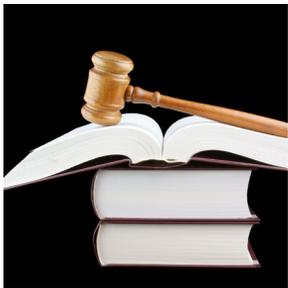




**Course length:** 4 hours      **Cost:** \$295-\$350\*  
**Prerequisites:** None      **Subscription:** 2-12 months  
**CPE credits:** 5.5 (see website for more details)

## An introductory overview to the business of natural gas

A solid understanding of how the natural gas business works is imperative to a successful career in the industry. Gas Industry Overview presents a clear and easy-to-understand fundamental overview of this fast-paced business. Whether new to the industry or a veteran who is looking for a deeper understanding of the natural gas business, this learning path helps participants make sense of this dynamic industry. Note that two versions of this learning path are available: U.S. and Canadian/U.S.



### WHO WILL BENEFIT FROM THIS COURSE?

- Any employee new to the gas industry
- New managers needing a broader understanding of the gas business
- Professionals moving into the gas industry from another industry
- Engineers working in the gas industry who need to understand how the business operates
- Energy industry employees with experience limited to one or two departments needing a broader business overview
- Sales professionals providing services to the natural gas industry
- Finance, accounting, legal, public relations, or regulatory professionals
- Technical professionals becoming involved in regulatory or business issues

### WHAT PARTICIPANTS WILL LEARN

- Natural gas consumers and their needs
- The components of the physical system and how it is designed to deliver gas to end users
- How the physical system is operated for maximum efficiency and safety
- How and why the gas industry is regulated
- Where restructuring has opened gas markets to competition
- How markets function and the wholesale and retail services offered in them

### COURSE AGENDA

#### Introduction

- Course objectives
- Natural gas in our society

- Physical properties of natural gas
- Units used to measure gas

#### Gas Customers

- The four key types of end-use customers (residential, commercial, industrial, electric generation)
- Wholesale customers (utilities, marketers)
- Number of customers and usage by customer class
- How residential, commercial, industrial, and electric generation customers use gas
- Aggregate demand and seasonal load curves
- Services available to satisfy customer needs (bundled utility service, unbundled LDC distribution with competitive supply, bypass, alternate fuels, energy efficiency)
- Average costs by customer type

#### The Gas Delivery System

- What natural gas is, how it was formed, and where it is found
- The North American supply regions
- Global gas supplies
- Gas system components (pipe, valves, compressors, regulators, meters, monitoring and control systems)
- Exploration, completion, and production
- Gathering and processing
- Gas transmission (pipe, pressure, compressors, hubs)
- The U.S. transmission network
- Hubs
- Gas storage (why gas is stored, how storage works, and where storage is located)
- The components of the gas distribution system

#### Gas Operations

- The entities responsible for gas operations
- Principles of gas operations (compressibility, capacity,

\* Please contact us for bulk discounts and site license pricing.





- maximum and minimum pressures, line pack, packing and drafting)
- System modeling for transmission and distribution systems
- Maintenance of transmission and distribution systems
- The four functions of gas control (forecast demand, develop operational plan, implement plan, and record daily activity)
- Nominations and scheduling
- Curtailments and how they are implemented
- Gas balancing
- Operational and emergency flow orders
- Gas accounting
- System maintenance
- Emergency operations
- How competitive markets and IT are changing the role of operations

## Gas Regulation

- What regulation is and does
- Why the gas industry is regulated
- The regulatory compact
- How regulation affects market participants (LDCs, interstate pipelines, producers, marketers)
- Who the regulators are (federal and state) and what they regulate
- Four types of regulatory proceedings (rulemakings, rate cases, certificate cases, complaint cases)
- How the regulatory process works
- The various steps in the ratemaking process
- Customer choice availability
- How restructuring has impacted U.S. markets

## The Gas Marketplace

- Upstream, midstream and downstream market participants (who they are and what they do)

- Gas market structure and the way in which participants transact business throughout the delivery chain
- Following a typical gas transaction
- How participants make money (regulated vs. competitive)
- Contractual arrangements
- Wholesale services (gathering, processing, supply, transportation, storage, hub services, risk management)
- Retail services (LDC and competitive supply services)
- How prices are set through the delivery chain
- Principles of gas supply and demand
- Why prices can be volatile
- Gas market risks and how they can be mitigated
- Regulation of market behavior

## The Future of Natural Gas

- The future of the upstream, midstream, and downstream sectors
- The future of the workforce
- The gas company of tomorrow

