

*Gas Network Innovation Competition Full Submission*  
**Supplementary Answer Form**

**Project: H21**

Tick if this answer has been provided verbally: ☐

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| Project code                           | NGNGN05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Question Number | 2                         |
| Question date                          | 22 <sup>nd</sup> August 2019                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Answer date     | 27 <sup>th</sup> Aug 2019 |
| Submission section question relates to | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                           |
| Topic                                  | Phase 2b – Unoccupied trials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |                           |
| Question                               | Within your submission you have detailed that you will be testing on "some above-ground assets" as part of Phase 2b - Unoccupied Network Trials. Can you provide details of the types of assets you will be testing and how this reflects the make up of the current network?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 |                           |
| Notes on question                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                           |
| Answer                                 | <p>The above ground assets are dependent on the specific assets present at the test site selected. Ideally, we would look to decommission district governors from IP and/or MP to domestic district low pressure from natural gas and convert the same equipment with hydrogen.</p> <p>The above ground assets would include valves, components such as filters and auxiliary pipework as well as regulators. This will allow the project to ascertain any issues relating to compatibility of the equipment with hydrogen in terms of soft parts, the commissioning procedure and the reliability of the equipment over a prolonged period of time.</p> <p>In addition to this we would be able to undertake demonstrations and build competency on the maintenance of these supply critical items of equipment for example checking filters for debris as a result of anticipated increases in velocity, as well as any potential acoustic impact relating to the increase in velocities.</p> <p>As mentioned District Governor (pressure regulators) are essential in ensuring customers receive the required supply of gas 24/7 whilst providing the robustness to support the surrounding networks to allow for mains outages in the event of supply emergencies such as large volume gas</p> |                 |                           |

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|-------------|-----------------------------------------------------------------------------------------------------|
|             | escapes and mains replacement works, NGN currently have circa 3,000 of these assets on the network. |
| Attachments |                                                                                                     |