



LNG – A Different Approach

The Teesside GasPort Project

Presented to
Winter Outlook Seminar

by
John Baldwin of Gas Strategies
and James Ball

On behalf of Rob Bryngelson,
Executive Vice President and
Chief Operating Officer
Excelerate Energy

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Presentation Overview

- Energy Bridge™ Technology
- Genesis of the GasPort Concept
- Teesside GasPort Overview
- Exceptional and Focused Project Team
- Project Design Basis and Functionality
- Project Status
- Project Development Risks
- Next Steps



Energy Bridge™ Regasification Vessels

Natural Gas Delivery in Three Ways

Energy Bridge™ was primarily designed to access markets unreachable by conventional means...



Energy Bridge™
Deepwater Port



Excelerate
GasPort™



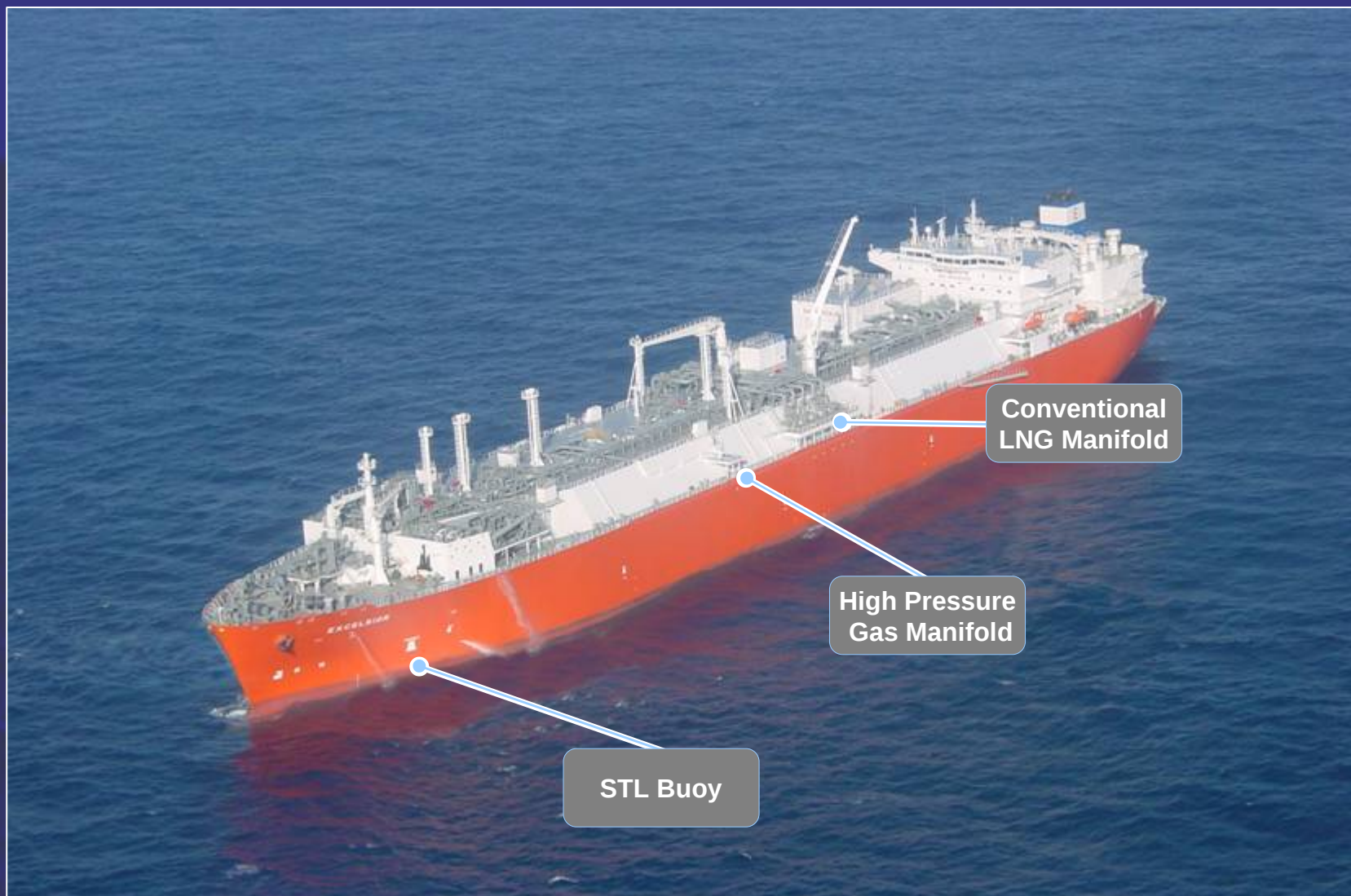
Conventional
Land-Based Terminal

...however, its economics are competitive with a conventional, land-based LNG terminal – with added flexibility benefits



Energy Bridge™ Regasification Vessels

Natural Gas Delivery in Three Ways





Energy Bridge™ Technology

Dockside Vaporization

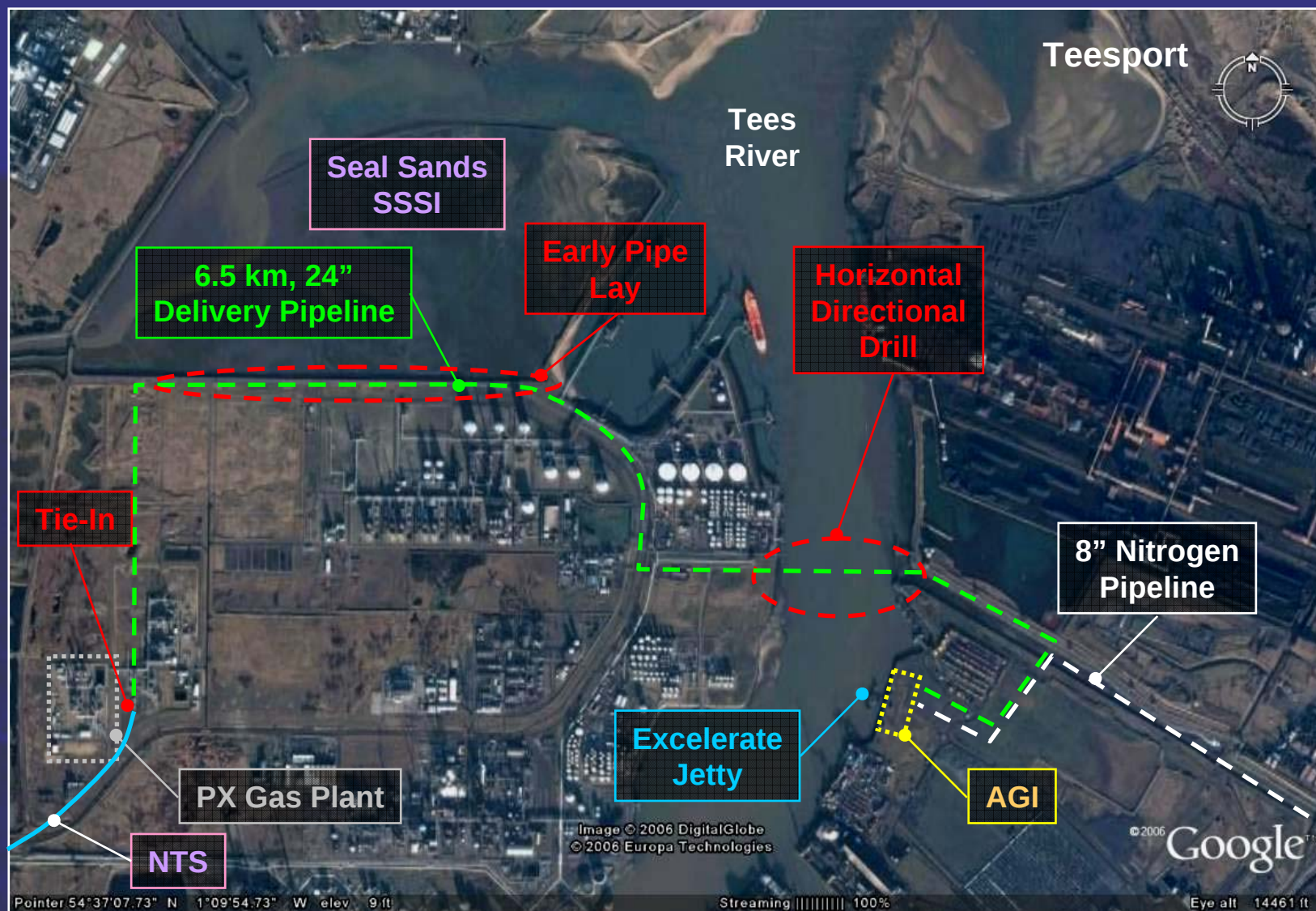


Allows delivery of regasified LNG directly into a gas pipeline installed on the jetty

Energy Bridge™ ships are equipped with a high pressure gas manifold



Teesside GasPort Project Layout

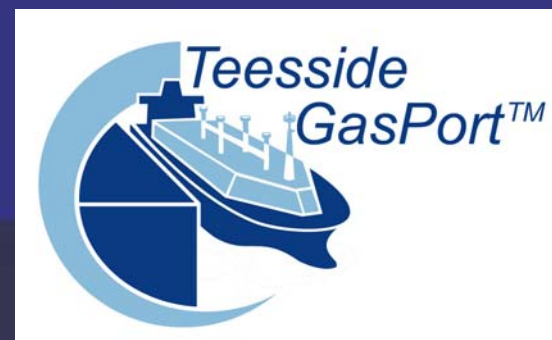




Teesside GasPort

Project Overview

- Primary project drivers
 - Be in-service by end December 2006
 - Respond to market price signals
 - Accommodate wide range of LNG specifications
- Key characteristics
 - Deliver 400 million cubic feet per day (mmcf) of natural gas (11.3 million cubic meters per day) with expansion to 600 mmcf from 2008
 - Provide the ability to accommodate market needs (variable output)
 - Minimize onshore infrastructure and time to market
 - Design as intrinsically safe with no LNG inventory onshore, and reduced planning impact
 - Total development and construction cost of approx. £30 million





Project Team Selection

The Right Team Makes all the Difference

- Accelerate Energy (EE)
 - Project sponsor and developer of GasPort technology
- Gas Strategies
 - Project development support and insight throughout the process
- PD Teesport Limited - Port Authority for the port at Teesside
 - Lessor of jetty lease and easements for the project
 - Invaluable in relation to local project support
- px (TGPP) Limited – operator of the Teesside Gas Processing Plant
 - Provider of O&M and transportation services to EE through existing NTS access point
 - Experienced company with strong relationships in Teesport



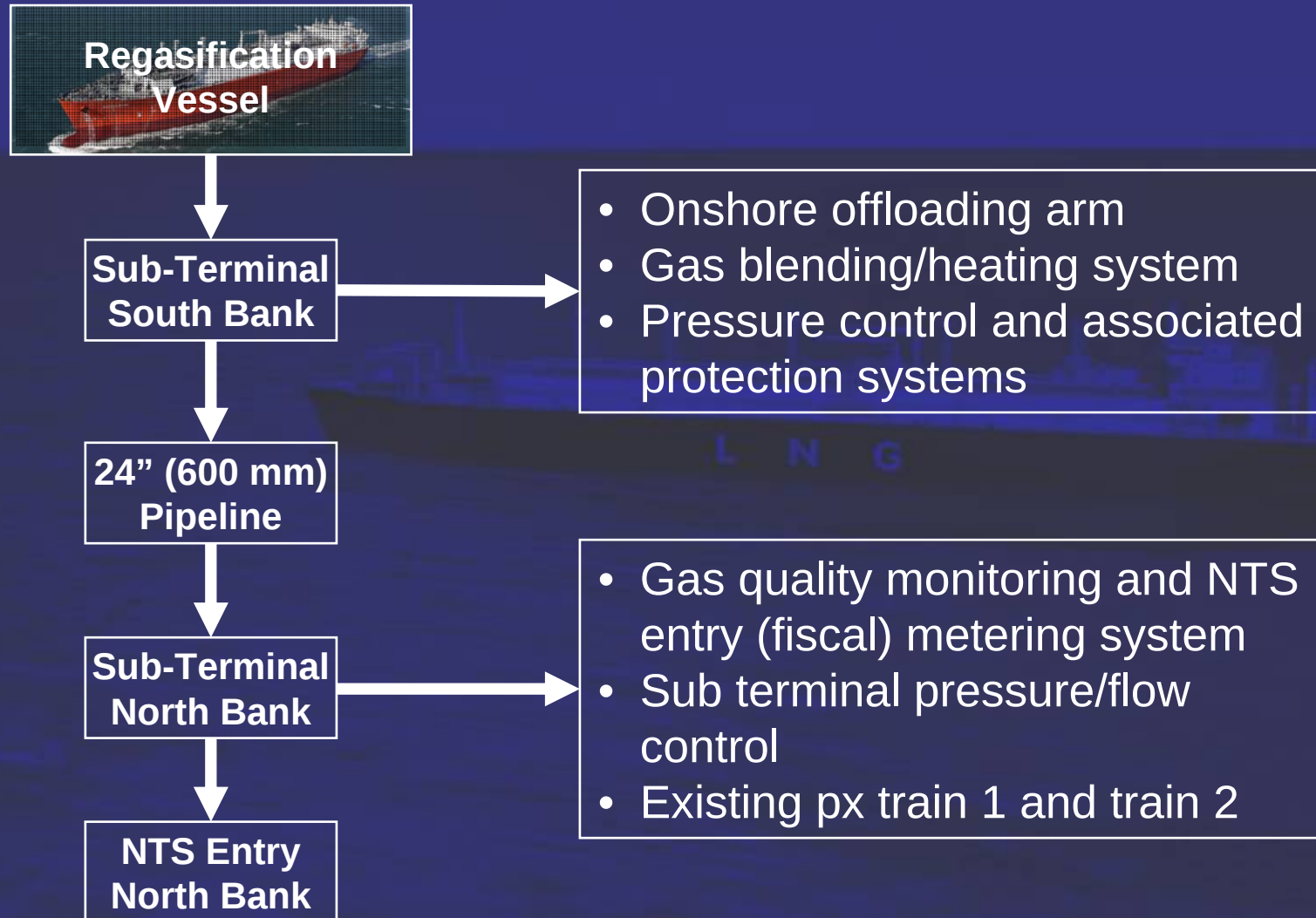
Project Team Selection

The Right Team Makes all the Difference

- Murphy Pipelines
 - Provider of pipeline and infrastructure design and construction
 - Respected contractor with extensive experience in building to National Grid specifications
- MouchelParkman GEL
 - Engineering and design contractor providing support for Murphy Pipelines
 - Key part of the team supporting EE throughout the permit application and development process
- BOC Limited
 - Provider of nitrogen supply to the project from existing facilities
 - Capable team that developed a rapid nitrogen solution to accommodate virtually any LNG source in the world

Teesside GasPort Design Basis

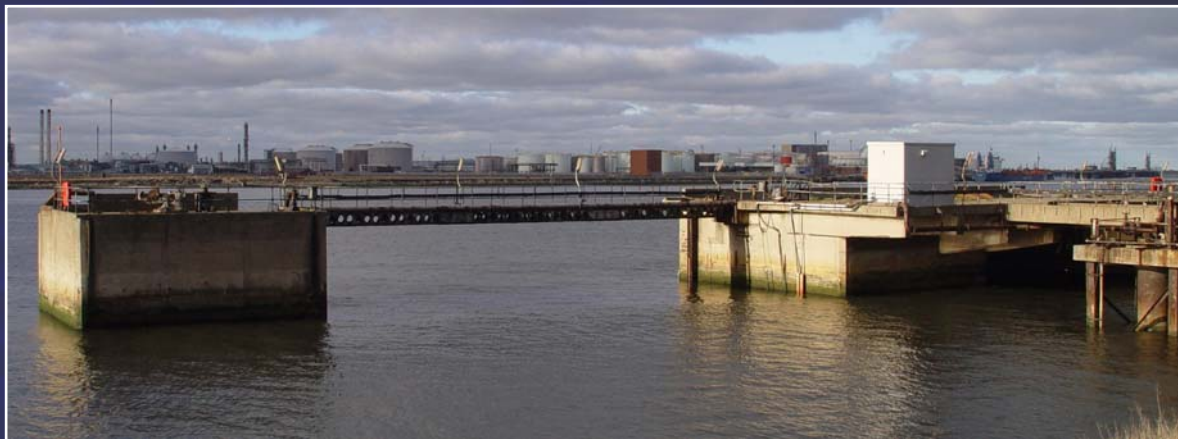
Component Summary





The Excelerate Jetty A.K.A. The Former Shell Jetty

- Existing jetty structurally sound – requiring refurbishment to bring it up to acceptable standards
- Agreements finalized with PD Teesport for jetty lease, land use, dredging, works license and conservancy dues
- Limited maintenance dredging required to return the ship pocket to its original state (sufficient depth)



Sub-Terminal Onshore Equipment

- A secure 'Sub-Terminal' being built on land adjacent to the Excelerate Jetty, containing:
 - Flow metering for control and nitrogen blending purposes
 - Pressure control / reduction / heating equipment to “step down” from 100 bar ship delivery to NTS pressure (50 to 75 bar)
 - Fire and gas safety systems including water deluge
 - Site security



Sub-Terminal site



Old mooring anchors
removed from Jetty



Teesside power in
background -
Largest UK CCGT



px Terminal Connection to the NTS

- Gas quality measurement and fiscal metering to be located at px facility
- Access to NTS through existing px Network Entry Agreement
 - No new System Entry Point required
 - Around 40MCMD of capacity surplus at Teesside
- New works at px Ltd comprise additional:
 - Gas metering
 - Quality monitoring (to NTS standards)
 - National Grid very helpful re metering

Tie-in point for the 24" gas pipeline
adjacent to the px plant site





Nitrogen Availability

Supply from BOC

- BOC's largest UK Oxygen plant (with Nitrogen as a by-product) is located around 2km from the Excelerate Jetty
- BOC will supply high-pressure nitrogen to the Excelerate Jetty, allowing receipt of a broader range of LNG supplies
- BOC will pump liquid Nitrogen to 105+ bar and then gasify it
- New 8" high pressure N₂ pipeline being built – within Murphy Pipelines' scope

Tie-in point for the 8" nitrogen line at the BOC facility





Ship Operations

HAZID for LNG vessels

- PD Teesport have consulted with all local stakeholders in relation to LNG vessel movements on the Tees
- Extensive and detailed HAZID
- Liaison with Isle of Grain and Milford Haven parties

BMT ISIS LIMITED
210 LOWER BRISTOL ROAD
BATH BA2 3DQ

REPORT TITLE PAGE

**HAZARD IDENTIFICATION MEETING: REGAS
VESSEL OPERATIONS AT PD
TEES PORT**

REPORT NUMBER 31008/HAZID
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REPORT NUMBER

31008/HAZID

SECURITY CLASSIFICATION

Unrestricted



Pipeline Routing

Key Issue is Securing Route

- New 24" pipeline will be owned and operated by px under their existing pipeline Safety Case (as applies to their pipeline to the Teesside Power Plant)
 - Excelerate will have rights to this pipeline
- Easement and crossing documents developed and discussions with landowners and operators well advanced
 - To date, all parties behaving in a reasonable manner
 - Most agreements in place – a few follow ups remain on technical issues
- Pipeline and associated infrastructure being built to 'National Grid' standards



Current Status

Project On Schedule for Dec. 2006

- Project team working to maintain the December 2006 schedule
- Engineer, Procure, Install, Commission contract in place with Murphy Pipeline's Ltd
- Design finalised, with most materials on order and approximately £18.5 million invested to date
- Key agreements with PD Ports and BOC for jetty use and nitrogen supply respectively have been finalized
- O&M and related agreements with px being finalised



Project Consents Process is Advancing

- Planning application including 281 page Environmental Impact Assessment submitted on 1 June 2006 for the 24" gas and 8" nitrogen pipelines to 2 authorities:
 - Stockton (North side of Tees River)
 - Redcar & Cleveland (South side of Tees River)
- Statutory Consultees:
 - English Nature - complete section next to SPA by November
 - HSE – pipeline safety related issues
 - Environment Agency (EA)
- Timetable
 - All approvals received on August 31, 2006
 - **In line with expectations – project proceeding for a December completion with first cargoes in early January**



Project Risks

Key Risks Being Managed

- Delayed material deliveries (steel pipeline, metering, etc.)
 - Equipment pre-ordered at risk prior to permissions provide protection
- Delay to completion of pipeline next to SPA (1 Nov schedule)
 - Pre-ordered pipeline allowed installation to commence immediately following planning permission
- Technical difficulties with HDD under Tees
 - HDD is ongoing and all appears well
- Delay to BOC works (scheduled completion 5 December)
 - Nitrogen works are progressing on schedule, also thanks to early commitments
- Wet September to November period hampering construction
- Delay in completion and installation of gas offloading arm



Next Steps

- Ensure successful project implementation in accordance with permissions granted by local authorities
- Focus on material and equipment delivery schedules
- Finalize easement and crossing agreements
- Finalize contracts with px (TGPP) Ltd
- Manage project risks and maintain overall schedule
- Continue coordination with regulators, port authority and port tenants
- Ensure gas delivery by early January 2007