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812 MURIEL STREET WOODSTOCK, ILLINOIS 60098 815-338-8579

MARKETING & FINANCING STRATEGIES FOR

SOLUTION MINED GAS STORAGE FACILITIES

Geoffrey K. Mitchell Vice President First Reserve Gas Storage, Inc. Boott Mills South, Box 2 100 Foot of John Street Lowell, Massachusetts 01852

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ABSTRACT

Marketing and Financing Strategies for Solution Mined Natural Gas Storage Facilities

The Federal Government mandate for the deregulation of the natural gas industry is causing major changes to take place in the way natural gas is sold and transported in the interstate market. It is also creating a growing need for increased utilization of underground natural gas storage. This increased need is not only for the more conventional form of underground gas storage using depleted gas and oil reservoirs, but also for new high deliverability/low volume gas storage in solution mined salt caverns in the gas producing areas of North America.

Salt cavern storage for natural gas, located in the production and gathering area, can be a useful tool to facilitate the gas acquisition and transportation strategies of local natural gas distribution utilities (LDCs). This type of storage can serve two primary purposes:

- * It can provide heating season supply security for firm gas customers and protect them against short duration production area interruptions due to gas well and gathering system freeze-ups; and,
- * In the off-peak months it can serve to provide high injection/withdrawal capacity for balancing daily and monthly production and market condition mismatches that occur due to the imprecise nature of scheduling natural gas deliveries in long haul pipeline systems.

As the need for this type of storage increases, the opportunity is at hand to convert suitable existing caverns now in liquid hydrocarbon storage service to natural gas service, and/or, leach new caverns to meet this increasing storage requirement.

The paper to be presented will provide insight into the developing need for this type of storage; the importance of site location of new facilities with respect to the markets and pipeline systems that would be connected to the storage; and, discuss the considerations for marketing and financing a solution mined salt storage project including project economic structures and storage rates.

The paper is based on the experiences of the author in helping develop the Hattiesburg Gas Storage Project in Mississippi. This propane to gas storage conversion project was placed in gas service in November 1990 and serves seven gas distribution utilities and one gas marketing/pipeline company.

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