

26 October 2022

To: [FutureNetworkRegulation@ofgem.gov.uk](mailto:FutureNetworkRegulation@ofgem.gov.uk)

## Ofgem open letter on Future Systems and Network Regulation

Sustainability First is a charity and think tank focussed on social and environmental issues in the energy and water sectors. We have been closely involved in the RIIO2 process through participation in the Ofgem Challenge Group and company groups as well as participating in a number of the Ofgem working groups and responding to all key consultations. We are keen that as part of this exercise Ofgem reflects on what has worked well and what hasn't – as well as thinking about the significant challenges ahead. We have also been involved in the early stages of thinking on PR24 in the water sector which provides further points for reflection.

We see four priority areas for Ofgem to consider:

- **The need for investment** - Given the significant challenges around meeting net zero and the new imperatives around national energy security and growth it is clear that the focus for RIIO3 has to be on delivering the very significant levels of strategic investment required through to the early 2030s, in particular on electricity. Both the National Infrastructure Commission and the Climate Change Committee (CCC) continue to stress the need for significant network investment if we are to connect the level of renewables required to meet the government's targets for a net zero grid by 2035 and to be a net exporter by 2040. In particular the Expert Group set up by the CCC to look at electricity market reform have made clear<sup>1</sup> that sharper locational price signals are not a substitute and that network investment is needed first with some form of locational pricing to follow in the 2030s. Putting the focus on what the networks are required to deliver in terms of investment (rather than simply what it costs) is the big mindset shift required for RIIO3.
- **Managing uncertainty around the role of hydrogen and heat decarbonisation** - For gas being clear on what is required is harder given the continuing uncertainty around domestic heat decarbonisation with a policy decision promised in 2026, although the scope of that remains unclear. Given that timeframe Ofgem needs a clear mechanism for handling what is a massive uncertainty – and also needs the companies to present plans that show the impacts of what could be radically different scenarios in different parts of their networks. Given the safety imperative Ofgem cannot simply put a halt on all investment even in the most scaled back scenario. And strategically, the energy security and growth agendas point to a strong case for investment in hydrogen more generally, which needs to be part of a more integrated cross-vector view of our energy future. A serious push on hydrogen would require strategic network investment in the gas networks. Ofgem needs to be engaging with government (including the devolved administrations) and the FSO (as its role is extended to include gas) to establish a clearer sense of what needs to be delivered.

---

<sup>1</sup> <https://www.theccc.org.uk/2022/09/27/priorities-for-electricity-market-reform-and-net-zero/>

- **The importance of adaptive planning** - While there is a clear case for strategic investment across all sectors, considerable uncertainty will remain around what is required when with wider geo-political events potentially having a significant influence. In RIIO2 Ofgem sought to move to more adaptive regulation, with more uncertainty mechanisms of various forms. Sustainability First has consistently advocated a shift to more of an adaptive planning approach which goes beyond the regulatory mechanisms to think about how the decisions the companies take about the investments required can themselves be more adaptive (eg choosing equipment that can readily be upgraded if forecasts turn out higher or reserving land that gives you an option to move quickly if reinforcement is needed).
- **The importance of strengthening the stakeholder voice and networks' role on social and environmental issues** - Consumer and stakeholder views should be better incorporated within the price control process. The ways of collating and using these views, in particular in relation to social and environmental issues such as the role of networks in communities and in relation to consumer vulnerability needs to be improved so that Ofgem has confidence in relying on the findings. This will help to build trust and legitimacy and ensure that the regulator is not out of step with public opinion. The focus needs to be on best value for current and future generations, not lowest cost.

We have set out below our answers to the questions in the open letter which build on the themes above.

## 1) Do you have any views on the strategic issues we will face in the development of the next price control review process?

Ofgem is right to highlight the **pace and scale of investment needed** in electricity networks and also the uncertainty around the future of gas.

In terms of the investment requirements on electricity, the ESO's Holistic Network Design (and NOA refresh) have provided a clear view of the investment needed out to 2030, highlighting significant additional investment over that allowed for electricity transmission in the RIIO2 baseline. With the proposed development of Centralised Strategic Network Planning the FSO will be able to provide this longer-term view going forwards.

With the electrification of heat and transport **it is clear that significant new renewable generation** will be required with significant network reinforcement at both the transmission and distribution levels. Historically Ofgem has set a very high bar for transmission investment to demonstrate that it is needed and in ED2 Ofgem ultimately settled on the most cautious of the scenarios for setting its baseline allowances. Given how far we need to go by 2050 **this cautious approach cannot be maintained**. There is growing frustration about low carbon technologies being unable to get connections until the 2030s and also media coverage of the impacts on new housing where the growth in data centres has left the network unable to cope with more demand. **Flexibility is important to make the most of the network capacity we have but it is not a substitute for the significant investment that is needed.**

In terms of the uncertainties around gas, the **implications** of the proposed 2026 "decision" on the **future of domestic heat need to be considered in much more depth**. What would the ultimate decommissioning of parts of the network look like and what does that mean for RIIO3? How do you balance the risk of asset stranding but also the need to maintain safety while gas still flows through the pipes even as customer numbers fall (leaving fewer customers to pick up the bill)? How and

when will decisions be taken on heat decarbonisation and what is the role of local decision makers in that process? Our expectation is that the BEIS “decision” will only address the feasibility of using hydrogen from a technical and safety perspective, not the cost and customer disruption considerations. Indeed, the best option may well ultimately vary across the country depending on local resources and types of housing (as reflected in thinking on zoning for district heating). These factors need to start to come into play in thinking about investment for GD3.

Alongside these major strategic challenges there are other critical areas that need increased focus in RII03:

- **Climate adaptation:** The CCC has regularly highlighted the lack of climate resilience in the networks with the potential for damaging cascade effects across other forms of infrastructure. This issue had relatively little focus in RII02 and needs more profile.
- **Valuing reliability:** In its draft determination on ED2 Ofgem raised questions about the value that customers place on reliability (in particular at this time of high prices). We have stressed the need for Ofgem to revisit its – now well outdated - work on the Value of Lost Load to provide the evidence to address these trade-offs in a world where there is ever greater reliance on electricity. As flagged by Ofgem in ED2, short duration interruptions may also become an area of growing concern.
- **Leakage and losses:** We remain frustrated that these two issues have not been given the focus that they deserve in RII02 given their cost and carbon impacts. Tackling methane emissions has been highlighted by the IPCC as one of the few ways to have a short-term impact on climate change resulting in the Methane Pledge at COP26. Tackling losses is a whole systems issue that is important even as the grid decarbonises as higher levels of losses increase the generation and network capacity required. With technology evolving it should be possible to monitor and manage both leakage and losses in a radically more sophisticated way in RII03.
- **Affordability:** Over recent price controls – and most evidently in RII02 – the falling cost of capital has effectively given Ofgem a “get out of jail free” card allowing significant increases in investment while still delivering falling network costs on customer bills. But that is changing and as borrowing costs go up investment becomes more expensive creating a real tension that Ofgem will have to resolve. While affordability needs to be addressed, the focus should not simply be on lowest cost, but best value, taking into consideration wider social, environmental and economic impacts including intergenerational considerations.
- **Consumer and community vulnerability:** As well as the impacts of higher bills there are significant structural changes that need to be considered, with an aging population and higher levels of long-term illness and disability. The networks have always played a role in supporting their customers in vulnerable situations but there has always been ambiguity and tensions over the boundaries of their role. Many stakeholders also want transmission companies, despite their distance from end consumers, to play their part, in particular in the communities in which they operate but this role and funding has been unclear. In the past this has led to proposals that have strong consumer group support being rejected by the regulator. Much more needs to be done on energy efficiency to deliver net zero (and help tackle fuel poverty) but despite a previous consultation from BEIS on an extended role for networks in this space nothing has happened. An early open debate is needed about the boundaries of the networks’ role in the face of these increased challenges.
- **Thriving environment** – Delivering net zero is crucial but Ofgem also needs to consider wider environmental impacts, including on biodiversity, and planetary resources as part of its

assessments. It is becoming increasingly clear that there is no economy if there is no nature and this needs to be reflected in decision-making.

In process terms thought also needs to be given to:

- **Local actors:** There are new players that need to have a stronger voice around local area energy planning and we would like to see more weight given to local area energy plans in the RIIO process.
- **Whole system and cross-sectoral thinking:** An immediate question is how to bring in a whole energy systems / cross-vector perspective when the timelines for the price controls for the different sectors are out of step. But thought also needs to be given to cross-sectoral issues. For example, as a result of electricity network supply interruptions early this year at least one water company experienced its worst water supply interruption in the history of the company with thousands of households and businesses left without water for many days. These kinds of cross-sectoral interdependencies need to be better understood, and reflected in the companies' incentive frameworks with parties encouraged to engage across the traditional boundaries of sectoral price controls to tackle problems not just in the interests of energy customers, but wider society and the economy.
- **Changing consumer attitudes and fairness** – Nearly a quarter of households don't have cars, many of whom are on the lowest incomes yet they are cross subsidising the rollout of electric vehicles and the infrastructure that supports them. Having an EV ensures cheaper fuel for those who own them and in the future likely lower cost energy. Yet EV owners are often more affluent and typically have significantly higher carbon footprints overall. Ofgem needs to be clear about its attitude to fairness in these kinds of situations and who should pay. While these are primarily network charging issues, they do have implications for how Ofgem approaches "willingness to pay" questions in RIIO. There are also arguments for making a stronger link between RIIO and network charging given that through the RIIO process Ofgem and the companies should be building their understanding of the underlying drivers of network costs.

## 2) Do you have any views on the case for change we have outlined?

We would agree that **(financial) incentives have worked and driven significant improvements** in customer service and reliability.

We remain highly sceptical about the value of **reputational incentives** as they have been used in RIIO2, especially on more technically complex issues like leakage or losses where Ofgem is simply requiring the companies to report publicly on their performance and has no plans at present to provide any sort of comparative assessment. That said, we recognise there can be an important role for reputational regulation on certain issues when performance is comparable and transparent. Sustainability First's research (for Project Inspire) found that, for example, league tables encourage the best to strive to be better still and even the less ambitious companies do not want to be at the bottom of the pack.

While this competitive spirit can be an important driver of performance it is important that it does not inhibit **collaboration** in particular in areas where new approaches and solutions need to be found.

We agree that the process is **extremely resource intensive** but would argue that it doesn't have to be. One of the initial goals for RIIO2 was to simplify the process but a desire to close down any potential loop holes and test and challenge every cost element has shaped the work of the team. The Business Plans were voluminous with myriad appendices making them inaccessible to stakeholders (as we set out in our comments on the ED2 plans) – but in many cases the companies were responding to highly detailed guidance that Ofgem provided about what had to be included. There is a **real opportunity here for some honest “lessons learned” about how to make the process less burdensome for everyone.**

However, we warn against the approach proposed in the PR24 draft methodology in the water sector, where water companies are discouraged from developing bespoke performance commitments in the interests of simplicity. It is important that companies can develop targets and policies that reflect the different needs and priorities of their diverse communities. A quest for comparability of performance must not be at the expense of **regional and local voices**. There is an important balance to be struck.

Related to this is the concern around **information asymmetry**. It is true that companies have an information advantage. To help tackle this Ofgem should consider how it can better support the development and retention of employees with appropriate knowledge, experience and expertise. There are also opportunities to leverage the significant expertise built up in the Customer Engagement Groups and User Groups to help address this imbalance.

We agree that **whole system thinking is important but would argue there still needs to be a sector focus**. The nature of the uncertainties and type of spend (eg how lumpy it is) point to different approaches by sector – but not to completely different forms of regulation.

We would note that the new Accelerated Onshore Investment proposals for electricity transmission have shown that there is scope for RIIO itself to be **more adaptive**.

We agree **that the role of the FSO will be important as an additional valuable source of evidence** on the need for investment. We have seen the real value of the ESO's work on the 2030 network requirements on transmission in making clear what needs to be delivered, based on a clear political commitment. Absent that clear political vision, the FSO cannot provide the same blueprint for gas but will increasingly need to consider hydrogen as part of a whole systems / cross-vector solution (as reflected for example in the ESO Regen work on a Day in the Life of 2035).

The political direction should be provided through BEIS delivering the long overdue **Strategy and Policy Statement**.

Considering all these elements our view is that in terms of the case for change in network regulation, there is a need for the framework to evolve but we would argue that RIIO is sufficiently flexible to accommodate these pressures.

### **3) Do you have views on whether the changes to the electricity or gas sectors mean we should consider alternatives to the approach taken in the RIIO2 price control?**

We agree with the findings in Citizens Advice's recent report<sup>2</sup> on Future Network Regulation that "While the current price control framework, known as 'RIIO', is largely viewed as positive, there are changes needed to make it fit for the future." As set out above, and in line with Citizens Advice's findings, our view is that these changes can be accommodated within the RIIO framework.

We would also emphasise the extent to which internationally the RIIO regime is held up as a role model and would draw Ofgem's attention to, for example, the recent report<sup>3</sup> by the RMI in the US.

We are concerned that Ofgem risk wasting time and resource exploring alternative models – such as those flagged in the open letter - that were looked at before, at the start of RIIO2, and were rejected. There is not enough time anyway ahead of the next price control to work through what a fundamental reset (such as a move to ex post rate of return regulation) would involve.

One of the lessons from RIIO2 was that the time spent at the beginning going round these alternative ideas meant that the timeframes were ridiculously compressed with the Sector Specific Methodology for electricity transmission and for gas published a month before the first draft plans were due in. The quality of the plans for electricity distribution was noticeably higher helped in part by the more timely provision of the Sector Specific Methodology and Business Plan Guidance.

A lot can be done within the RIIO framework and this should be Ofgem's focus rather than exploring alternatives.

#### **4) Are there any broad frameworks or options that you think we should consider, including variants and alternatives to those we set out?**

As set out above we do not consider that a fundamentally different approach is needed. However, there are a number of areas where serious thought is needed to evolve RIIO to meet the challenges identified above and to take on board lessons from RIIO2. These include:

##### *Engagement*

- **Clarifying the role of Consumer Engagement Groups (CEGs) / User Groups (UGs) and the Ofgem Challenge Group.** In our experience the CEGs and UGs are a highly valuable part of the RIIO process leading to significantly better plans through being close enough to the companies to be able to get under the skin of what is proposed but nonetheless able to bring a fresh perspective. Formalising the CEG / UG role is helpful in giving the Groups legitimacy and influence in the companies. It is often the companies that most need challenge and culture change that do not want to listen to stakeholder views.
- **Local area energy planning.** As noted above, local area energy planning can be expected to become increasingly vital in relation to decarbonisation of heat and transport. What weight is given to LAEPs and to the voices of locally elected officials requires thought.
- **Consumer research:** Following the Ofwat / CCW lead, Ofgem might usefully reconsider where responsibility for consumer research should sit and in particular whether it could be

---

<sup>2</sup> <https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/future-network-regulation-delivering-a-regulatory-framework-fit-for-the-future/>

<sup>3</sup> <https://rmi.org/totex-ratemaking/>

more centralised as has been done in water – and as proposed by Citizens Advice in their report. In RIIO2 Ofgem set the value of incentives but did not have the evidence on customer willingness to pay on which to base those decisions. Our [response](#) to the Ofwat consultation on engagement in PR24 sets out our views on this and related issues which Ofgem might usefully consider in reflecting on the RIIO3 approach to research and engagement.

- **Building on the negotiated settlement concept** there could be scope to put more responsibility on CEGs / UGs for agreeing at least some social and environmental actions that have a local focus. The vulnerability UIOLI allowance on gas distribution is a possible model for this, taking decisions on the precise form of support provided outside the price control process.

*Putting the plans in context:*

- Linking price controls to **longer term plans**: One of the problems with RIIO is its focus on looking at the world in five year chunks. However, separately, the networks have requirements to produce ten year Network Development Plans, for example. Finding a way to make linkages between the price control and these longer term plans (as Ofwat are seeking to do in PR24) is a way to bring in a longer term perspective.
- The role of **scenario planning**: In RIIO2 (and particularly ED2) Ofgem has put a lot of store by the FES and CCC scenarios with a requirement that companies show how their plans could flex for different scenarios. A clear lesson from ED2 is that, uncomfortable as it may be, Ofgem has to provide direction as to which scenario should be used as a central case to aid benchmarking – even if networks then want to make the argument for a different scenario based on their local engagement. It is also important that in testing plans against alternative scenarios this is not simply about how the costs change but also deliverability and the lead times involved.
- This relates to our call for more focus on the **adaptive planning** approaches used in water (and advocated by Citizens Advice) as a way to handle uncertainty. The [slide pack](#) that we have prepared on this topic has been shared previously with Ofgem and we would be happy to take colleagues through it again in this context if helpful.

More fundamentally though we would come back to the issues we raised at the start of this letter and the need to be clear what the challenges are that need to be addressed in each sector.

**For transmission the imperative is around accelerating the regulatory approvals for the significant levels of strategic investment required.** The LOTI mechanism was a way to deal with uncertain investment but has already been shown to be too slow and too conservative. Ofgem’s proposals for accelerated onshore investment, underpinned by a clear needs assessment by the ESO, provide a template for how a more streamlined and strategic process might work. This would leave much of the major investment spend being settled outside the 5 yearly RIIO process - but in our view there is still value in retaining the 5 yearly cycle as a chance to do a stock take on cost of capital, operational costs and wider elements of the incentive package.

**For gas distribution and gas transmission the challenge is around how to deal with the uncertainty on the future of gas.** A re-opener is a superficially easy answer but the issue is too fundamental to simply put it off in that way. While it is difficult, Ofgem urgently needs to work out with government what the nature of the 2026 decision could be and what the nature of the uncertainty therefore is. The GDNs have been doing a huge amount of thinking through their Gas Gone Green programme on what an ambitious hydrogen strategy looks like. What hasn’t been articulated is what the future of

the gas networks would be in a heat pump world – will they all actually still be required until 2050 when the last million or so customers move away or how will that be managed? Conversely a real push for hydrogen as part of a national energy security and growth strategy could see significant investment required in targeted areas. Articulating at least the known unknowns is the first step in designing uncertainty mechanisms to cope with them. As well as the design of uncertainty mechanisms there will also be implications for asset lives (currently set at 40 years for gas distribution)<sup>4</sup> and potentially a radically different approach to the recovery of the fixed network costs across a declining customer base. The debate on stranding risk that played out in the CMA appeal illustrates this point.

**For electricity distribution the challenge is again around the level of strategic investment required.**

Having opted to place more reliance on flexibility in ED2, it is inevitable that significant investment will be needed in ED3. However, the same challenges will arise around how to deal with the uncertainties in demand growth and the trade-offs with flexibility. The fact that there are still significant concerns being voiced by all parties around the design of the volume driver for load related investment shows both that this is a difficult problem but also the dangers of leaving these fundamental points of “detail” until so late in the process. We have also noted in our response on Draft Determinations that Ofgem has accepted very different models of the DSO role across the companies. For ED3 a clearer and more consistent direction will be needed.

Through its open letter Ofgem is placing a focus on the cross-cutting elements of the RIIO framework and whether these are fit for purpose. In our view this is not really where the issues lie and in developing its timeline for RIIO3 it is imperative that Ofgem allows enough time for proper consideration of the sector specific design issues which in our view are where the greatest challenges lie.

Yours sincerely

Maxine Frerk Associate Sustainability First

Cc Judith Ward, Zoe McLeod

---

<sup>4</sup> The Grid Edge Policy paper on asset lives in ED2 (submitted in response to the Call for Input on the Business Plans) highlights the complexities around the simple sounding idea of changing asset lives and advocates a different model based on the approach in water