

# CSL Update on Rough: Ops Forum

Date: 25 January 2018



## Agenda

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- The Easington Terminal and Offshore installations.
- Background to recent events.
- Rough Indicative Production Curve for 2018
- Consequences of Rough's transition from storage operations to production

## The Easington Terminal and Offshore installations

The Rough field commenced gas production and processing in 1975. In 1985, the gas field was converted to store gas



- The 47/3B platform has 24 wells
- Over 30 years old
- 3 jacket facility
- It is manned all year round by 100 people

- The 47/8A platform has 6 wells
- Over 40 years old
- It is smaller than 3B, and only used for withdrawal
- Withdrawn from operations in September 2016



- The Easington Terminal covers 46 acres
- It processes gas from Rough and York
- There are over 8000 valves and 2000 transmitters, 18500m3 piping, vessels and tanks
- Connected to the assets via a 36" 29km pipeline



## Background to recent events



March 2015, following technical reports on the integrity of its wells, CSL announced a decision to limit the maximum operating pressure in Rough from 3,500 pounds per square inch (psi) to 3,000 psi while it conducted tests to establish that it could operate the wells at the higher pressure

The results of CSL's independent well testing program (conducted between March 2015 and June 2017) demonstrated that the Rough wells are susceptible to a range of unpredictable age-related failures and any return to injection operations would pose an unacceptable health and safety risk.

On 19 June 2017, the Centrica board approved CSL's recommendation that it could not continue to operate the Rough gas storage facility as a storage facility and should seek all necessary consents to produce all recoverable gas from the field.

On 26 September 2017 the OGA granting consent to produce 30.7 bcf of cushion gas on safety grounds.

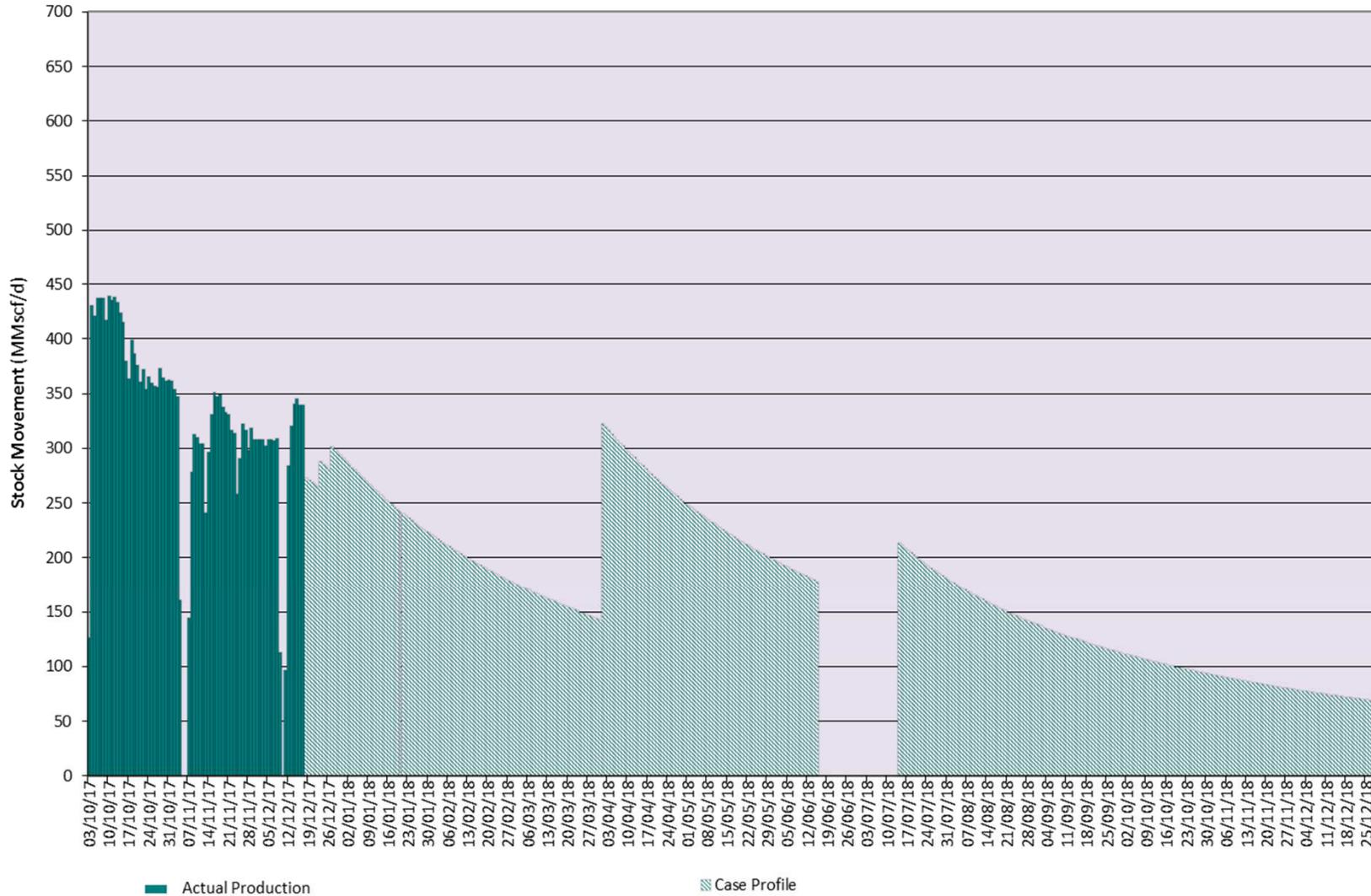
On 13 December 2017 the CMA concluded that the age and degradation of the wells and other facilities at Rough mean that Rough was no longer capable of safe injection operations without a substantial refurbishment which was not economically viable, and the undertakings are no longer appropriate

On 15 January 2018 the OGA granted consent for CSL to produce indigenous gas and associated liquids from Rough from 00:00 17 January 2018, confirming the transition from a storage operation to one of production.

# Rough Indicative Production Curve for 2018

Published 18 December 2017

Base Case Profile



## Consequences of Rough's transition from storage operations to production

### **Information Provision and Reporting:**

- Stock Reporting ceases
- Monthly Technical Capability Reporting ceases
  - Maximum Technical Capacity (space, injection, withdrawal)
- However, Real Time Flows will continue

### **Safety Monitors and Ops Margins**

- No longer included in the Safety monitor
  - However, safety monitor calculation will include Rough Production
- No longer participating in providing Ops Margins

### **Production**

- Recoverable Reserves originally estimated at 183 bcf (including the initial 30.7 bcf)
- Actual recoverable reserves and production timeline will be dependent on economics including cost of compression