



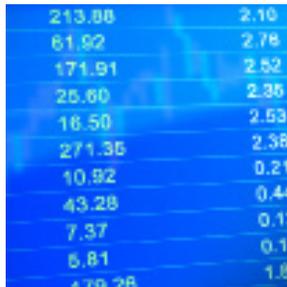
Course length: Two days

Prerequisites: none but Gas Industry Basics (live seminar), Gas Industry Overview (online course), or an understanding of the natural gas business is helpful.

CPE credits: 16

A study of the global Liquefied Natural Gas (LNG) industry and how it is dramatically changing natural gas markets

Liquefied Natural Gas (LNG) plays a critical role in natural gas markets in many parts of the world, and with the advent of LNG exports it has the potential to significantly impact North American markets. Global LNG Industry Basics and Market Impacts gives participants an understanding of how the LNG business works and how it impacts natural gas markets in North America and elsewhere in the world. Details include what LNG is and how it works; the LNG supply chain; LNG costs; issues with regulation, safety and security; the dynamics of the LNG marketplace; how LNG impacts domestic gas markets; and a look at the future of the industry.



WHO WILL BENEFIT FROM THIS SEMINAR?

- Gas or electric industry employees whose companies are now (or may become) involved in the LNG business
- Gas procurement and supply planning professionals working for utilities, electric generators, marketers, and large consumers who need to understand supply alternatives
- Finance, accounting, legal, sales, and regulatory professionals providing services to gas producers, gas pipelines, utilities, gas marketers, electric generators, large gas end users, and other organizations impacted by gas markets
- Regulatory or governmental employees needing to understand future gas supply options
- Energy industry professionals who need an understanding of the LNG business to better understand future gas markets and gas infrastructure needs

WHAT PARTICIPANTS WILL LEARN

- What LNG is and how it works
- The physical supply chain for LNG
- LNG cost structures
- LNG-related environmental, safety, and security issues and how they can be mitigated
- Market participants in the delivery chain
- How LNG transactions are structured and priced
- The economics of LNG supply
- The steps involved in developing an LNG project
- Global LNG market dynamics
- The potential impacts of LNG on the North American marketplace
- The critical role of LNG in growing world energy markets

COURSE AGENDA

Introduction to LNG

- What is LNG?

- Where it comes from
- Why LNG is used as a transport mechanism
- Where LNG is used today and why it is important to gas markets
- The LNG Challenge: high capital costs and long lead times in volatile gas markets
- LNG units of measurement

The LNG Supply Chain

- An overview of the LNG delivery chain (production, liquefaction, shipping, and regasification)
- Necessary supply characteristics to make a project work
- Liquefaction (characteristics, capital and expense costs, existing and proposed global capacities)
- Shipping (characteristics, tanker capital and expense costs, existing fleet)
- Storage and regasification (characteristics, capital and expense costs, existing and proposed terminals)
- Pipeline/LDC to consumer
- The overall LNG value chain

Regulation, Safety, and Security

- Environmental issues
- Permitting and regulation
- Details on U.S., Mexican, and Canadian permitting
- Safety issues and regulation
- Security issues and regulation

LNG Market Dynamics

- Top world consumers of natural gas
- Which countries buy LNG globally and how much
- Where global natural gas is located
- Which countries produce and export LNG and how much
- How price differentials between global markets impact LNG flow
- How LNG supply and demand is evolving
- LNG project structures
- Asset owners and users by market segment





- LNG as a commodity
- How cargo arbitrage works
- Technology evolution including on-ship liquefaction and regasification
- The risks involved with an LNG project
- LNG contract structure and terms
- Traditional sales and purchase agreements (SPAs)
- Traditional LNG pricing mechanisms
- The trend to shorter more flexible agreements and different pricing mechanisms
- The impact of U.S. LNG supply on pricing and contractual terms
- Ship portfolios and transport pricing options
- Requirements for LNG debt financing
- Financing options
- Risks in the LNG market
- Creating successful projects

The Future of LNG

- Key issues for LNG
- Implications for domestic and global energy markets
- Impacts on domestic gas prices
- Possible futures for the LNG business

