

0607 - Amendment to Gas Quality NTS Entry Specification at the St Fergus NSMP System Entry Point



Proposer: St Fergus NSMP/BP
Panel Date: 15th December 2016

Why change?



- Rhum gas is GSMR compliant and can be up to 6.5mol% CO₂ prior to blending.
- NSMP Sub-terminal NEA specification is a maximum of 4.0mol% CO₂.
- Rhum gas flowing at high rates and commingled with all FUKA gas sources has a combined CO₂ content <2.7mol%. Without production from the Laggan/Tormore fields the combined export would have a composition of ~4.5 mol% CO₂ before mixing with the other St Fergus sub-terminals.
- Without a mitigation mechanism interruptions in Laggan/Tormore production rates risk the NSMP Sub-terminal NEA specification increasing above 4.0mol% CO₂ for the duration of the interruption. Without any mitigation, Rhum can only deliver gas into FUKA to the extent it is blended by Bruce or Alwyn. This reduced production rate will lead to the early cessation of production of the Bruce and Rhum fields.

Issue



- Rhum currently secures firm delivery of low CO₂ gas from Norway to St Fergus via the Vesterled Pipeline to mitigate the problem through blending.
- Due to the prohibitive cost of procuring this service from Norwegian shippers this is not sustainable leading to the early cessation of production from Rhum and Bruce fields.
- Inclusion of processing and treatment solutions to remove the excess carbon dioxide have been considered upstream of the NTS (both offshore and onshore at the NSMP sub-terminal), however these would require significant investment and time to implement. Rhum would become cash negative and cease production before any project became operational.

Solution



- The modification proposes an amendment to the existing NEA to increase the CO₂ limit of gas delivered into the National Transmission System in respect of the St Fergus NSMP System Entry Point to 5.5mol%, to cater for short-term outages at the SAGE and SEGAL sub-terminals and the future relative decline of other St Fergus NSMP fields, from the current limit of 4.0mol%.
- The dilution from low CO₂ (<2mol%) gas from the SEGAL sub terminal and SAGE sub terminal (<4mol%) and low CO₂ gas from Norway via Vesterled means that the export into the NTS will remain below 4% under most operating scenarios modelled.