

2nd February 2022

Dear Mr Innes

Re: OFGEM Consultation on SGN LTS Futures Project

I am writing to provide a response to the current OFGEM consultation on the SGN LTS Futures Project. I have read the consultation document and accessed the redacted proposal and would like to provide input to Questions 1 and 2 of the consultation as detailed below.

Question 1:

I agree with the statement in §2.1 that establishing a low carbon hydrogen sector is critical to the success of the UK's net-zero ambitions. Delivering this challenging target will involve the production of large volumes of hydrogen and will require the rapid development of a safe and cost-effective hydrogen pipeline transmission network. In my opinion, the primary (and perhaps only) way in which we can develop this network is through the re-use of existing infrastructure. However, in order to be able to make a safety justification for the reuse of the pipeline network, robust guidelines are required to close the gaps in knowledge associated with large-scale hydrogen transportation in the UK.

The LTS Futures Project represents a timely and rare opportunity to demonstrate the feasibility of reusing the large LTS network of pipelines and associated equipment for hydrogen transportation. I further believe that the proposed development of the blueprint of requirements for a change of use from gas to hydrogen will have benefits outside the live demonstration and will increase the value and reach of the project. ***I therefore agree with your assessment that the project should be approved.***

Question 2:

I broadly agree with your assessment of the SGN project plan based on my reading of the redacted proposal provided, except for the statement in §2.8 of the consultation, which indicates that the results of this project will be valid for **higher** grades of steel. I believe that this may be an error in the consultation document, which, although not material to the outcome to fund the project, is not correct as it stands.

The pipeline described in Appendix E is of Grade X52. The SGN proposal states that this grade comprises 93% of the population of LTS pipelines. SGN indicate that by using this pipe material in the live trial, they will then have confidence to apply these findings to pipelines of **lower** grade (including Grade B, Grade X42 and X46). Based on my expertise in pipeline materials, I agree with the statement in the SGN proposal and concur that they are testing a worst-case material and will be able to apply the results to **lower** grades of steel than X52, which, in my opinion, increases the validity and value of the project. ***I therefore agree with the proposed choice of location for the project.***

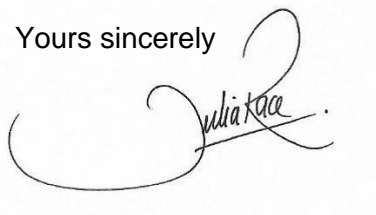


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Thank you for the opportunity to engage with this consultation and I am happy to answer any questions or queries that you might have in respect of this response.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Julia Race', is written over a light blue rectangular background.

Dr Julia Race

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