

4 September 2020

To RIIO-2 consultation team,

Please find below the Hydrogen East response to the draft determinations for the phase 1 RIIO-2 companies.

Hydrogen East is a new group formed recently to raise awareness of hydrogen opportunities across East Anglia to support delivery of Net Zero by 2050 and to promote the technology, its supply chain and develop associated local markets. I am also a well-recognised commentator on market change, regulation and decarbonisation.

First some general comments on the proposals.

Given the legal requirement to reduce greenhouse gas emissions, and the integral role that energy network operators will play in realising Net Zero commitments, we are keen to see greater clarity and flexibility especially relating to the Net Zero and Heat Policy re-openers proposed by Ofgem. As a general observation, the approach likely to be applied by Ofgem is too black and white and provides insufficient flexibility to allow licensees to proactively consider new directions and innovations within the life of RIIO-2.

Ofgem's proposed approach also fails to recognise that:

- hydrogen is an emerging commodity that could offer wide-ranging benefits to carbon abatement across a number of vectors and hard to reach sectors, and which is likely to see adoption as a key policy goal as early as 2021
- in a region like East Anglia, which is well-positioned to become the UK's clean growth region, hydrogen could well become a transformational energy source that could catalyse the local economy, and
- there are existing energy hubs that are likely to be the focus of early transition projects in the life of RIIO-2, and policy needs to encourage and facilitate innovation projects that seek to support early adoption of hydrogen technologies given locational and cost limitations on aggressive adoption of electrification, especially in areas where there is an invaluable infrastructure asset around supply of gas.

Considerations for how licensees will be able to fund Net Zero activity should be a core component of the price control, rather than added on as a contingency measure. While we understand Ofgem's mandate to ensure value for consumers, we are concerned that the

risks (and costs) in delaying Net Zero investment until there is greater certainty are not being given due weight when being considered against the risks of misplaced or mis-timed investments. As the timescale to enact Net Zero solutions compresses, the cost of implementing them increases.

Please find our responses relating to specific questions from the draft determinations documents below. These all focus on innovations for innovation or uncertainty mechanisms. In general, we find the proposed arrangements do not create the right incentives on the companies to innovate and take a leadership role on hydrogen innovation and existing system repurposing.

**Q21** *Do you agree with our overall approach to meeting Net Zero at lowest cost to consumers? Specifically, do you agree with our approach to fund known and justified Net Zero investment needs in the baseline, and to use uncertainty mechanisms to provide funding in-period for Net Zero investment when the need becomes clearer?*

We feel that the high stakes investment required to achieve Net Zero ambitions through less-established technologies would be best facilitated through an investment provision in the baseline, rather than almost solely through potential approvals for uncertainty mechanisms.

Although the provision of uncertainty mechanisms is a necessary feature of an extended price control period during a period of sustained change and network transformation, too much uncertainty can hamper confidence and reduce appetites for participating in innovative projects. While the exact pathway to Net Zero may not be clear, we know the destination and funds should be available to licensees on that basis and a reasonable degree of confidence and support for appropriately defined schemes should be forthcoming.

**Q23** *Do you have any views on our proposed approach to a Net Zero re-opener?*

Given that the majority of hydrogen developments would be funded through the Net Zero re-opener, we have a number of concerns regarding the proposed approach. While we applaud the provision that allows the Net Zero re-opener to be initiated at any point during the price control period, we feel that it would benefit from additional flexibility compared to the common approach for re-openers.

#### Initiating re-opening

Ideally, we would like licensees to be able to initiate the re-opener, rather than Ofgem alone. The regulator can play an integral role in gauging wider market developments and preventing duplication of effort but leaving licensees without the ability to initiate the re-opener makes the provision inevitably restrictive. As a general observation, innovation to support Net Zero should be seen as an opportunity, not a risk.

If a more symmetrical approach cannot be facilitated, we would like Ofgem to be comprehensive in defining the triggers that it will use to initiate the re-opener and how licensees and stakeholders can submit eligible developments for the regulator to use in its

decision-making process<sup>1</sup>. If tracking of Net Zero re-opener conditions is not formalised, we are concerned that significant delays to approving and to implementing new developments will inhibit thinking and ambition.

### Classifying eligible investments

The core document specifies that the Net Zero re-opener is not to be used for innovation projects or heat policy initiatives<sup>2</sup>. Assuming this position is confirmed, we feel it is important for Ofgem to distinguish between BAU funding of innovation projects using existing technologies, and the riskier proof-of-concept investments that are needed to bring new technologies and applications to the market. Without the distinction, we are concerned that funding available through the Net Zero re-opener will be limited and will significantly impair the speed at which developing technologies can be tested and then implemented at scale.

### Materiality thresholds

The proposal to limit the re-openers with a materiality threshold could hinder small-scale proof-of concept developments. Local projects are likely to provide significant benefits at the national level that are hard to fully quantify at the outset. Developments that do not meet materiality thresholds could be impeded and the subsequent macroeconomic benefits missed.

While we see the logic of licensees aggregating multiple projects for the purposes of meeting the materiality criteria, we are concerned that this could unduly delay projects that are further ahead in the pipeline.

We agree that a case-by-case approach is more appropriate. Perhaps with a nominal minimum value to reduce the administrative burden.

### Clarifying how future Net Zero policies and innovation projects will interplay

Given that there is not a stand-alone re-opener for future Net Zero policies, which are likely to be applied under the Net Zero re-opener, we would like greater clarity on whether funds to meet Net Zero policy obligations and initiate less-established innovation projects are mutually exclusive. For example, if a gas distribution network operator is awarded funding for a specific project through the Net Zero re-opener, will it be eligible for additional funding if the Net Zero re-opener is triggered at a national level to facilitate new policy initiatives?

**GDQ46** *What are your views on our consultation position to address bespoke decarbonisation of heat re-openers through our proposed innovation stimulus, Net Zero and Heat Policy re-opener mechanisms?*

It is not obvious why Gas Transmission should be able to use the Heat Policy re-opener mechanism alongside Gas Distribution. There seems to be an overwhelming case that two of the five defined triggers should be applicable to Gas Transmission as they are directly relevant to the licensee's business. They are; 'changes to the regulations relating to the

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<sup>1</sup> Paragraph 8.30 – Consultation RII0-2 Draft Determinations -Core Document

<sup>2</sup> Paragraph 8.20 – ibid

quality and composition of gas' and 'the future role of gas networks in the heat sector as determined by government policy that may result in parts of the existing network either being decommissioned or made ready to convey hydrogen.' The proposals should be extended in include transmission.

**GDQ47** *What are your views on the questions set out in paragraph 4.57 of this document in relation to large hydrogen projects?*

Most of these questions are more appropriately for the GDNs, but we would make the following comments.

Some costs for industrial hydrogen decarbonisation projects should certainly be socialised, while others should be targeted on beneficiaries. This should be determined on a case-by-case basis. What level of contribution there should be from industry for long-term asset investment projects in this space should also be dealt with on a case-by case basis. But Ofgem needs to develop principles here that would allow licensees to understand the approach and avoid surprises.

Where a project is intended to inform or reflect a heat policy decision, there should be a mechanism to allow cost recovery. This could include changes to policy frameworks to allow increased volumes of hydrogen blends into the national or local transmission system.

**NGGTQ27** *Do you agree with our proposed approach to approve the need for investment, provide development funding and assess the full project costs through a UM during RII0-GT2, for the Bacton, St Fergus subsidence and King's Lynn subsidence projects?*

We are pleased that Ofgem have accepted the need to consider significant investment at Bacton Terminal to ensure long-term operation. However, we are disappointed that Ofgem do not agree with the redevelopment option put forward by NGGT, as it has been widely consulted upon and holds significant support from local stakeholders. With the inclusion of the uncertainty mechanism, NGGT will face additional costs and time in making the necessary changes that will secure the site's future in a Net Zero landscape.

Please let us know if you would like to discuss any of these responses in further detail.

**Nigel Cornwall**