

## **Recompletion of Salt Caverns at LI. Torup Gas Storage Facility**

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### **Abstract**

The gas storage facility at LI. Torup in Denmark was built in the 80's of last century. In total seven caverns have been solution mined and have been equipped with the related surface and subsurface completion items to allow for a safe, reliable and long-term gas storage application.

After more than 30 years of gas storage operation, the design lifetime of the installed downhole equipment is partly reached and future operation gets more challenging. Consequently, a recompletion campaign was launched by the owner Energinet.dk. Major task is the replacement of the existing subsurface installations by state-of-the-art equipment. This is desirable from a safety point of view as well as to make the caverns fit for purpose for future applications.

The recompletion process will be presented based on the three already successfully renewed gas caverns at Energinet.dk's facility in LI. Torup. The paper will cover technical aspects related to the project phases of flooding, recompletion, testing and gas refill. Furthermore, an insight into the upcoming operations and potential challenges will be given.

**Key words:** storage operation, gas caverns, design lifetime, future challenges, flooding, recompletion, testing and gas refill.