

Unique Regulatory Features

- A holder of a certificate of public convenience and necessity may acquire property by the exercise of the right of eminent domain in U.S. District Court or in State court
- The Commission grants a certificate and states that eminent domain may only be used for the proposed pipeline and related facilities in the exact location described and only for the transportation of natural gas
- Early access to properties is important to scope environmental issues for the consolidated FERC records

Supremacy/Preemption

Unique Regulatory Features

- When a state regulation affects the ability of FERC to regulate comprehensively and achieve uniformity of regulation or presents the prospect of interference, then the state law may be preempted even though collision may not be inevitable—*U.S. Supreme Court* (1988)
- FERC encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction, of facilities approved by this Commission—*FERC Certificate Condition*