

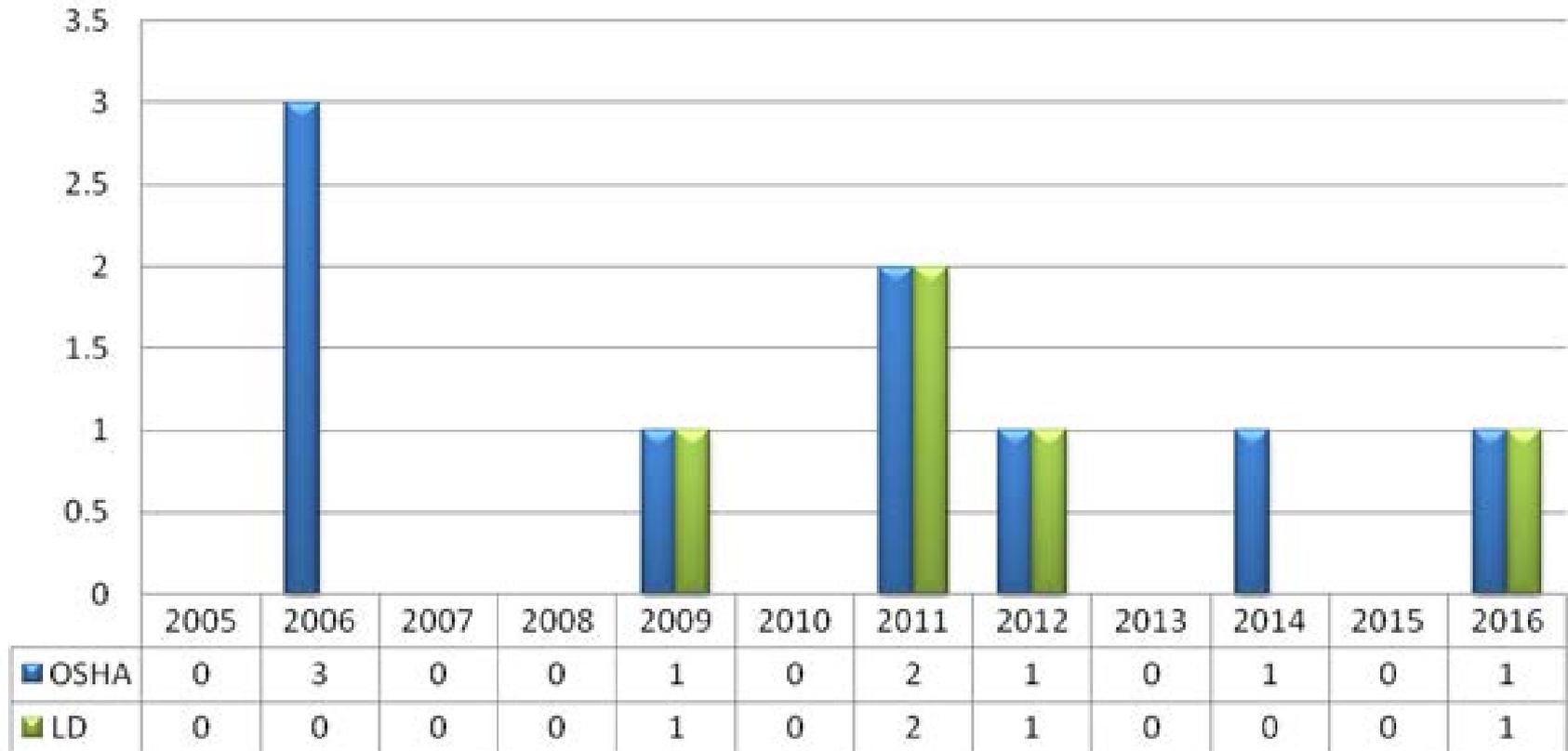


Cove Point LNG
U.S. Coast Guard, 5th District
May 10, 2017

Safety, Ethics, Excellence & Teamwork

Cove Point Operations

Cove Point OSHA & LD History

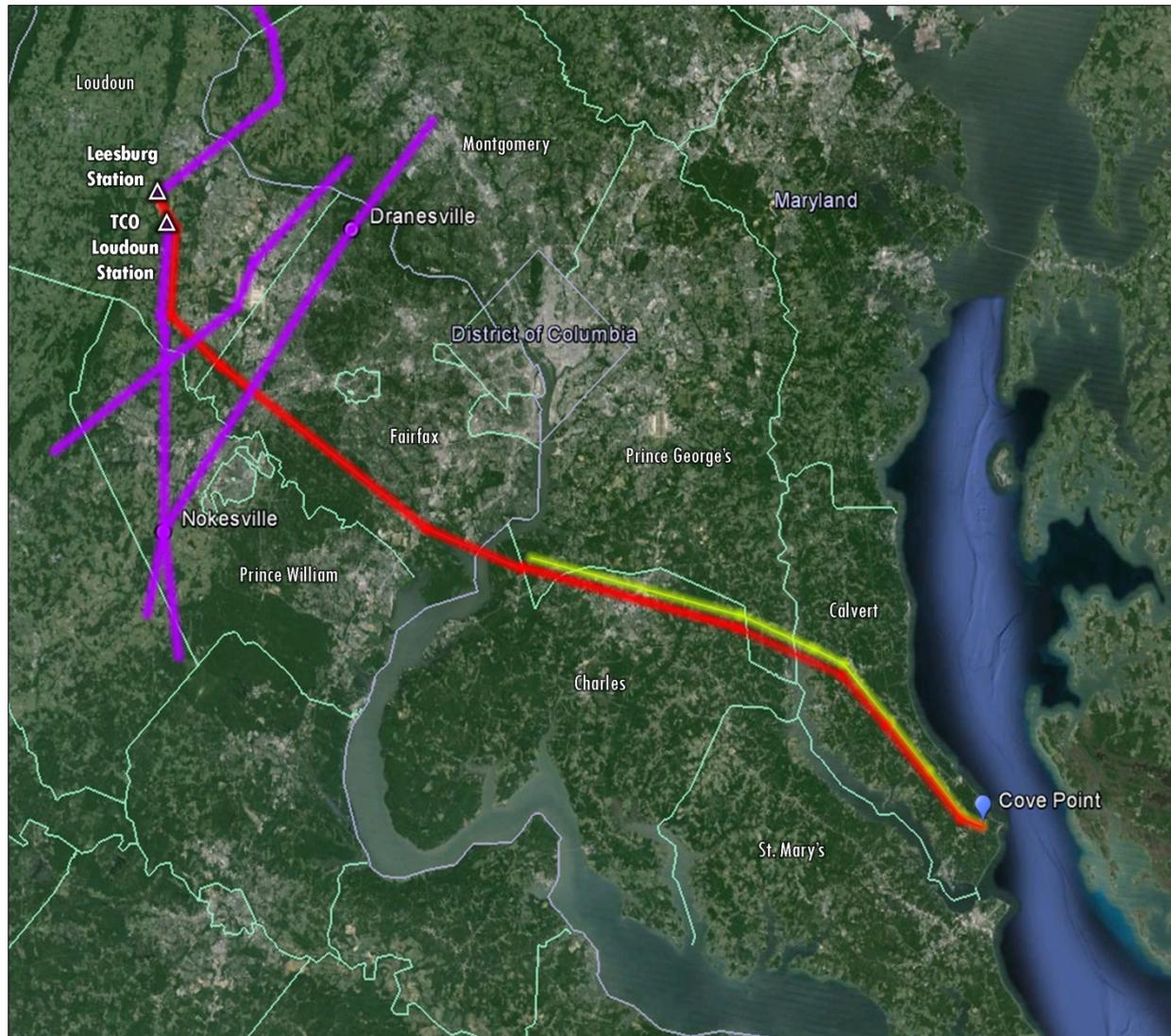


Cove Point LNG History

- Mid-1970s Cove Point LNG designed and built
- 1978 Import operations commenced
- 1980 Import service ceased and placed in stand-by status
- 1994 Authorized to reactivate to provide peaking storage**
- 2002 Dominion acquired the terminal**
- 2003 Commercial LNG imports commenced
- 2004 A fifth LNG tank was placed in service
- 2008 Facility expansion finished
- 2011 Pier expansion finished
- 2011 Export project announced



Southern Maryland Landmark



- Located on the Chesapeake Bay in Southern Maryland

— 87 miles of existing 36" diameter pipe

— 47 miles of existing parallel 36" diameter pipe

— Interconnects with

- Transco
- Columbia
- DTI

Nature Preserve on the Bay



Restoring a Freshwater Marsh



- Close breach
- Revetment
- Dredge material
- Fortify beach
- Environmental stewardship

Environmental Excellence



Cove Point Fresh Water Marsh Project

- National Environmental Excellence Award
 - National Association of Environmental Professionals
- Environmental Excellence Award
 - SGA
LINKING PEOPLE, IDEAS, INFORMATION
- Chairman's Stewardship Award
 - Interstate Oil and Gas Compact Commission

Environmental Excellence



"Hero of the Chesapeake Bay"
Maryland Legislative
Sportsmen's Foundation



Dominion Reef at the Gooses

Existing Service and Customers

Deliverability
LTD – 1,000,000 dktd (Shell BP Statoil)

FPS – Peaking
14.7 MMcfd Liquefaction

**~ 80 MW Power
Generation**

2.8

1.25

1.25

1.25

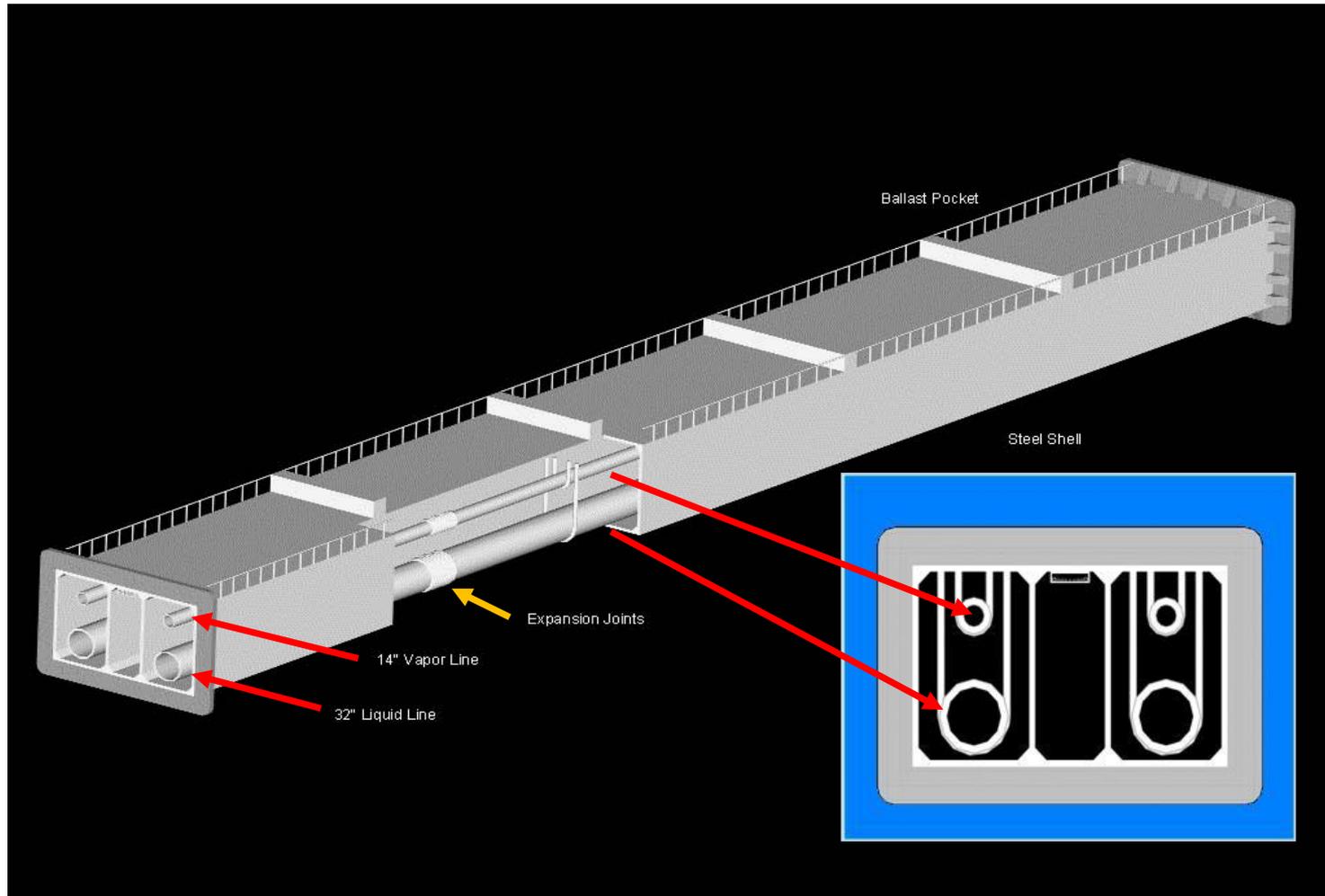
3.4

1.25

3.4
(Bcf)

Storage 14.6 BCF

The Underwater Tunnel



20 tunnel sections that lie on the bottom of the Chesapeake Bay make up about 1 mile of the 1 ¼-mile tunnel

The Offshore Pier

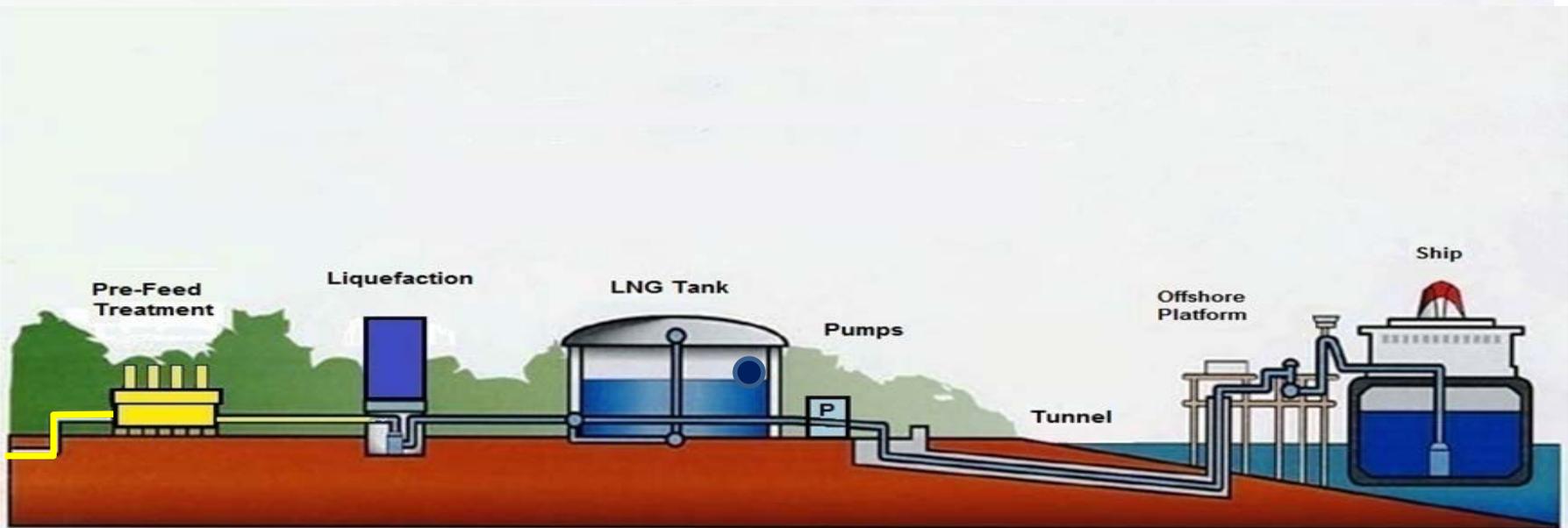
- Can accept 267,000-cubic-meter ships
- More than 1/2 mile in length
- North and South piers, capable of docking two ships
- U.S. Coast Guard, Calvert County Sheriff 's Office enforce security exclusion zone for transport ships and platform

Insulated Pipes Carry LNG



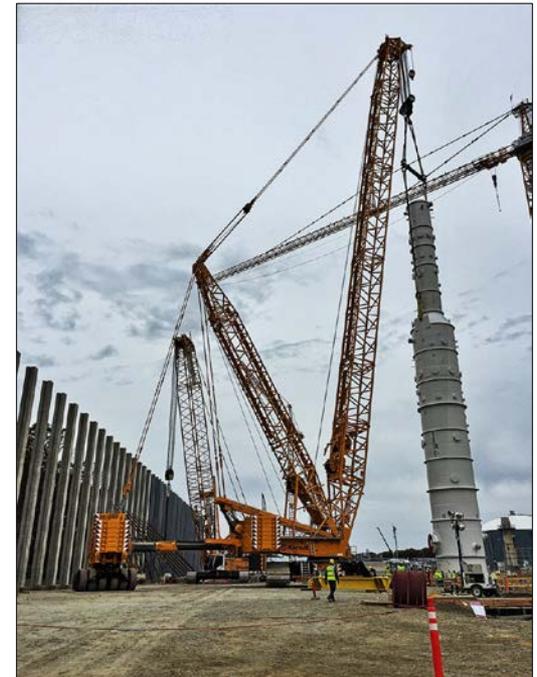
- LNG is pumped from ships at Cove Point's offshore dock through insulated transfer pipes to insulated storage tanks more than 100 feet above the water level of the bay
- The pipes are constantly circulating liquid and vapor throughout the plant when ships are not unloading, to keep the facilities cold.

Bi-directional Operations



Cove Point Liquefaction Project Schedule

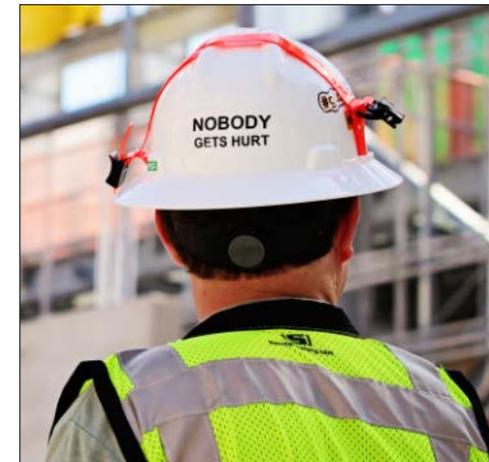
- ✓ 10/2011 Filed DOE Export Application for NFTA Countries
- ✓ 6/2012 Submitted FERC Pre-Filing
- ✓ 1/2013 Completed Front-End Engineering and Design (FEED) Study
- ✓ 4/2013 Signed 20 year Terminal Service Agreements
- Filed FERC Application
- Filed Air Permit
- Executed an EPC agreement
- ✓ Sept 2013 DOE Non-FTA approval
- ✓ 5/15/2014 FERC Environmental Assessment issued
- ✓ 9/29/2014 FERC Approval to construct
- ✓ 10/2/2014 Construction commences
- Q4 2017 Target In-service



Safety, Ethics, Excellence & Teamwork

Cove Point Project Construction Safety

- Craft engagement critical
- 2017 OSHA Recordable Incidents
 - Over 3.1 million hours worked
 - Four recordable incidents
 - OSHA RIR = 0.25*
- Commissioning safety focus
 - Lock Out / Tag Out
 - Confined space entry
 - Energized electrical systems
 - Rotating equipment
 - Stored energy

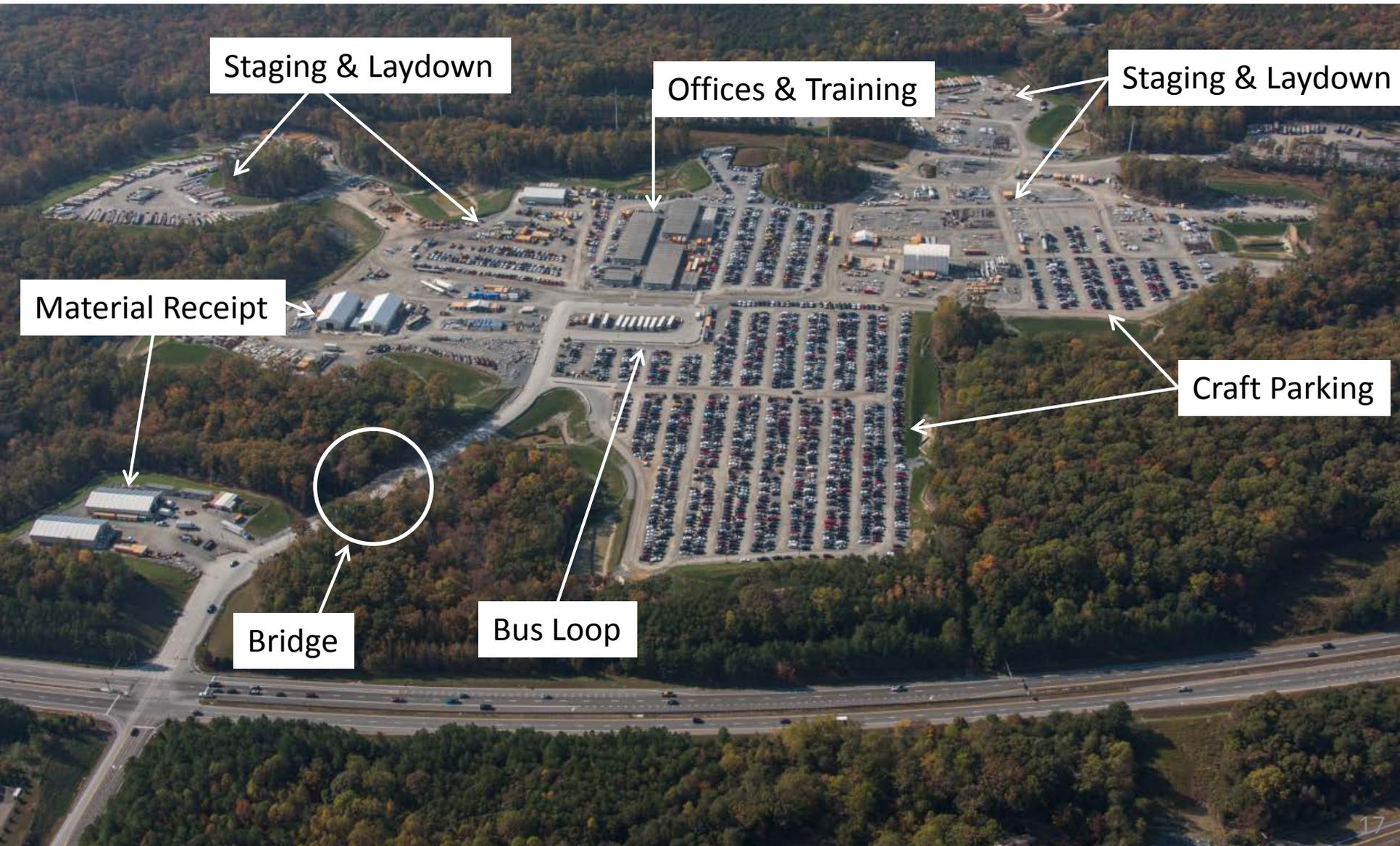


*Average OSHA RIR would be 3.7 for heavy construction

Project Work Areas



Off-Site Area A - Site Support Services



Off-site Area B Equipment Deliveries

- Heavy hauls complete
 - Received 35 barges
 - Completed 77 heavy hauls
 - Road survey complete – no issues
- Land restoration complete
 - Pier removed, land restored
 - Oyster mitigation program
 - Final survey complete
 - Oyster bar restoration is 4 acres
 - Shell placement has begun



Terminal Construction - Project Status

- Status as of May 5
 - Permitting complete
 - Engineering essentially complete
 - Procurement of engineered equipment complete
 - All major equipment has been set
 - Overall project 89% complete
 - On schedule for late 2017 COD

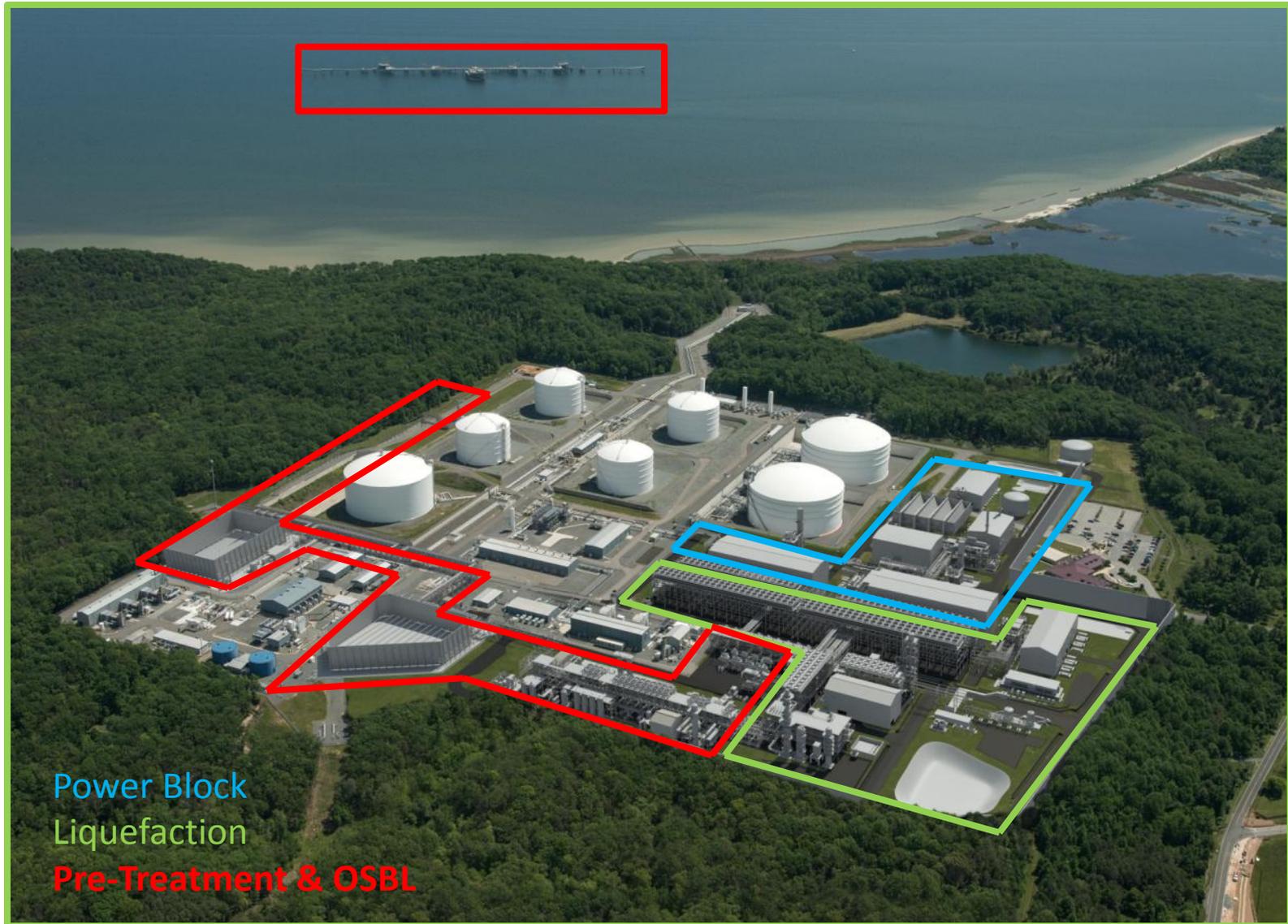


Liquefaction Pipe Bridge Road Crossing



Cable Pulling Area

Terminal Construction - Major Phases of Project



Terminal Construction - Commodities

Commodity	UOM	Total Quantity
Concrete	CY	85,236
Steel	TN	20,698
Pipe - Small Bore	LF	161,426
Pipe - Large Bore	LF	300,908
Pipe Welding - Large Bore	DI	101,402
Cable Tray	LF	74,519
Channel Tray	LF	207,901
Wire and Cable	LF	4,440,471
Terminations	EA	170,000
Coatings	LF	334,294
Insulation	LF	202,357
Fireproofing	SF	188,069



Truck Unloading Retention Slab



Auxiliary Boiler – Preparing for 1st Fire

Terminal Construction - Labor

- Construction Workforce
 - On-site workforce
 - Staff ~ 721
 - Direct Hire Craft ~ 2,110
 - Sub-Contractors ~ 684
 - Total ~3,515
 - Craft peaked at ~3,000
 - More than 9,000 craft have worked on-site
 - Tri-County residents ~ 35%
 - Transitioning craft based on area of expertise
 - Significant reductions in staff and craft over next three months



Terminal Construction - Project Logistics

- Project Labor Agreement
 - Staggered shifts to accommodate bussing craft to work locations
 - Day and night shifts to minimize congestion working 6-7 days/week
- Logistics Center
 - Cameras to monitor road and site congestion
 - Status of truck unloading and need for next truck
- Steel & Pipe Staging
 - Pre-loaded on transport in order needed
 - Directly from truck to final installed location
 - RFID tags on over 22,400 off-site prefabricated pipe spools
- Construction Crane Density
 - 53 total cranes on-site within a 54 acre work area
 - 5 tower, 17 crawler, 31 wheel mounted cranes

Terminal Construction – Next Steps

- Highlights in next few months
 - Complete Pipe
 - Cable tray, cable and terminations
 - Early commissioning activities
 - Power Block commissioning, oil flushes and steam blows



Final Grading – Auxiliary Boiler Area



Pulling 15,000 Volt Cable to Substation



LNG Rack Pipe Spool

November 2014



February 2017



Terminal Construction - Finished Project



Rendering - Finished Facility
December 2017

Exporting Clean Energy, Importing Prosperity

Exporting Clean Energy,
Importing Prosperity



Surplus natural gas, shipped through the existing
Cove Point terminal, can help meet the global demand
for cleaner energy and bring \$40 million a year
in property taxes home to Calvert County.