



# 0826 Amendment to Network Entry Provision at Shell St Fergus Terminal

UK Commercial Regulatory Affairs Manager

**Christiane Sykes**

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# Agenda

- The Proposal
- Background
- Data points for reference
- Conclusion
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# The Proposal

- This is an enabling Modification to facilitate temporary amendment to the Wobbe Index (WI) upper limit within the Network Entry Provisions between Shell and National Grid at St Fergus.
- It is proposed to increase the Wobbe Index (WI) limit from 51.2 MJ/m<sup>3</sup> to 51.4 MJ/m<sup>3</sup>.
- This is in line with the GS(M)R legislation  $\leq 51.41$  MJ/m<sup>3</sup> and consistent with standard Network Entry Agreements, thereby creating a level playing field and securing effective competition between relevant shippers.
- The estimated gain in gas flows to the NTS is 10-15 TJ/d per 0.1 MJ/m<sup>3</sup>, which equates to 20-30 TJ/d for the 0.2 MJ/m<sup>3</sup> Wobbe Index increase proposed.
- According to Ofgem figures, the average British household uses 14900 kWh/year\* (0.05364 TJ/year) of energy (gas and electricity combined). This proposal could, therefore, increase deliveries to the NTS to meet the demand of 136,000-204,000 households per year, which would benefit UK energy supply security.
- This proposal further facilitates the UK Strategy to maximise economic recovery from existing North Sea production by fine-tuning our St Fergus operations enabling us to provide more energy to the NTS.

# Background

- Shell raised this proposal on 12 October 2022
- The proposal was presented to the Modification Panel on 20 October 2022
- The Panel determined that Modification 0826S is unlikely to have a material effect due to other network entry parties already operating to the requested increased Wobbe Index limit.
- On the basis that most Delivery Facility Operators (DFOs) already have access to the full Wobbe range permitted by GS(M)R, this proposal mitigates the risk of discrimination between different shippers.
- In light of the above, Modification 0826S will follow Self-Governance procedures.
- The Panel voted to send this proposal to the Transmission Working Group to give market participants the opportunity to discuss the proposal and to ask questions.
- The aim is for the Proposal to return to the November Panel meeting, where Panel members will decide if the proposal is ready to go to consultation.

# Data Points for reference

- In terms of volumes and overall energy impacts, the following table illustrates the impact of this change request – all data based on operating the Shell St Fergus terminal under the current limit of 51.2 MJ/Sm<sup>3</sup>;

Period	Average Volume of gas to grid (mcmd)	Average Wobbe level (MJ/m <sup>3</sup> )	Energy Value (TJ/d)
All of 2020	18.4	49.6	673
Nov 21 – Mar 22	23.1	50.6	927
Sept 22	22.8	50.85	923

- The increase in energy already realised under the current Wobbe limit is approximately 250 TJ/d or 37% of total energy delivered at St Fergus.
- Shell UK has calculated that the increase in the Upper Wobbe limit from the current 51.2 to 51.4 MJ/m<sup>3</sup> is equivalent to an increase in flow of between 0.16 and 0.17 mcmd with an associated energy increase of 20 – 30 TJ/d.
- The proposed Upper Wobbe limit increase represents an incremental increase of circa 3.2% in the energy compared to current average levels and less than 1% increase in total volumes delivered at St Fergus
- With regards to network penetration, we neither expect a local nor national effect on end users owing to the small percentage increase in incremental volume and energy, compared to total deliveries.
- The combined Upper Wobbe limit of the three St Fergus sub-terminals is 51.3 (with the Shell Terminal capped at 51.2) – increasing the Shell Terminal Cap to 51.4 raises the combined limit to the GS(M)R cap of 51.4 MJ/m<sup>3</sup>.

# Conclusion

- This proposal better facilitates the Transporters' Relevant Objectives:
  - a) **Efficient and economic operation of the pipe-line system:** by facilitating increased energy to be processed through the existing network infrastructure than would otherwise be the case.
  - d) **Securing of effective competition:**
    - i. **between relevant shippers:** by levelling the playing field and preventing discrimination through aligning the Shell St Fergus Upper WI limit with the GS(M)R legislation and with other terminals delivering gas onto the NTS.
- No detrimental impact on other network users is foreseen by implementation of this proposal on the basis of the minor increase in the Upper WI limit; the relatively small percentage increase in energy and volumes, compared to overall St Fergus volumes / energy content; comingling with other gases before entering the NTS, all of which are within the GS(M)R limit.

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# Questions and Answers

Q&A

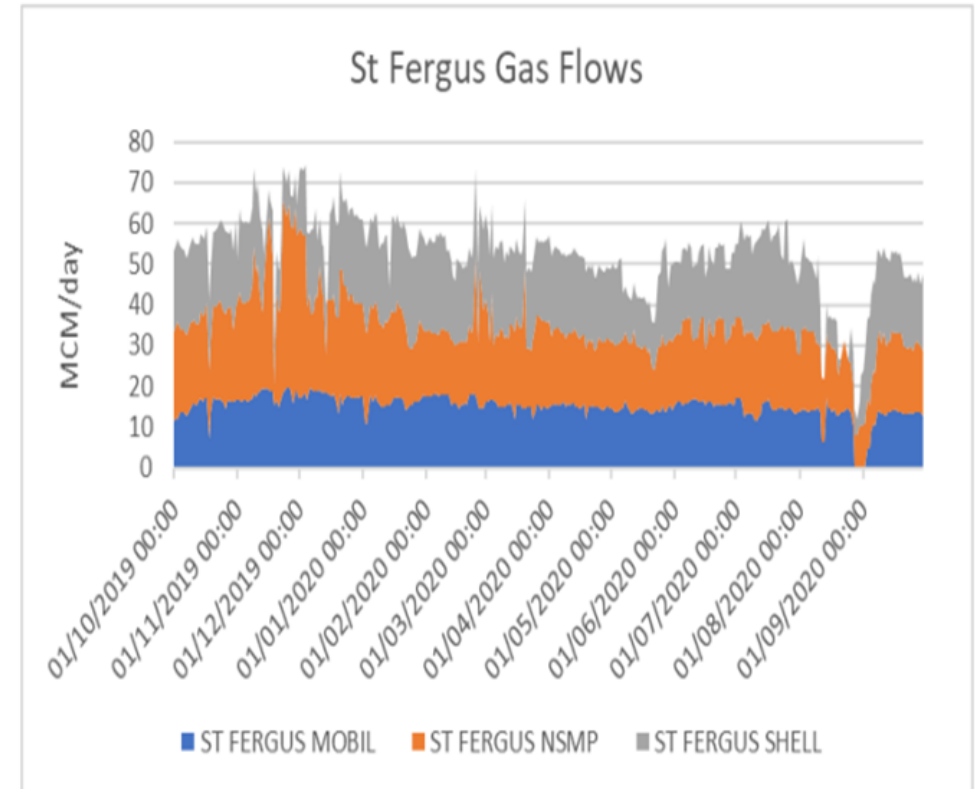


# ANNEX



# St Fergus Gas Flows

- The St Fergus gas terminal accepts gas from three sub-terminals and is currently one of the highest utilised sites on the NTS.
- The opposite graph shows an assessment of the flow rates of gas entering the NTS at St Fergus, which was undertaken by SAGE North Sea Limited (SNSL)\* over an 18 month period (UNC 0780).
- Flows from the sub-terminals are comingled before reaching the NTS, thereby minimising the net effect of a change to gas quality in one of the sub-terminals and the risk of impacting network penetration further downstream.
- **N.B.** Whilst comingling mitigates the impact of WI changes between the sub-terminals, increasing the St Fergus terminal Upper WI limit by 0.2 MJ/m<sup>3</sup> is not dependent on comingling to ensure compliance with the GS(MR) limit.



Entry Point Flowrates	SAGE (mcm/day)	NSMP (mcm/day)	Shell (mcm/day)
Max Flowrates	19.70	47.46	26.44
Average Flowrates	15.35	19.86	18.14

# History of Gas Quality Changes

## ■ 0256: Amendment to the Network Entry Agreement at St Fergus SAGE Terminal:

Gas Quality Characteristic	Current Specification	Proposed Specification
WN Lower Limit	48.2 MJ/m <sup>3</sup>	47.2 MJ/m <sup>3</sup>
WN Upper Limit	51 MJ/m <sup>3</sup>	51.41 MJ/m <sup>3</sup>

- Implemented in October 2009
- The 8 respondents were unanimous in their support of implementation, including NGG.
- In their response, NGG cited some of the following reasons for their support:
  - a) we believe that the Proposal is not being driven by an intention to bring gas of a particularly high or low wobble and CV specification into the NTS but rather by a desire to 'level the playing field' with most other DFOs
  - b) In the unlikely event that gas was entered at the SAGE sub-terminal within the expanded wobble range [the] mixing effect would mitigate any CV related commercial risk.
- There have been at least 12 proposals to change the gas quality parameters at entry terminal, all of which have been implemented.