International Gas Business Management Training

Description

Introduction

The hydrocarbon gas industry is fundamental to the successful exploitation of one of the world's most important resources. This industry plays a critical role in driving the global economy. The ever increasing use of energy to power the need for the industrial development has resulted in rapid expansion of gas exploration, processing and usage.

The processes and systems involved in producing processing and distributing large quantities gas are highly complex, capital-intensive and require state-of-the-art technology.

As the gas industry faces challenges related to climate change, alternative energies, and energy substitutions, it recognizes the need for managers who have a comprehensive and broad understanding of the industry, including economics, evaluation and decision-making skills and who understand the issues that face the gas industries in the future.

This course will provide a basis for functional managers and those whose experience has been limited to a particular area of the industry, to prepare for additional responsibilities by providing a broad base of knowledge covering the total spectrum of the gas business and specific skills related to the evaluation of opportunities and enhanced decision-making.

The course addresses the following key highlights:

- Understanding of the process considerations of the hydrocarbon gas chain
- Effective and efficient operations of the industry
- The economics of the gas industries
- Skill developments for opportunity evaluation relating to the gas market

Objectives

At the end of this seminar participants will have:

- An understanding of the value added steps in the gas processes
- Gain an insight in the way the Gas Industries have organized to operate effectively and efficiently
- Learn the details of gas processing
- Understand the fundamentals of the economics of the gas industries

The Content

Sources Origins and Nature of Hydrocarbon Gas

- Fundamentals of Organic Chemistry
- Definition of Hydrocarbon Gases
- The Gas Industry
- Basic Gas Geology
- Origins of Hydrocarbon Deposits
- Exploration Activities
- Exploration Methods
- Types of Well

Sources Origin and Nature of Hydrocarbon Gas – Continued

- Gas Fields Developments
- Production
- Well Fluids and Surface production
- Transportation
- Ship Transportation
- Pipelines

Exploration Drilling & Production

- Where and how does drilling take place?
- Gas leasing process and terms
- Searching for Oil and Gas
- Types of Wells
- Drilling Operations
- Natural Gas Production and Processing Operations

Gas Companies, Corporate Relations, and Structures

- Operating Companies and Service Companies
- Local, National and Multi National Gas Companies
- Major National Gas Companies
- Major International Gas Companies
- Integrated and Non Integrated Companies
- Integrated Companies
- Non Integrated Companies

Processing Operations and Economics

- Gas Processing Operations
- Inlet Separation
- SulphurRemoval andSulphurRecovery
- Dehydration
- Dewpoint Control and by-product recovery
- Gas Compression
- Basic Economics of the Gas Industries
- Gas Quality and Measurement
- Richness
- Impurities
- Sulphur
- Acidity
- Specifications

World Gas Supply and Demand

- Supply Chain
- Production
- Transport
- Storage
- Distribution
- Sales and Marketing

Evaluation of Gas Opportunities

- Estimating the Cost of Gas Facilities
- Using Historical Costs
- Cost curves
- Adjusting For Different Sizes
- Adjusting For Different Time Periods

LNG –LNG Chain

- Process
- Liquefaction
- Shipping
- Storage
- Re-Gasification

Other Technologies

- Gas to Liquids
- Gas Commodity and Transport Capacity
- Industry Regulation
- Ownership

- State owned
- Joint Ventures
- Privatised
- Price Controls
- Rate of Return

Gas for Power Generation

- The ‘Dash for Gas’ – key drivers
- Economics: CCGT v Oil v Coal v Nuclear
- Efficiency Gains
- Cost and Market Trends
- Gas Supply