



May 28-30, 2008 | Crowne Plaza
Downtown Houston | Houston, TX

Gas Storage Development Tutorial



**There has never been a better time to
develop gas storage than now.**

But real-world expertise is in short-supply. Learn from the most experienced parties how you can reap the benefits of rapidly escalating storage flow prices and project valuations.

- Position your project or strategy using the most up-to-date valuation data and insights (both extrinsic and transactional values)
- Learn how to manage construction costs, engineering risk, and maximize development opportunities
- Anticipate and overcome permitting and regulatory hurdles
- Understand how leading gas storage financiers view the role of contracts, market vs. cost-based rates, trends in sale prices and M&A, and impact of the credit crunch
- Active storage developers present 5 real-world case studies, including two greenfield developments, enhancement of existing storage, acquisition and development of an existing project, and an above-ground storage project

**Plus, don't miss the
pre-conference workshop:
ICF's Outlook for Gas Storage and Gas
Storage Valuation**

Participating Companies:

AGL Resources /
Golden Triangle Storage
Enterprise Products Partners/
Petal Gas Storage
Falcon Gas Storage Company, Inc.
Floridian Natural Gas
Storage Company
ICF International
International Gas Consulting
Locke Lord Bissell & Liddell LLP
Macquarie Cook Power Inc.
Mizuho Corporate Bank, Ltd
MultiFuels LP /
Freebird Gas Storage, LLC
Pace Global Energy Services
RBC Capital Markets
RW Beck, Inc.
SunTrust Robinson Humphrey -
Energy Banking
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About the Conference

There has never been a better time to develop gas storage than now. High gas prices, rising volatility and liquidity of gas markets have increased the intrinsic and extrinsic value of storage facilities to both active market participants and investors, driving an unprecedented round of acquisition and aggregation plays. MLP valuations of cash-flowing assets are at record levels; strategic buyers are forced to compete with MLPs, driving in turn storage facility transactional value. Players in the gas market are stepping up their efforts to develop or acquire more storage capacity, even flipping projects before they are permitted. These trends have seen real-world validation in three recent deals, where storage projects have been flipped for high dollar value and multiples.

Gas storage, while highly lucrative, is also a highly specialized area, with a limited number of people who have successfully developed, enhanced and flipped projects. To play in this space, you need to have a firm knowledge of the market and locational pricing dynamics, valuation parameters, and selling and contracting strategies. For developers of new projects, geological, technical, contracting, environmental/permitting and construction risk factors must be mastered, and deals strategically structured to attract the best financing.

This **Gas Storage Development Tutorial**, building on Infocast's line of Project Finance Tutorials, will assemble the top developers, lawyers, analysts, and financiers in the field. Structured in a methodical, step-by-step fashion, you will learn what it takes to bring a gas storage project to a profitable outcome.

Workshop

Wednesday, May 28, 2008, 1-5pm

Outlook for Gas Storage and Gas Storage Valuation

ICF International will present its projections for gas storage throughout North America. The workshop will investigate how the development and use of storage is likely to be impacted by different market conditions. The importance of gas storage for managing growing production from the Mid-continent Shales and from LNG imports will also be investigated. The status of current storage projects will be summarized and the value for new gas storage will be discussed. Measures of intrinsic and extrinsic values for storage will be provided, and the means by which the full value of storage may be captured will be discussed. Values of storage reflected by different types of storage services, including load following and hub balancing services will be investigated. Results of different case studies showing the value of storage will be presented.

Kevin Petak, *Vice President, Gas Market Modeling*, ICF INTERNATIONAL
George Maher, *Vice President, Houston Gas Practice*, ICF INTERNATIONAL
Geoffrey Brand, *Senior Consultant*, ICF INTERNATIONAL

Tutorial Agenda

Thursday, May 29, 2008

Welcome and Introduction from the Chairman

Kevin Petak, *Vice President, Gas Market Modeling*, ICF INTERNATIONAL

Session #1 – Value of Gas Storage

Valuing Gas Storage Fields: Intrinsic and Extrinsic Value in Context

- » Traditional Storage Value Sources and Measures
 - » Intrinsic Value
 - » Extrinsic Value
 - » Hub Services
- » Emerging Value Drivers and Prospective Impacts
 - » Demand Side
 - » Downstream Physical Options
 - » Upstream Gas Supply
 - » Capital Restructuring
- » Asset Risk Management and Value Decay Exposure
 - » Sources
 - » Responses

Rutherford "Bo" Poats, *Executive Vice President*,
PACE GLOBAL ENERGY SERVICES

A Survey of Gas Storage Transactional Values

- » Transaction trends for operating assets
- » Are the recent transactions for development projects pointing to a new reality?
- » What considerations go into developer-operator flip decisions?
- » Value points in the development chain
- » What can the market support?
- » Strategic vs. financial buyers
- » Impact of MLPs on purchase price

Lee Van Atta, *Senior Director*, RW BECK

Session #2 – Technical and Engineering Considerations, Permitting and Approvals

Managing Construction Cost and Engineering Risk and Maximizing Development Opportunities

- » Events leading to the recent reservoir and salt cavern construction cost run-ups
- » Regional development cost comparisons for various types of storage
- » Tips on controlling hard and soft costs
- » Geological/engineering issues for successful greenfield storage projects
- » Techniques to manage the base gas, well count and compression trade-offs with service offering and market pricing for storage service

Kenneth Beckmann, *President*, INTERNATIONAL GAS CONSULTING

Obtaining Permits and Regulatory Approvals

- » Conducting an open season to determine potential services and customers
- » Negotiation of precedent agreements
- » The FERC application process for a storage project, including availability of market-based rates, environmental, landowner concerns and other issues

Jim Moriarty, *Partner*, LOCKE LORD BISSELL & LIDDELL LLP

Group Luncheon

To Register, Call (201) 871-0474

Fax: (253) 663-7224 | Email: register@pmaconference.com | www.pmaconference.com
PO Box 2303, Falls Church, VA 22042

Session #3 – Assessing and Mitigating Risks

Panel Discussion:

Identifying and Overcoming Hurdles and Risks in Gas Storage Development

- » The financial environment—making the right moves at the right time:
 - » When will capacity demand charges under-perform either replacement cost or facility EBITDA multipliers?
 - » Will rates keep up with the values the market perceives?
- » Volatility will fix capacity value, and that forces how much incremental expansion can be squeezed out to justify paying too much?
- » Regulatory risk
- » Commercial risk
- » Community risk
- » Geology risk
- » Engineering & construction risk:
 - » Increasing construction costs
 - » Long-lead material procurement
 - » Trade-offs of cavern and pipeline sizing vs. schedule and cost
 - » Land acquisition challenges
 - » Environmental issues in areas of historic oil/gas production

Moderator:

Kevin Petak, *Vice President, Gas Market Modeling*, ICF INTERNATIONAL

Panelists:

James Diemer, *Executive Vice President*, PACE GLOBAL ENERGY SERVICES

John Hopper, *President & CEO*, FALCON GAS STORAGE COMPANY, INC.

Dave Marchese, *Vice President*, HADDINGTON VENTURES LLC

Kim Tarr, *Managing Director of Midstream Projects, Engineering & Construction*, AGL RESOURCES/GOLDEN TRIANGLE STORAGE

Jim Warren, *Managing Director*, SUNTRUST ROBINSON HUMPHREY - ENERGY BANKING

Session #4 – Financing Storage Projects

Financier's Perspective: The Importance of Contracts and How the Financial Community Views Market-Based Vs. Cost-Based Rates

- » Contracted versus uncontracted storage
 - » Market access & due-diligence concerns
 - » Gas marketing expertise
 - » Valuation parameters (operational & market)
 - » Duration of contracts
 - » Assessment of competition from other projects coming online
 - » Assessing technical viability of salt development or depleted reservoir
 - » Transitioning from developing a facility to looking to cash out
- Charles Costenbender, *Senior Manager*, MACQUARIE COOK POWER INC.

Gas Storage M&A: Recent Trends in Sale Processes from a Buyer's Perspective and Seller's Perspective

- » What the market is looking for
- » What's saleable, what's not
- » Metrics for recent gas storage assets
- » What's in the pipeline
- » What to expect in future trends

Robert D. Hallett, *Managing Director, Mergers & Acquisitions Group*, RBC CAPITAL MARKETS

The Current Credit Crisis; How Does It Impact Storage Deals?

Since the summer of 2007, there has been a continuous stream of announcements from large institutions regarding massive write-downs and/or losses. The big question now is: Are we there yet? Is the worst really over? How long will it take for the market to return to normalcy? A more specific question for us is: How does it impact storage deals in particular? Can deals be done in the middle of this crisis? What changes are needed to get a deal done? Is there any substantial change in the perception of risk related to storage deals? Has the source of funds changed significantly? How does the current crisis affect the commercial arrangements and financing structures?

Ashok Gupta, *Senior Vice President, Project & International Finance*, MIZUHO CORPORATE BANK, LTD.

Friday, May 30, 2008

Welcome and Introduction to Day 2 Sessions

Kevin Petak, *Vice President, Gas Market Modeling*, ICF INTERNATIONAL

Session #5 – Examples of Gas Storage Development

Case Study 1: Developing a 'Greenfield' Salt Dome Storage Project

- » Southern Pines project in Mississippi, tied to FGT, Transco, GulfSouth and Sesh pipelines
- » FERC approved 3 8BCF working caverns for a total of 24BCF, rated 1.6BCF extraction and 1BCF injection
- » Major water quality challenges – SGR built their own water treatment plant, adding additional \$5-6M to project budget, supply of specialty chemicals needed
- » 12-13 BCF sold in initial project development, from 2-3 years to 10-12
- » Term B financing and Gulf bonds got a great loan rate based on customer contracts in hand and past track record.

Mark D. Cook, *Principal, SGR HOLDINGS / VP Marketing & Sales*, SGR MISSISSIPPI RESOURCES

Case Study 2: Development of a New Salt Dome Storage Field

- » Spindletop salt dome in Beaumont, Jefferson County, Texas
- » Just received FERC approval, and for market-based rates
- » 12 BCF of working gas storage capacity in two caverns and, depending on market demand, could gradually enlarge the two caverns' capacity up to 28 BCF of working gas in the future
- » Access to interstate and three intrastate pipelines
- » Construction will begin in 2008, first cavern online in 2010/11, second open by 2013

Dana Grams, *President*, PIVOTAL ENERGY DEVELOPMENT, AGL RESOURCES/GOLDEN TRIANGLE STORAGE

Case Study 3 – Enhancement of an Existing Storage Field

- » Subsurface considerations
- » Leaching enhancements
- » Header and interconnect limitations
- » Operational requirements
- » Optimization opportunities

Russ Kovin, *Vice President*, ENTERPRISE PRODUCTS PARTNERS, PETAL GAS STORAGE

Case Study 4 – Acquisition and Development of an Existing Storage Field

- » Expansion of a shallow depleted natural gas reservoir in Lamar County, Alabama; capacity: 7.6 BCF; 1.44 BCF; peak injection capability: 300 MMBTU/day; peak withdrawal capability: 300 MMBTU/day
- » Abandonment issues
- » Navigating the regulatory and permitting process
- » Joint ownership considerations
- » Field testing
- » The integration of assets and equipment

Gil F. Muhl, *Vice President*, MULTIFUELS LP / FREEBIRD GAS STORAGE, LLC

Case Study 5 – Experiences Developing Above Ground Storage

- » Martin County Florida, two 4 BCF natural gas storage tanks, will liquefy up to 100 BCF a day, vaporize up to 800 MCF a day into Gulfstream and FGT
- » Regulated through FERC 7C Certificate
- » Located at end of the supply pipeline system; performs a peak-shaving service but additionally adds supply security, reduces greenhouse gas emissions, and provides a hedge against high prices
- » Makes existing pipeline capacity more efficient by converting unused off-peak capacity to peak day deliverability in market area
- » More cost effective than building pipeline capacity to meet peak hourly requirements

Dave Sharp, *Principal*, FLORIDIAN NATURAL GAS STORAGE COMPANY LLC

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Tuition	Standard	Government
Tutorial (May 29-30): Gas Storage Project Development Tutorial	\$1,695.00	\$995.00
Workshop (May 28): ICF's Outlook for Gas Storage and Gas Storage Valuation	\$595.00	\$395.00

Discounts:
Government Employees (see above).
Team Discount for teams of three or more from the same organization, the third and subsequent registrants qualify for a 50% discount (applies to full-price registrants only).
Please note: Discounts are subject to verification and approval. No discounts can be combined.

Venue/Hotel Accommodations:
Infocast has secured a limited number of rooms at the Crowne Plaza Downtown Houston at the special rate of \$155 until Tuesday, May 13th, 2008. To receive the special rate, call the hotel directly at (713) 739-8800 and mention that you are an Infocast/Gas Storage Project Development Tutorial 2008 registrant. The hotel is located at 1700 Smith Street, Houston TX 77002. Please visit the event website at <http://www.infocastinc.com/gas08> for additional information.

Continuing Education Credits:
Infocast certifies that this activity has been approved for Continuing Education credit by the State of California in the amount of 10.25 hours for the tutorial and an additional 3.5 hours for the workshop. Continuing Education credit hours are subject to change.

Cancellation, Refunds & Credits:
Should you be unable to attend, a refund, less a \$195 administrative charge, will be made for cancellations received via letter or fax at least 10 working days before the event. We will be pleased to transfer your registration to another member of your company, or credit the registration fee to another Infocast conference if you register within 6 months from the date of this conference. In the event the conference is cancelled, Infocast's liability is limited to the refund of the conference registration fee only.

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An Infocast Business Intelligence Event Gas Storage Project Development Tutorial

Registration Form

Please make checks payable to: "PMA"

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Please check one or more of the following:

- I would like to take advantage of the team discount (see left)
 I can't attend, but put me on your mailing list for future programs

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Tutorial (May 29-30): Gas Storage Project Development Tutorial	\$1,695.00	\$995.00	
Workshop (May 28): ICF'S Outlook For Gas Storage and Gas Storage Valuation	\$595.00	\$395.00	
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