Aspects and Solutions of Modern Storage Operation and Management: An Experience Report

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Abstract

The requirements for documentation and communication for the operation of a cavern gas storage facility are getting larger with the growth of data transmission and communication in the age of the internet. A lot of participants need or stipulate dependably information in short time. The presentation will be structured in 3 parts.

The first part will show individually requirements regarding individual aspects, like fast and multi-cycling operation mode, work flow itself, necessary documents and communications for work flow on the location itself and for different gas market participants. Examples are quantity calculation of the measuring sections, directions and totals, accounting of the daily schedules and allocations for the storage clients, keeping an operation balance account and calculation of book amounts.

The second part will show special aspects of information technology, like different transmittal paths, transfer of the process evaluation in defined intervals (e.g. so called Near Real Time Allocation), document administration, file administration depending on different requirements. Challenges to handle big masses of data will be presented and strategies to handle data mismatches being already detected in the build-up situation will be shown.

The third part describes the approach to cover all the aspects previously mentioned by an integrated web based software solution to handle the completely data flow and document management in a commercial operation phase.

Finally by means of different views a partial data flow of a commercial gas day will be shown to highlight the daily business regarding data flow and their importance for a successful participation on the gas market.

Key words

Operations, Maintenance, Dispatching, Gas market