

By email: Graham Craig – graham.craig@ofgem.gov.uk

9th January 2023

Dear Graham,

RE: Ofgem's Consultation on Wormington Compressor Emissions – Final Preferred Option

Thank you for the opportunity to respond to the consultation on Ofgem's Final Preferred Option for investment at the Wormington Compressor Station¹. This letter comprises the response on the consultation from South Hook Gas Company Ltd. ("SHG").

SHG has concerns about the proposed Final Preferred Option and specifically the proposal to retain one of the remaining existing gas turbines under the 500-hour Emergency Use Derogation (Option 7 of the BAT assessment). This proposal will reduce the resilience that currently exists at Wormington, even with the improved availability of the new gas compressor, at a time when the importation of LNG is of critical importance to both GB and EU security of supply. As a minimum, SHG believes that both existing gas turbines should be upgraded to ensure they maintain at least the current levels of availability. However, we believe that investment opportunities such as this should be used to *increase* the availability of assets and *improve* network resilience where possible.

In paragraph 4.32 of the consultation, Ofgem highlights the importance of the Wormington Compressor Station and the key role it plays in maintaining security of supply. Ofgem goes on to say that reducing the number of gas turbines "would represent an unjustified reduction in network capability". SHG considers that 500 hours (i.e. approximately 20 days) of run time is insufficient and therefore does not satisfactorily resolve the identified issues around the reduction of resilience at such a critical part of the network. National Grid Gas Transmission ("NGGT") stated in their Final Option Selection Report ("FOSR")² that they require two compressors running in parallel (across all demand levels) to achieve the maximum capability and that, if parallel operation is not available, a capability reduction of up to approx. 30mcm³ could arise for the period of unavailability. It is worth noting that the capability is already below that of the Milford Haven Obligated Baseline for significant parts of the year and so SHG considers that a further reduction in resilience versus the status quo is unacceptable. Should there be either planned or unplanned outages, 500 hours of "back up" parallel run time could very quickly be fully utilized. It is also not clear to SHG in what scenarios the limited compressor would be run under an "Emergency Use Derogation".

The 500-hour limit also presents a risk for NGGT should there be an outage in summer or shoulder (i.e. March/April and September/October) months as they need to ensure they have enough run time and resilience for winter. SHG would not expect NGGT to utilise the full 500-hour run time given their 1-in-20 obligations, even if it is required to achieve full capability in those periods. Therefore, this presents a significant risk and uncertainty for both NGGT and upstream LNG Shippers. There is also a concern that, if planned maintenance is required on either the Variable Speed Drive ("VSD") or new GT compressor and NGGT are concerned about utilising all of the 500-hour run time, NGGT will seek to reduce the capacity release at Milford Haven over the relevant periods to reduce the constraint risks, as was the case in Summer 2022. This would be entirely unacceptable, given that Ofgem would ultimately be sanctioning this reduction in compression capability and increased risk to network resilience.

¹ <https://www.ofgem.gov.uk/publications/consultation-wormington-compressor-emissions-final-preferred-option>

² <https://www.nationalgrid.com/gas-transmission/document/140601/download>

³ Figure 12 and Figure 13 of NGGT Final Option Selection Report

SHG is concerned that the FOSR and Ofgem's Final Preferred Option underestimate the number of constraints that might occur on the NTS at Milford Haven and therefore the cost benefit analysis subsequently leans towards under-investment on the network. There is reference to the average historic constraint at Milford Haven being 2.3mcm. However, this is not consistent with the constraints that NGGT forecasted in the capacity restriction that was implemented for Summer 2022 and is currently being proposed for Summer 2023. In these proposals, NGGT suggested that constraints could be up to 22mcm, which could cause costs of up to £20.6m per day. This in turn highlights the need for additional network investment to achieve the required capability at Milford Haven. For clarity, SHG does not agree with these constraint cost projections, not least because a constraint of 22mcm is unlikely to occur, especially on an enduring basis. However, the NGGT figures in the Milford Haven capacity release restriction consultations do demonstrate that NGGT believe a constraint risk exists at Milford Haven over a sustained period, which is not consistent with the proposals in this Wormington Compressor Station consultation.

SHG has raised concerns about the Milford Haven capacity release constraint proposals on the grounds that these proposals create significant uncertainty around deliverability onto the NTS and therefore increase the probability of unnecessary diversions of LNG cargos away from GB. SHG has determined (as part of its response to these latest capacity release constraint proposals) that the loss of a single LNG cargo could result in an NBP increase of up to 10p/th⁴ versus a net-benefit to the GB consumer if such cargo was delivered of approx. £10m⁵ per day. SHG believes that at least two cargoes were diverted over Summer 2022 as a result of the uncertainty caused by the capacity restriction. However, had these cargoes been delivered, there **would have been no NTS constraints** and therefore the loss of these cargoes was detrimental to the GB market. The market impact of losing these cargos almost certainly leads to increased costs for consumers and could very quickly change the NPV of the preferred options of associated investment decisions (including this consultation).

Please note that SHG is currently going through the PARCA process to increase the send out capacity at the Milford Haven ASEP, which was the trigger for the Western Gas Network Upgrade Project. The project is seeking to increase the send out capacity from the SHLNG Terminal by 25% (i.e. allowing up to 813 GWh/day aggregate send out). The installation of two new GT compressors at Wormington was understood by SHG to be a critical part of the option selection process for PARCA, noting that even this selected option does not release capability fully in line with the capacity requested as part of the SHG PARCA application. Therefore, the fact that the proposed Final Preferred Option would not involve investment in a second new gas turbine is particularly troubling to SHG as this would (1) reduce network resilience below the current levels, (2) have a significant negative impact on SHG's ability to utilise the additional send out capacity at the SHLNG Terminal and (3) thereby ultimately undermining the expected increase in NTS capability and resilience as a result of the PARCA.

SHG welcomes Ofgem's suggestion that, if Avon Dry Low Emissions ("DLE") technology becomes available in future, then it should be retrofitted. This would remove the limitation on running hours and provide the extra resilience needed at the Wormington Compressor Station. Whilst Table 9 of the consultation suggests availability will not meet the same level as a new GT (75% for DLE versus 90% for a new GT), the level is probably sufficient to provide the required resilience for a "backup" compressor. However, there would still be a risk of the remaining compressor not being available. If this is not fully available, then NGGT should not seek to reduce the Milford Haven Capacity. More fundamentally, as noted in the consultation document, the DLE technology is not currently approved. Therefore, SHG questions whether an investment decision should be made based on potential future solutions. This also suggests some concern around the lack of resilience provided by a 500-hour limited compressor. Indeed, in the scenario that the Avon DLE Retrofit Technology is not approved in future, does Ofgem have full

⁴ Based on December 2022 prices and LNG deliveries

⁵ Based on average demand for December 2022

confidence that a 500-hour limited compressor provides the resilience needed under the current market conditions?

We hope this response is of assistance. Should you wish to discuss further or have any questions please contact either Adam Bates at abates@southhookgas.com and +44 (0)7787 524 566 or Andrew Sealey at asealey@southhookgas.com and +44 (0)7825 612 704.

Yours sincerely,

Adam Bates

Regulatory and Commercial Executive
South Hook Gas Company Ltd.