Energy Intensive Users Group

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**EIUG Response to Ofgem’s Consultation on RIIO-3 Sector Specific Methodology**

**Introduction**

1. The Energy Intensive Users Group (EIUG) is an umbrella organisation that represents the interests of energy intensive industrial (EIIs) consumers. Its objectives are to achieve fair and competitive energy prices and ensure security of energy supply for and cost-effective decarbonisation of British industry so that they can continue to compete internationally. It represents manufacturers of steel, chemicals, fertilisers, paper, glass, cement, lime, ceramics, and industrial gases and they produce materials which are essential inputs to UK manufacturing supply chains, including materials that support climate solutions in the energy, transport, construction, agriculture, and household sectors. They add an annual contribution of £29bn GVA to the UK economy and support 210,000 jobs directly and 800,000 jobs indirectly around the country.
2. These foundation industries are both energy and trade intensive and continuing to invest in the UK. In order to be able to compete globally, EIIs need secure, internationally competitive energy supplies and measures to mitigate the risk of carbon leakage.
3. This response provides replies to those consultation questions that are of most interest to EIIs.

**Electricity Network Investments - Triads**

1. Investment in the electricity transmission and distribution networks will have to increase to connect new generation and demand and transmit and distribute electricity in light expected electrification of the UK economy. The investment cost will be reflected in higher network charges and therefore, all else being equal, higher electricity prices.
2. The EIUG recognises that there needs to be a step-change in electricity transmission and distribution network investments across GB to build a more flexible and secure energy system that support the transition to Net Zero at pace. In hindsight, the RIIO-2 settlement was probably too stringent. However, the EIUG perceives the risk that this pendulum might now swing in the opposite direction: investment in unnecessary and/or inefficient network capacity which end-consumers will have to pay for.
3. The EIUG would therefore like to refer to its joint letter with the MEUC to the ESO about the end of triads and operational balancing for the next winters (see annex). Triads were the three half-hour settlement periods of highest demand on the GB electricity transmission system that occur between November and February each year. NG ESO historically used triads to determine Transmission Network Use of System (TNUoS) demand charges for customers with half hourly meters, predominantly industrial and commercial energy customers. Its aim was to avoid unnecessary investment in oversizing capacity of the electricity transmission network to meet peak demand, thereby saving consumers electricity costs.
4. The TNUoS charging methodology therefore deliberately included an incentive to reduce demand (DSR) at peak times for the electricity system, reducing the overall level of generation needed to balance the GB market, and importantly the very high cost of providing marginal capacity on transmission and distribution networks. Notwithstanding the methodology’s residual element to recover the cost of running and maintaining the electricity transmission network, the DSR element principally negated expensive investment and inefficient electricity network capacity.
5. With significant investment needed to increase connection to the networks and transmit and distribution electricity, the potential consumer benefit of avoiding expensive and inefficient network capacity will only become bigger. The EIUG therefore strongly recommends to introducing a financial incentive again that would capture this benefit.

**Future Energy Scenarios (FES)**

*OVQ7. Do you agree with the proposal to use the FES framework for selecting the RIIO-3 scenarios and OVQ8 to use FES Leading the Way as the planning scenario for ET in RIIO-3?*

1. The EIUG believes that the FES framework is probably the best analysis available for selecting RIIO-3 scenarios, but past FES scenarios, in particular the Leading the Way / Going Green scenarios have been overoptimistic. Basing price control scenarios on overoptimistic scenarios could lead to a bigger investment envelop than needed or reality is able to deliver, yet the level of investment agreed will be reflected in network charges.

1. Ofgem might therefore want to consider whether to apply System Transformation scenario as additional common conservative scenario to the planning scenario for ET in RIIO-3. Alternatively, it might consider the use of price control deliverables (PCD) to do the same.

**Bespokes**

1. Some gas and electricity distribution network operators will have an industrial cluster in its area. An industrial cluster will have unique requirements and circumstances, based on its local geography and needs. The EIUG would like to see this reflected in the price control settlement.
2. Ideally, the industrial cluster organisation and its distribution network companies will work together to assess impacts the cluster organisation’s strategy to decarbonise might have on the distribution network, and knock-on impact on the transmission network. The EIUG encourages Ofgem to work with the relevant network companies and industrial cluster organisations to develop its business plan guidance.

**Truth Telling Incentive**

*What are your thoughts on the size and strength of any truth telling incentive?*

1. The EIUG would like to stress the importance of good corporate governance in truth telling. Companies with good corporate governance are less likely to exploit the information asymmetry between it and the regulator. The EIUG recommends that Ofgem also assesses the network companies corporate governance against the [UK corporate governance code](https://media.frc.org.uk/documents/UK_Corporate_Governance_Code_2024_kRCm5ss.pdf).

**Future of Gas**

1. The consultation rightfully points out the number of distinct challenges that will impact on Ofgem’s approach to regulation through the RIIO-3 period and beyond for the gas sector, including:

* balancing the level of investment needed to maintain a safe and reliable network with the uncertainty around the pace at which gas demand declines across different parts of GB;
* uncertainty in the extent to which existing gas network assets may be repurposed for hydrogen or Carbon Capture, Utilisation and Storage (CCUS);
* deciding how costs for both historical and future investment are recovered over time from a declining customer base to ensure fairness and protect both consumers and investors against the risk of asset stranding; and
* tackling the issue of how to pay for the potential decommissioning of assets where they are no longer required through the 2030s and 2040s.

1. The challenges are pertinent to the gas-intensive industries in the UK. Though the EIUG agrees with Ofgem’s anticipation that there will be no large-scale, systemic changes to the gas networks during the RIIO-3 price control period, the long asset life of manufacturing equipment makes it important to develop the flexibility with this period to manage the strategic uncertainties around the future of gas networks.

*OVQ6. Should RIIO-3 help to manage future gas network decommissioning costs? If so, do you have views on what these costs could be and what mechanisms should be used, including for anticipatory funding?*

1. The EIUG believes that RIIO-3 should help to manage future gas network decommissioning cost, primarily focussed on anticipatory investment in future decommissioning liabilities. However, the cost of potential decommissioning itself is a different question.

**Hydrogen**

1. Hydrogen will have a role in decarbonising the UK economy and it can provide zero carbon energy for certain energy intensive industries, particularly in those industrial clusters which aim to decarbonise by deploying hydrogen infrastructure, but it will also be needed for dispersed sites.

*OVQ1. Do you agree with our proposal for how RIIO-3 should interact with the Hydrogen Transport Business Model?*

1. The EIUG agrees the proposals for how RIIO-3 should interact with the HTBM and encourages Ofgem to work closely with DESNZ.

*OVQ3. Do you agree with the proposal that network costs relating to hydrogen blending at both distribution and transmission level should be included in RIIO-3 net zero related UMs?*

1. The EIUG agrees with the proposal that network cost relating to hydrogen blending should be included in RIIO-3 net zero related UMs, as long as the information from the telemetry and monitoring equipment is communicated to end-consumers, such as gas-intensive industries, so that can take measures to control the quality of gas for their manufacturing purposes, when necessary.

Arjan Geveke

Director – EIUG

Annex

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Craig Dyke

Head of National Control

National Grid ESO

1 - 3 Strand

WC2N 5EH London

Cc: Hannah Small

Subject: end of triads and operational balancing for next winters

London, 16 March 2023

Dear Craig,

We are writing to you on behalf of members of the Energy Intensive Users Group (EIUG) and Major Energy Users Council (MEUC) to highlight the reduction in the value of triads and the motivation of I&C customers to reduce their electricity demand at times of high system demand. This loss in capacity might increase operational risks to NG ESO, especially as forecasts for next winter predict that the risk of security of electricity supply will be at the same level of this winter.

We would like to invite NG ESO to discuss with the EIUG and MEUC how best to capture the volume of triads that might be lost and reforming any of its DSR instruments so I&C customers can continue to support NG ESO in its ability to manage system operability and better contain costs for all GB consumers ahead of next winter.

*Triads*

This winter will have seen the last of Triads – the three half-hour settlement periods of highest demand on the GB electricity transmission system that occur between November and February (inclusive) each year. NG ESO historically used Triads to determine TNUoS demand charges for customers with half hourly meters, predominantly industrial and commercial (I&C) energy customers. As the charge was proportional to a businesses' energy within the Triad periods (and linked to location), it provides a strong incentive to I&C customers to minimise consumption over these periods to lower TNUoS charges and thereby its energy costs. This was achieved by a combination of demand reduction, load switching to alternative embedded generation, including running and testing on site emergency back-up generators in periods that coincided with peak demands.

The TNUoS charging methodology deliberately included an incentive to reduce demand (DSR) at peak times for the electricity system, reducing the overall level of generation needed to support the GB market, and importantly the very high cost of providing marginal capacity on transmission and distribution networks. Notwithstanding the methodology’s residual element to recover the cost of running and maintaining the electricity transmission network, the DSR element principally negated expensive investment and inefficient electricity network capacity.

Although there were good reasons to review and reform Triads and Ofgem recognised the benefit of avoiding such expensive network upgrades, it focused on the cost recovery element of TNUoS in its targeted charging review (TCR) and moved the DSR element to its access and forward-looking charges programme. Ofgem subsequently decoupled access reform from future charging. This means that the main DSR incentive for I&C customers no longer exists and the benefit of avoiding expensive capacity upgrades is not being incentivised in upcoming and subsequent winters.

*Demand Reduction*

The table below shows the NG ESO’s maximal estimated reduction in capacity in response to triad in the past winters.

|  |  |
| --- | --- |
| **Winter** | **Max Est. Capacity (GW)** |
| 2021/2022 | 1.3 |
| 2020/2021 | 1.7 |
| 2019/2020 | 2.3 |
| 2018/2019 | 2.4 |
| 2017/2018 | 2.0 |
| 2016/2017 | 2.0 |
| 2015/2016 | 2.0 |
| 2014/2015 | 1.2 |
| 2013/2014 | 1.8 |
| 2012/2013 | 1.2 |
| 2011/2012 | 1.0 |
| 2010/2011 | 1.2 |
| 2009/2010 | 1.0 |

*Source: NG ESO’s Winter Review and Consultation reports and National Grid ESO Power Response Demand Side Flexibility Report 2019.*

Though the uptake of volume between 2015 and 2020 is likely due to gas-reciprocating engines, more ‘traditional’ DSR has been above 1GW. This capacity is not insignificant. One of the reasons for this volume was that the value of avoiding TNUoS charges was understood and triad management was administratively relatively easy compared to other DSR instruments.

The feedback that the EIUG and MEUC are getting from members who actively participated in Triads is that, although there is still some value left in Triads, the value is unlikely to be high enough the cover the cost of reconfiguring assets in response to triad warnings. Neither do we foresee that those I&C customers will move to NG ESO’s new demand flexibility service (DFS) or any of its other DSR instruments. The 1GW or more of demand reductions is therefore likely to be lost for next and future winters, until Ofgem implements a forward-looking charging incentive. The loss might increase operational risks to NG ESO and ultimately greater costs for consumers, especially as forecasts for next winter predict that the risk of security of electricity supply will be at the same level of this winter.

As mentioned above, we would like to invite NG ESO to discuss with the EIUG and MEUC how best to capture the volume of triads that might be lost and reforming any of its DSR instruments so I&C customers can help NG ESO in its ability to manage system operability ahead of next winter.

Kind regards,

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Arjan Geveke Eddie Proffitt

Director – EIUG Technical Director - MEUC