

Ofgem
Network Price Controls
RIIO-3 Team

Re: Call for Evidence on the Electricity Transmission, Gas Transmission and Gas Distribution Business Plans for RIIO-3

Via email to RIIO3@ofgem.gov.uk

10 February 2025

Dear RIIO-3 team,

I am writing to you in my official capacity as Chief Executive of Protium Green Solutions Ltd to provide our feedback on Wales & West Utilities' Business Plan. This response does not need to be confidential.

Protium Green Solutions is the UK's leading electrolytic hydrogen developer. We have been operating our Pioneer 1 production facility in South Wales since March 2023 and will bring our second facility, Pioneer 2, online this year. With further projects in development, Protium is one of the few developers in the UK with real-world experience of operating electrolyzers and delivering hydrogen to end users in a range of applications.

Protium has been working with Wales & West Utilities (WWU) for over a year. During this time, we have seen WWU's commitment to decarbonisation manifest in a number of tangible, meaningful ways. This was epitomised initially by WWU's hydrogen van trial, for which Protium provided green hydrogen produced locally to the van's service area. WWU have also been at the forefront of developing an approach to hydrogen transition for the long term.

The importance of hydrogen to the future transport fuel mix cannot be overstated. As has been demonstrated by the work undertaken so far by WWU, it is clear that fleet decarbonisation requires more than just battery electric vehicles (BEVs). Hydrogen fuel cell electric vehicles (FCEVs) give fleet operators flexibility and a high degree of operational alignment.

WWU's research, funded under RIIO-GD1/2, shows that fewer than 50% of their current van journeys can be serviced by a BEV option. The same research shows that 95% of current van journeys could be serviced by hydrogen FCEVs if daily refuelling is available. There are considerable challenges on both the vehicle and refuelling technologies necessary to make this a reality, but WWU's continued trialling and development work provide a meaningful "pull" to the value chain – justifying further investment from Original Equipment Manufacturers and hydrogen producers, accelerating the entire ecosystem.

This Ofgem-funded van trial proved crucial to demonstrating that hydrogen had the potential to be a suitable fuel for the network engineering fleet, and potentially other uses within WWU's wider fleet. Hydrogen's relative nascency requires a continued programme of trials

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and modelling, ensuring that both the infrastructure and operational model mature in lockstep.

WWU, like all networks, is under increasing pressure to not only meet net zero targets, but also to comply with the net zero emission vehicle mandate as set by Government. Avoiding delivery challenges while transitioning to a zero-emission fleet is key. Programmes which build on prior learning continue to instil confidence and support the investment case for equipment, infrastructure, and production.

Protium has seen the direct result of this following the 2024 van trial. Representatives from WWU have since spoken to a wide range of stakeholders to highlight the learnings from the trial, which has resulted in a rapid expansion of interest to fleets across the UK. OEMs are bringing new vehicles to market – including Stellantis' recent launch of the hydrogen FCEV Vauxhall Movano van.

The proposals laid out by WWU in section 11.4 of their innovation strategy document have Protium's full support. In particular, continued live demonstration of vehicles is critical to building confidence across the entire value chain from end users through to investors in hydrogen production projects.

Protium also fully supports WWU's intent to undertake further modelling, particularly as it relates to refuelling infrastructure and onboard requirements. Modelling like this supports hydrogen project developers like Protium in selecting the best possible locations for both production and refuelling infrastructure, as well as enabling the preparation of transport and storage solutions during the time before a hydrogen pipeline is available.

In addition to our support for WWU's proposals on fleet transition activity, we also wish to add our support for WWU's wider decarbonisation activities utilising hydrogen. In our engagement with WWU, it is clear that the organisation understands the complex and interrelated nature of hydrogen transition; hydrogen is many things in our future energy ecosystem. A substantial amount of work is underway to ensure that this transition is researched, modelled, tested, and scaled effectively. WWU's proposals drive directly at these objectives.

In summary, Protium has had the opportunity to work with WWU on programmes previously supported by Ofgem and we have seen the direct impact that this has had on WWU and the wider market. They are a clear leader, having recognised that delivering the net zero transition requires fast, deep change. Their ambitious approach will unlock fleet decarbonisation both in their region and across the UK, and Protium strongly encourages Ofgem to deploy funding to support the work WWU has proposed.

Sincerely,

Chris Jackson
Chief Executive