



GS(M)R Review: Gas Quality Specification Changes

Transmission Workgroup
6th April 2023



The GS(M)R Review

In Q1 2022, HSE consulted on changes to the [Gas Safety \(Management\) Regulations 1996 \(legislation.gov.uk\)](https://www.legislation.gov.uk) (GS(M)R)

In relation to gas quality, the following amendments to the UK specification were consulted on:

- Reduction of the lower limit for Wobbe Index from 47.2 MJ/m³ to 46.5 MJ/m³
- Replacement of the Incomplete Combustion Factor (ICF) and Soot Index (SI) parameters with a Relative Density (RD) limit of 0.7
- Increase to the upper limit for oxygen content from 0.2mol% to 1.0mol% on below 38 bar systems

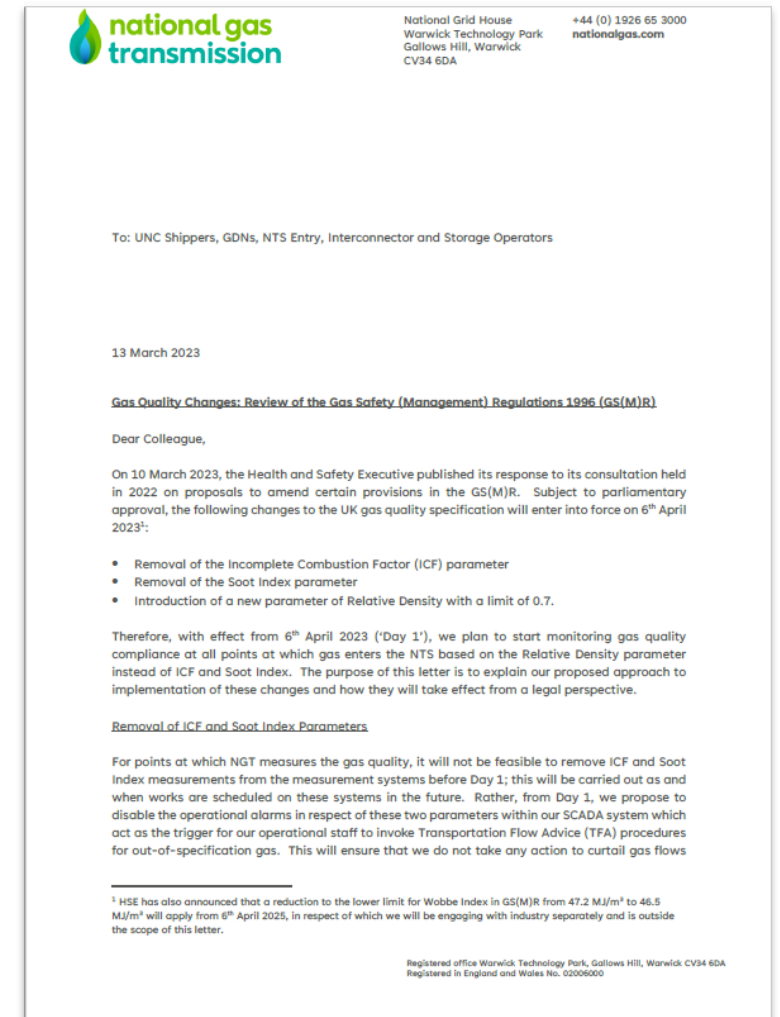
STATUTORY INSTRUMENTS	
1996 No. 551	
HEALTH AND SAFETY	
Gas Safety (Management) Regulations 1996	
<i>Made</i>	4th March 1996
<i>Laid before Parliament</i>	8th March 1996
<i>Coming into force—</i>	
<i>All regulations except</i>	
<i>regulation 8</i>	1st April 1996
<i>Regulation 8</i>	31st October 1996

HSE Conclusions

- On 10th March 2023, HSE published its [Consultation Response and Impact Assessment](#)
- Subject to no objections being raised during parliamentary procedure, these changes to the gas quality specification will be included within
 - [The Gas Safety \(Management\) \(Amendment\) Regulations 2023 \(legislation.gov.uk\)](#)
 - [The Gas Safety \(Management\) \(Amendment\) \(No. 2\) Regulations 2023 \(legislation.gov.uk\)](#)
- The replacement of ICF and SI with RD will be effective from 6th April 2023
- The reduction in the lower limit for Wobbe Index will be effective from 6th April 2025

Implementation of ICF/SI/RD Change: Operational Matters

- On 13th March 2023, we wrote to UNC shippers, GDNs, entry terminals, storage and interconnector operators to communicate these changes and our proposed approach to implementation
- From 6th April 2023, we shall monitor compliance of gas entering the NTS in accordance with the RD limit instead of ICF and SI
- RD is already measured and telemetered at NTS entry points, therefore no action is required by operators before entry into force
- NGT will implement the necessary operational alarms to monitor compliance
- At some entry points it may be desirable to extend the telemetry range for RD; we will follow up on this with the relevant operators



Implementation of ICF/SI/RD Change: Commercial / Contractual Matters

- Where a gas quality limit change is required to be implemented due to a change in law, UNC provides that each operational agreement (NEA, SCA, IA) shall be deemed to incorporate that change from its entry in force
- For ICF, SI and RD, this will take effect from 6th April 2023
- We will seek to execute the relevant contractual changes with operators in the coming months; a UNC consultation process is not required

Implementation of Wobbe Index change

- A reduction in the Wobbe Index lower limit at NTS entry points will be voluntary based on those sites that wish to do so and subject to a UNC consultation process
- As previously communicated at the [September 2022 Transmission Workgroup](#) the NTS entry terminals that have indicated a wish to do so are:
 - Bacton (Perenco)
 - Barrow (Spirit Energy)
 - Teesside (Px)
 - St Fergus (NSMP)
 - Grain LNG
 - Somerset Farm (aka Murrow) biomethane
- We will be re-confirming the position with these operators
- We propose to raise one UNC Modification to enable contractual changes for all these sites

Focus on Bacton

- Interconnector and BBL currently have Wobbe Index lower limits that are equivalent to 47.2 MJ/m³ for both NTS exit and NTS entry
- A reduction in Perenco's lower limit for Wobbe Index could result in the specification of gas offtaken by the interconnectors being below this value when operating in export mode
- Therefore, our current view is that a reduction in the Wobbe Index specification between Interconnector and Fluxys and between BBL and GTS are pre-requisites for reductions in the interconnectors' specification with NGT at Bacton
- Further engagement is needed with Interconnector, BBL and EU TSOs to establish the feasibility of making these changes
- We propose to conduct this engagement and seek agreement in principle with these TSOs before raising the UNC Modification

Transparency Considerations

- The Workgroup previously requested an enhanced and ongoing level of transparency from NTS entry points that adopt a wider Wobbe range, showing expected future delivery volumes and specification
- This could potentially feed into periodic updates to NGT's [network penetration analysis](#) that was completed last year, indicating areas of the network where lower Wobbe gas might be prevalent
- This could inform risk assessments by exit points that are sensitive to changes in Wobbe Index and inform decisions about whether to invest in adaptations to plant
- The conclusions of last year's analysis showed that
 - Only Barrow is currently expected to deliver gas below 47.2 MJ/m³ in steady state operation
 - The other entry points expect to deliver gas below this Wobbe value either during start-up/shut-down or when higher Wobbe fields are on outage which are less predictable
 - We would expect any low wobbe gas delivered at Bacton and St Fergus to be blended to be above 47.2 MJ/m³ by other supplies at those locations prior to NTS entry on most days
- We would welcome the Workgroup's views on the approach to implementation of the Wobbe Index change

