## Solution Mining Research Institute Fall 2012 Technical Conference Bremen, Germany, 1-2 October 2012

## NomiX - A Solution to Focus on Sales-Related Questions without Disregard of Cavern Restrictions

Frédéric Brodersen, GreyLogix GmbH, Flensburg, Germany Katrin Vosbeck, E.ON Gas Storage GmbH, Essen, Germany Jochen Kemper, Open Grid Europe GmbH, Essen, Germany

## Abstract

In the past operators of cavern gas storages had the objective to balance seasonal movements, but today the portfolio management is particularly important. The modern cavern gas storage is an asset that is closely linked to the markets - and the markets are volatile especially in times of the liberalization. This causes a change in the conventional use case of cavern gas storages: The storage is no longer used by the owner but even more used by the leaser and the caverns get a special function in the portfolio management. Thus intelligent tools are necessary. Fast and safe storage and retrieval are required. Often components and equipment parts of a storage facility are now designed redundantly or are kept in Hotstandby to meet the requirements of higher and faster deliverability. Fast load changes of the caverns within the safety-parameters (rock mechanics), optimized utilization of the storage capacities and minimized staff on the facility lead to the need of having an automated and seamless nomination process with minimized manual interventions.

This raises the demand for a tool that enables the users to develop their trading portfolio without damaging the storage and without running in contract penalty but with real data from the asset to use the full capacity. GreyLogix, in cooperation with Socon, has developed an integrated software solution for this challenge. It allows nomination, checking limits in terms of safety and capacity and automated execution using an intelligent infrastructure management.

**Keywords:** Gas Trading, Cavern Restrictions, Portfolio Management, Simulation, Profit Maximization, Cavern for Gas Storage, Gas Storage, Storage Cavern, Germany, United Kingdom

©2022 - Solution Mining Institute

Full Paper is Available in the SMRI Library(www.solutionmining.org)