

THE WAGP AND DEVELOPMENT OF GHANA'S DOMESTIC GAS MARKET

A PRESENTATION AT THE NARUC WINTER COMMITTEE MEETINGS IN

WASHINGTON DC

BY

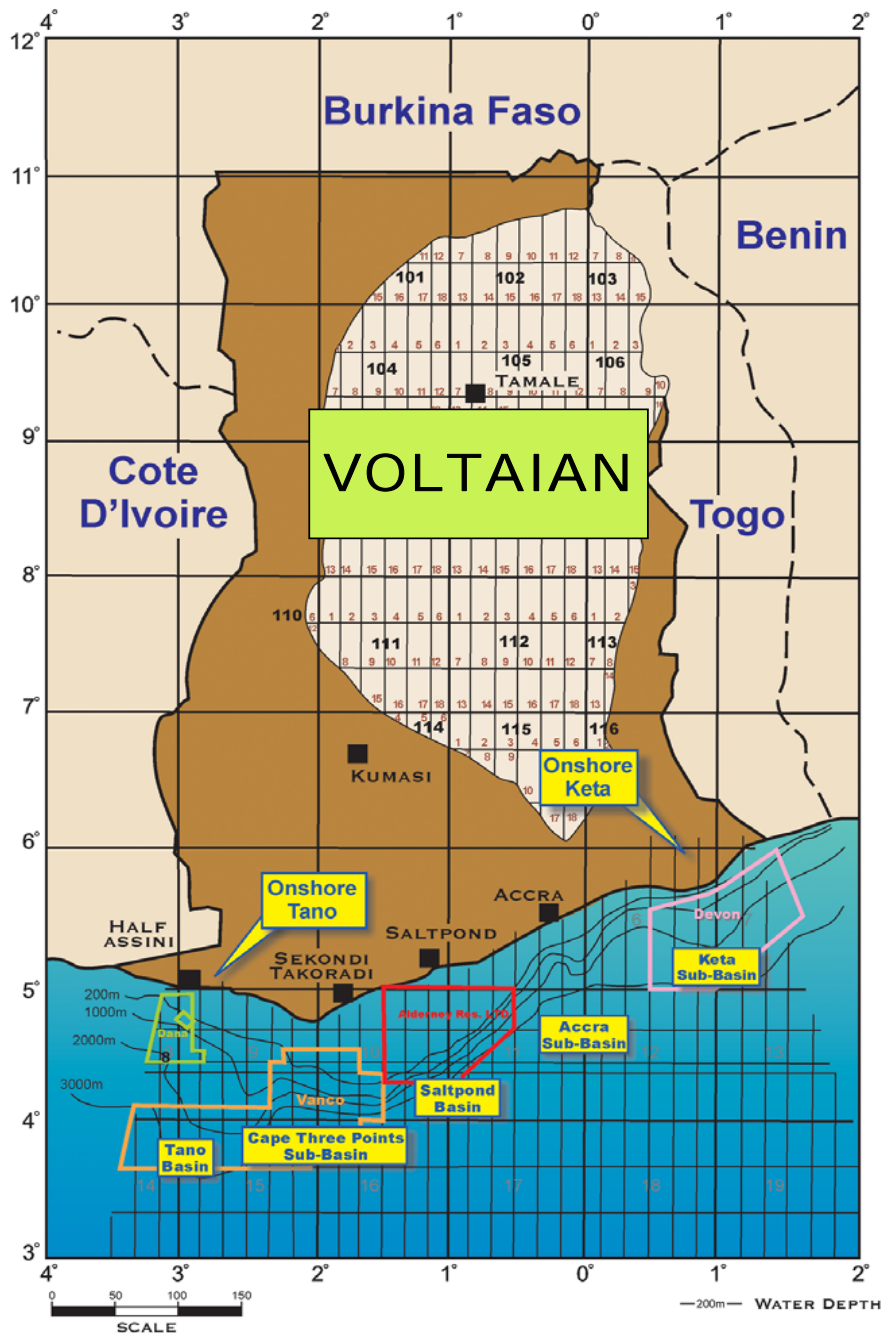
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FEBRUARY, 2006

PRESENTATION OUTLINE

- BACKGROUND TO EXPLORATION IN GHANA
- BACKGROUND OF THE WAGP
- BENEFITS OF THE WAGP
- THE WAGP PHYSICAL STRUCTURE
- THE WAGP SCHEDULE
- WHY DEVELOP GHANA'S SECONDARY NETWORK
- EXISTING STATUTES, INSTITUTIONS & RESPONSIBILITIES
- WHAT ARE WE DOING?
- DRAFT POLICY RECOMMENDATIONS
- NEXT STEPS
- CONCLUSION

SEDIMENTARY BASINS OF GHANA



West African Gas Pipeline

Objective: Transport Nigerian produced natural gas to commercially viable markets in Benin, Ghana & Togo.

System Capacity:

Initial 170 MMscfd
Ultimate 470 MMscfd

New West African Gas Pipeline (WAGP)
gas transmission system funded, owned and operated by shareholders, extending from the ELPS to landfalls in Benin, Togo, and Ghana.

Existing Escravos-to-Lagos Pipeline System (ELPS) Capacity: 800 mm SCFD
owned and operated by Nigerian National Petroleum Corporation (NNPC).

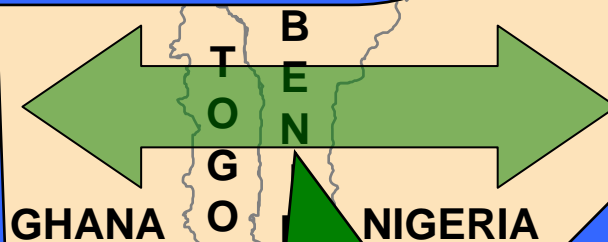


Total Investment	\$635MM
Pre-Development	\$ 75MM
Construction	\$560MM
Pipeline Start-up	4 th Qtr 06

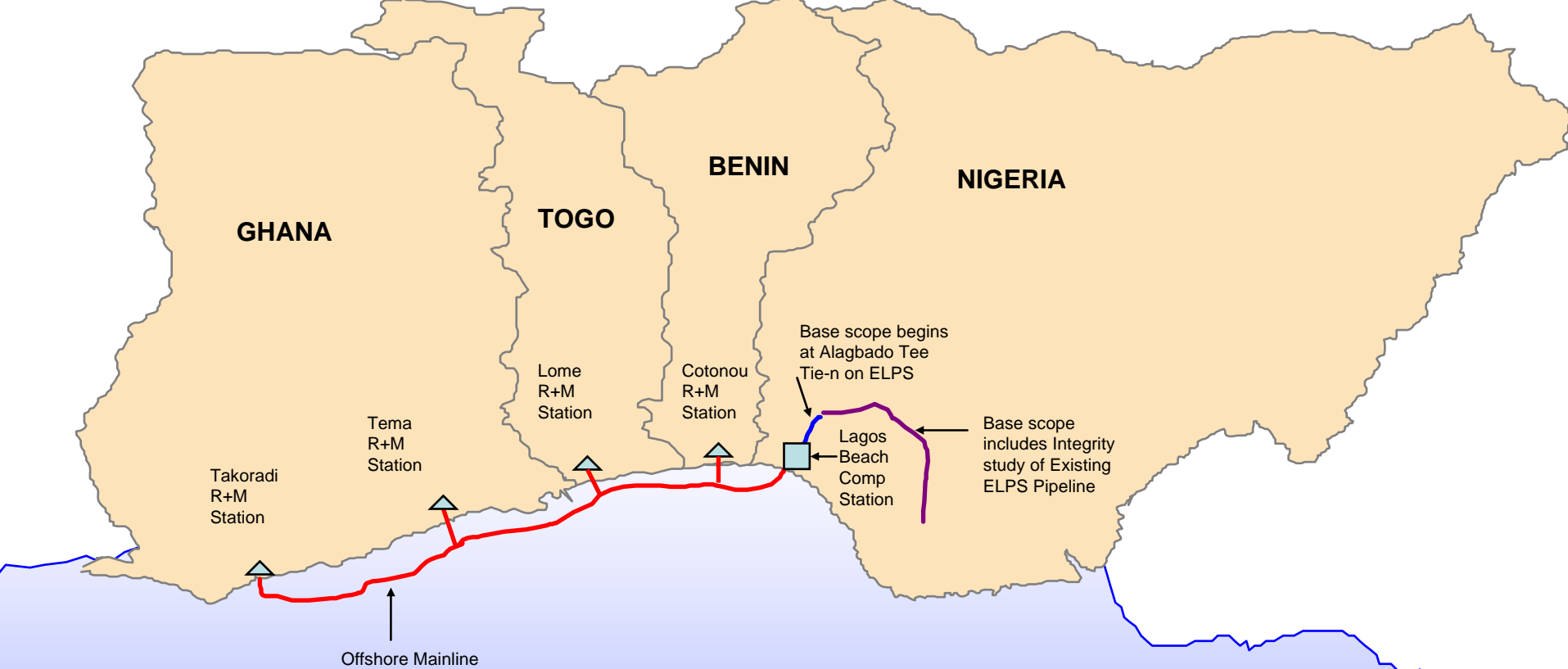
Benefits of WAGP

- Provides a low cost, sustainable fuel (and electricity) solution for Benin, Ghana, and Togo
 - ⇒ Fuel for existing and forecasted independent power plants;
 - ⇒ Fuel for industrial and commercial facilities
- Provides infrastructure as a catalyst stimulating direct foreign investment in new West African industries as well as provides trade opportunities for foreign exporters.
- Enhances the regional environment by substituting cleaner burning natural gas for less desirable fuels.

- Provides Nigeria and foreign investors an additional commercial market for natural gas.
- Reduces gas flaring associated with oil production in Nigeria, contributing to reduction of 'greenhouse' gases.



- Accelerates regional integration, economic growth and stability.
- Cornerstone of West African Power Pool



Description	Distance (km)	Diameter (inch)
Escravos - Lagos	380	36 / 24
Alagbado – Lagos Beach	56	30
Lagos Beach - Takoradi	567	20
Tema Spur	17	18
Lome Spur	19	10
Cotonou Spur	20	8

Base Case System Capacity:

Initial 200 MMscfd
 Ultimate 470 MMscfd

Project Development Schedule

		<u>Status</u>
Conceptual	Phase 1	Completed
Feasibility	Phase 2	Completed
Definitional	Phase 3	Completed
<u>Construction</u>	Phase 4	<u>In progress</u>
Operations	Phase 5	

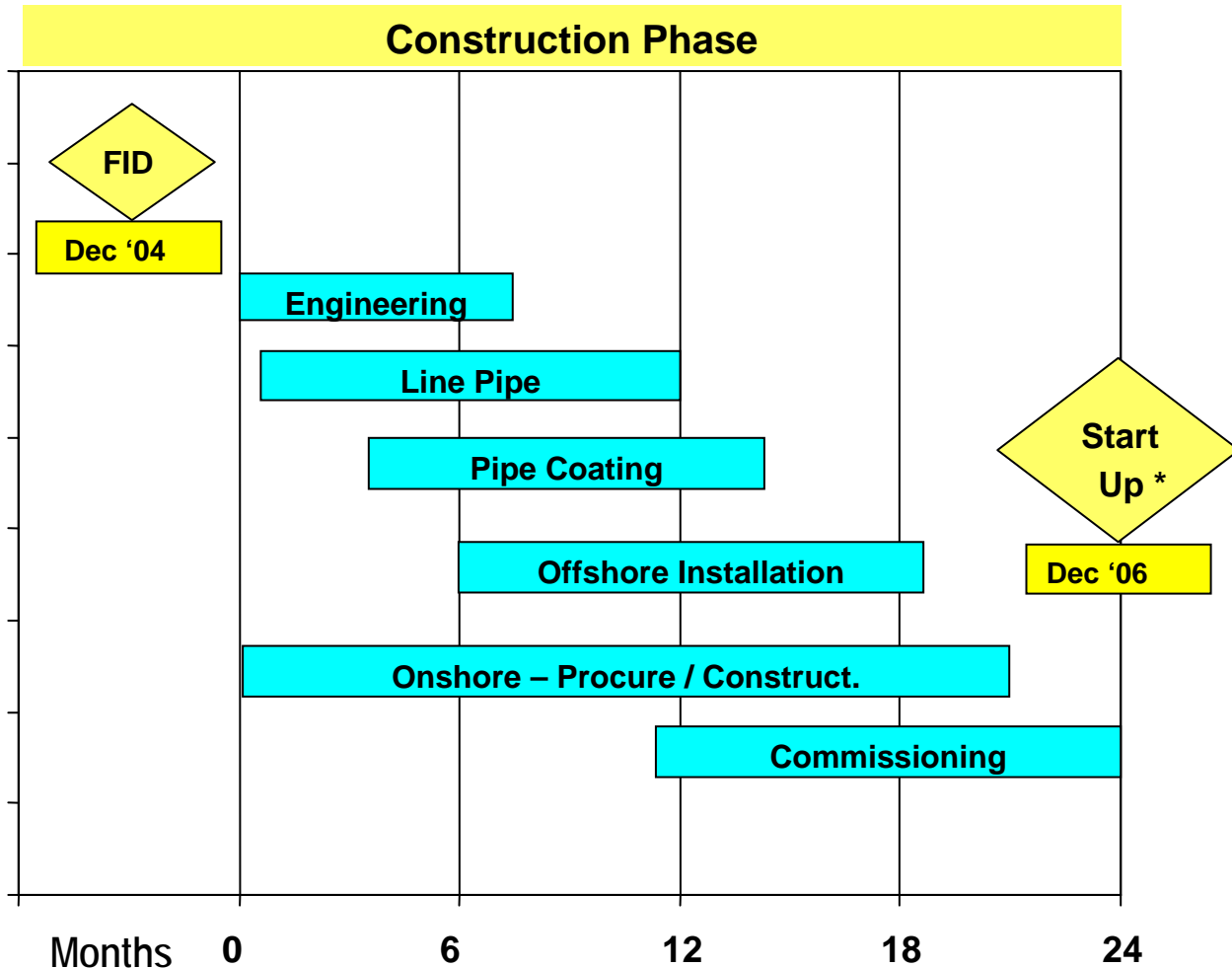
West African Gas Pipeline Company (WAPCo)

Ownership

Shareholders

Chevron	36.7%
NNPC	25.0 %
Shell	18.0 %
VRA	16.3 %
SoBeGaz	2.0 %
SoToGaz	2.0 %

West African Gas Pipeline Schedule and Milestones



* Current Project Forecast

WHY DEVELOP GHANA'S DOMESTIC GAS MARKET?

- **BACKGROUND & REASONS FOR DEVELOPMENT OF THE GAS INDUSTRY**
- **OVERALL GOVERNMENT POLICY**
- **EXISTING STATUTES : exploration laws, EC, PURC, WAGP Act/LI, IPA etc**
- **MARKET STUDIES**
- **BEST INDUSTRY PRACTICE**

LEGAL/INSTITUTIONAL & REGULATORY FRAMEWORK

- **DEFINITION OF ROLES OF MoEn, EC, PURC**
- **MoEn – SETS OUT OVERALL POLICY; ADJUDICATIVE ROLE**
- **EC – LICENSING, TECHNICAL STANDARDS; PLANNING**
- **PURC - TARIFF SETTING, QUALITY OF SERVICE MONITORING**

OBJECTIVES

- To define a policy for the development of the secondary gas market in Ghana and recommend strategies that will expedite the implementation of the policy

This framework, we believe, should contain the following:

“Policies for the gas downstream sector relating to gas transmission, gas distribution, gas marketing, standards with respect to technical specifications for plant and equipment, health, safety and the natural environment”

SCOPE OF PRELIMINARY DRAFT POLICY RECOMMENDATIONS

- How would the organizational chain linking the local gas distribution company (LDC) to the end users be organized?
- Should Ghana opt for bundled or unbundled service? That is should Ghana opt for only one company to do distribution and marketing or two different companies?
- Which Secondary Market(s) should be developed initially?
- Should the gas distribution entity (LDC) be a governmental entity or private firm or a public/private entity?
- Should the LDC have an exclusive right to build and operate the network in its zone of operation?
- What would be the basis for the LDC to acquire rights of way or other land for creating a distribution network?
- Who should have the authority to select the distribution entity and what are the procedures to be used for such selection?
- What fiscal and market incentives could be offered to attract investors and consumers to participate in the project?

NEXT STEPS

- DRAFTING OF REQUIRED STANDARDS, CODES AND REGULATIONS
- CAPACITY BUILDING ACTIVITIES
- SEEKING REQUIRED ASSISTANCE FROM INTERNATIONAL PARTNERS
- COMPLETE WORK ON THE POLICY FRAMEWORK TO CREATE THE ENABLING ENVIRONMENT FOR THE DOMESTIC GAS MARKET

WE ARE HAPPY TO BE HERE

THANK YOU FOR THE
OPPORTUNITY