RESPONSE TO RIIO-ED3 Framework consultation

15 January 2025

To: RIIO3@ofgem.gov.uk

Sustainability First is an independent charity and think tank focused on promoting practical solutions to deliver fair and sustainable energy and water sectors. We have published and engaged extensively over many years on policy, regulatory and consumer issues including in relation to previous RIIO price controls. We have participated in the ED3 working groups which have provided useful additional information to the consultation.

Summary

We welcome the opportunity to contribute to the development of the ED3 framework. The focus on the electricity distribution sector supporting decarbonisation at speed is welcome but must be balanced by Ofgem ensuring that this is done in a fair way, protecting the full interests of consumers.

We have responded to many of the questions in detail in the attached note.

On the main policy issue in the consultation, the shift towards "Plan and deliver", we agree that the framework should enable some anticipatory strategic investment (particularly at higher voltages), but we don't support a wholesale shift from incentive regulation even for load related investment. We strongly believe that better outcomes will be achieved by focussing on decisions taken with the best information and capability, using incentive regulation to align interests on the desired outcomes. For the vast majority of distribution load related investment, this means decisions taken by DNOs on an ongoing basis, based on new incentives to avoid delays to decarbonisation provided these can be developed as part of the price control review. DNOs should be able to choose from a range of solutions, including use of flexibility without building a backlog of investment. We expect the RESPs will add significant value in time, but caution against heavy reliance on the RESP for ED3.

We are disappointed that the framework consultation takes place in a context where stakeholders lack the necessary information on DNO performance to give an informed response. Transparency is poor, and has worsened over recent years, despite Ofgem's desire to rely on reputational incentives for so much of the important work that DNOs do. Requiring DNOs to publish glossy reports is of little value. What is needed is comparative assessment and reporting, to understand both absolute and relative performance, along with more explicit mechanisms to inform stakeholders (including but not just ISGs) and to hold DNO management to account. Without this, Ofgem's proposals on a wide range of environmental and societal issues rest on very weak foundations.

On customer and stakeholder engagement, we recognise some improvements have been made but see a long way to go. ISGs need to be better empowered to improve DNO engagement and there is a case for some collaborative research, including more use of deliberative techniques. Engagement with harder to reach groups needs to be improved, in terms of research with particular customer groups and also avoiding stakeholder

engagement and Ofgem consultations in practice favouring energy companies over public interest stakeholders. We also see a need to strengthen the evidence base from SMEs.

On environmental issues, the framework consultation talks about a greater emphasis which we welcome but seems not to back this up with practical measures. We advocate a broader approach to climate resilience, stronger measures on losses and SF6, and fuller consideration of the range of environmental issues including biodiversity. We look forward to the mid-period review of AERs.

On the scope of the DNO role, we are disappointed that the consultation does not build on previous experience. We see scope for a greater role for DNOs, on things like energy efficiency and potentially smart meters, starting with trials, but this needs a different approach from Ofgem to take the opportunities to add value.

As a final note, we recognise that the RIIO framework has become increasingly complicated and new measures are added at each review. Depending on the policy choices Ofgem takes, there may be scope for consolidation and some simplification – this is hard to assess at this stage but should be borne in mind as the methodology is developed, not least as without this there is a risk of stakeholder engagement and consultation becoming less and less effective.

As noted above, we provide much more detail on these points and several others in the annex. As ever, we would be very happy to discuss any of the points we make and to bring constructive suggestions to give RIIO-ED3 the best chance to succeed.

Yours sincerely,

Martin Crouch

Associate
Sustainability First

cc: David Murray, Zoe McLeod, Judith Ward, Maxine Frerk, Martin Hurst, William Baker, George Day

ANNEX Answers to selected questions

Drivers for change

Q1. Do you agree with our characterisation of the wider context for ED3? Are there any other areas of context that you consider material for ED3?

We recognise the drivers for change identified in the consultation and agree that they will be significant. We consider that there is still considerable uncertainty in how the use of electricity will develop over the ED3 period – for example, history suggests that electricity demand in 2030 may be more likely to be outside the narrow FES 2024 range quoted than within it. As well as the likelihood of forecasts being wrong, it would also be prudent to recognise that new policy decisions such as REMA seem to take longer than we would hope and target deadlines for sectoral action such as ending sales of internal combustion engine vehicles or new gas boilers seem susceptible to change. On the other hand, some changes will undoubtedly happen faster than we expect.

Perhaps even more significantly, the consultation ignores some of the biggest changes that customers are facing – such as the huge increase in energy bills and the broader cost of living crisis. By quoting only national metrics, it misses the divergence of experience across different customers, both on a segmental and geographic basis.

Linked to above, the consultation also ignores significant social trends including those outlined in Ofgem's Consumer Vulnerability Strategy Refresh consultation. For example, an increasingly ageing and disabled population which will result in a step change increase in communication and access needs. The growth in single households with no support networks, which has implications for household resilience and demand for services. Growing relative poverty and financial and digital inequality including unequal access to smart meters, which has implications for ensuring nobody is left behind in the transition to net zero and 'what is fair'. These are just a few illustrations.

The uncomfortable truth is that there is a small but growing minority of the public who are actively anti-net zero policies, which will impact acceptability, trust, demand for services, and perceptions of value for money. Our literature review for National Grid found that while the majority of the UK population are concerned about climate change there is also a gap between public concern, willingness to pay for change and willingness to take action if it impinges on people's lifestyles or costs them more. Concern does not always translate into support for action on climate change and there is significant regional variation.

Another important element of context for ED3 is whether the DNOs are currently delivering what is required of them and whether they can be relied upon to take decisions in response to regulatory incentives in the future. While there is a lack of transparency about current performance due to the absence of annual reporting by Ofgem or any alternative, it seems that the current incentive regulation of DNOs has been relatively successful, compared to other sectors, albeit with some weaknesses in the regulatory model (such as in relation to losses).

ED3 objective and consumer outcomes

Q2. What are your views on our overarching objective and proposed consumer outcomes?

We support the goal for ED3 of delivering decarbonisation goals at least whole system cost. This effectively requires consideration of what is best value to customers and wider society. However, it is not sufficient to consider least average cost – the differential impact on different customer groups including vulnerable customers and the need to mitigate the risk of them being left behind needs to be reinstated.

We welcome the focus on lowest cost over time. Sustainability First's independent research for National Grid found that a majority of people support the costs of investment in infrastructure being frontloaded on bills if it results in lower bills overall and longer-term. Though a minority were against this either because they couldn't afford increases themselves or were concerned about the financial cost on others including small businesses in the cost-of-living crisis.

Considerations of least cost also need to consider inter-generational fairness. Issues of intergenerational equity are of growing importance and in Wales of course have a statutory underpinning. There's no agreed framework as to how to understand and address inter-generational fairness issues. However, there are a handful of tools that may be of use to Ofgem in its decision making: Sustainability First and Frontier Economics' strawman framework for assessing intergenerational equity and its prompt questions; Treasury Greenbook, though arguably this needs updating; the Framework for Intergenerational fairness tool; and the Environment Act's 'Polluter Pays Principle'. The Office of Future Generations Commissioner has also been set up in Wales to help organisations think about the long-term. We'd recommend further research in this area and are happy to discuss this further.

We have no particular comments on the four consumer outcomes, recognising that the "responsible business" one seems to be used as a catch-all for important outcomes that don't fit anywhere else – which may question whether this presentation is particularly useful especially as it's not really an accurate use of the phrase. For example, reliability matters to consumer but could probably be included under any of the four outcomes. Delivering reliability isn't part of being part of a responsible business in consumers eyes, it's part of core service (a hygiene factor they would expect to be delivered by an energy network company). It would be helpful for Ofgem to be clearer how (or whether) it intends to use the outcomes to drive its decisions.

Regulatory framework

Q3. Do you agree that the network investment elements of the framework should be more input based?

We do not consider that Ofgem has demonstrated that network investment regulation should be more input based, in the sense of being specified by someone other than the DNO well in advance. While the differences between transmission and distribution are summarised in para 6.2 of the consultation, the proposals appear to forget these distinctions.

Ofgem should consider who is best placed to make decisions, given the need for "hundreds of thousands of (mostly) small, replicable, labour-intensive, local interventions to the individual network assets", that "typical lead times for most reinforcement projects on the lower voltage parts of the distribution network are much shorter than transmission" and the "uncertainty around the timing and location of low-carbon technology uptake" (para 6.2 pf the Framework Consultation).

The framework document draws on Ofgem's 2022 modelled estimates of distribution network capacity needs under different scenarios. That modelling also makes the cost-benefit case for bringing forward load related expenditure (albeit only in the context of networks not becoming any smarter). Ofgem indicate that by 2035 half the primary network and one-fifth of the secondary network could be operating at maximum capacity at peak' (para 1.10; para 6.6 footnote 21). Even so, this leaves significant network capacity which may not be constrained by 2035, especially at lower voltages. In fact, the model document notes: 'In reality, the level of network utilisation and therefore spare network capacity varies very widely between Great Britain's different regions and network types. There is also a very high level of variation within specific regional networks. As with any such forecast, some of these projections will be too high or too low, which implies that relying on forecasts will lead to delays to decarbonisation where reinforcement turns out to be needed but is not forecast, as well as additional cost from investment made but not yet needed.

This fails to make use of the best information available. Indeed, DNOs have been directly funded in ED2 to deploy new network sensors and monitors, including at lower voltages. They should therefore demonstrate how their ED3 LRE investment plans take on board this improved monitoring data. DNOs must show what improved monitoring tells them about today's network bottlenecks, especially at lower voltages – and must also demonstrate how they are making use of this new network data in their own models to inform both the geography and the timing of their plans to tackle network constraints now and through the early-to-mid-2030's

As we comment below, we see weaknesses in the ED2 approach that need to be addressed.

Q4. Do you agree that we should consider introducing additional controls around network investments and what features should these controls contain?

Q5. Do you agree that the incentives on DNOs will need to adapt from RIIO-ED2 and if so, how?

Combined answer to Q4 and Q5

One of the main weaknesses of the ED2 approach was that Ofgem was more focussed on ensuring that it provided sufficient funds for DNOs to pay for network investment and failed to put in place any mechanism to ensure or incentivise that DNOs undertook the most

effective and efficient investment to minimise potential delays to decarbonisation. It seems unlikely, particularly at lower voltages, that either the NESO or Ofgem will be able to specify well in advance, what the optimal investments will be and particularly that they would do a better job than DNOs who have better information and are able to update their plans in a more agile way, if only the DNOs could be trusted to be trying to minimise delays. We would therefore strongly advocate that Ofgem seek to develop metrics to measure delays and an incentive to minimise delays – which would then drive the DNO response in a similar way to the interruptions incentive encouraging the DNOs to minimise interruptions in a cost-effective way.

If, as discussed further below, Ofgem is also concerned about DNOs building up a backlog of future reinforcement needs, then again Ofgem should seek to develop a measure of the potential backlog and require DNOs to keep this below a threshold, perhaps analogous to the approach for non-load investment of tracking and limiting the network asset risk metric (NARM).

Q6. Do you agree that there is still a role for re-openers in ED3, particularly given the timing of the future full RESP output and how should these be triggered?

We agree that there will likely be a need for "re-openers" – or at least the flexibility to vary required outcomes rather than wholesale re-openers. Where practical, use of volume drivers is likely to be preferable to more open-ended (and slower) reconsideration but must be twinned with incentives to deliver the required outcomes.

We do not agree with the view that seems to be implied that the first full RESP output will be a perfect forecast of future needs.

Q7. Using RIIO-ED2 as the counterfactual, what alternative regulatory models or characteristics are needed in ED3 to ensure the DNOs deliver the above consumer outcomes? What are the trade-offs we should consider?

See answers to Q4 and Q5.

Q8. Do you agree that the regulatory framework for ED3 should have features of the Plan and Deliver model for network investment and Incentive Regulation model for other elements?

We do not agree that the distinction is this simple.

We recognise that a more "Plan and Deliver" approach is needed for electricity transmission and that it is likely some aspects of this model may be needed for the more strategic investments at the highest voltages of the distribution network, including investment ahead of need. We do not consider that a Plan and Deliver model has been shown to be appropriate for the lower voltages, with thousands of decisions. At a minimum, it is worth trying to develop an Incentive Regulation framework which aligns DNOs interests with Ofgem's objectives and makes best use of their better information and ability to adapt as information evolves. We note that Ofgem has not yet tried to develop incentives on these lines and consider this should be a priority for 2025. This may lead to elements of "Plan and

Deliver" for some strategic investments at the higher voltages and a largely incentive-based approach to most network investment, particularly at lower voltages.

Q9. Do you think that there is a greater role for elements of ex post regulation or of cost pass through in ED3, either specifically in assessing cost changes resulting from changes to investment requirements during the period, or more broadly to reflect the changing context?

We consider that Ofgem needs to give greater focus first on securing the required outcomes and then assess how the framework can support that being done efficiently to avoid excessive costs to customers.

Networks for net zero

Q12. Do you agree that the risk and downside for consumers of network underinvestment in network reinforcement would be greater than the downside of overinvestment?

We agree that in particular locations at higher voltages, the balance of risks has shifted such that a bias to more investment is likely to be appropriate.

Our independent consumer research for National Grid identified public support for energy companies investing in infrastructure to 'get it right first time' and to build in advance to meet future need- effectively supporting anticipatory investment. At a household level, it is important that there are no barriers to behaviour change i.e. significant delays to connections could deter people from adopting low carbon technologies.

However, it is too simplistic to extend this by analogy to an entire distribution network. The risks to consumers do not come from the aggregate level of investment in the way the question implies. One of the main downsides of over-prescribing investment is that it will be in the wrong places and hence omitted in other places where it is more urgently needed – investment everywhere across the network is unrealistic.

In particular, investment decisions should be based on the best available information, using improved network data to refine the timing and location of reinforcement and to fit with increasingly dynamic operation of distribution networks.

The outcomes of these decisions need to be captured and demonstrated through regular transparent reporting, to hold to account whoever is driving the process, whether that is the DNO or some combination of Ofgem and NESO through the tRESP process.

Q13. What are the benefits and risks to deliverability if network reinforcement is deferred to future periods?

This depends on the extent and nature of deferral and what the additional time is used for. If the investment cannot be delivered when needed or if the need for capacity is temporary, then use of flexibility to defer the need for investment has clear benefits for enabling customers to connect. We agree that building up a backlog of deferred investment could become problematic but consider that this could more effectively be addressed by regulatory rules to limit the build-up of a backlog rather than to limit the use of flexibility.

Q14. What do you see as the role of distributed flexibility, both in the short and longer term, to manage distribution network constraints?

See answer to Q13. Temporary use of flexibility can also facilitate larger capacity increments being delivered later in a more cost-effective way under a "touch it once" model. We also see that use of distributed flexibility for network constraints can help to prime the market for distributed flexibility, which can then be used more widely across the system.

Q15. How do we ensure that network flexibility is used only when it is in consumers' long-term interests in ED3?

If network flexibility is in consumers' short-term interests, why can it not be used on a short-term basis?

Q17. Do you agree that the tRESP output outlined for early 2026 will help create a level playing field for DNOs' business planning and support the ED3 objective and consumer outcomes?

We have high hopes for the tRESP output but for the overall RESP process to be a success it is important not to place unrealistic expectations on it. We consider that Ofgem should work to make it as useful as possible but not place excessive reliance on it.

In practice we expect the tRESP output for ED3 will of necessity be limited so Ofgem must maximise the extent to which it can utilise DNO Business Plans, including making use of network monitoring data. The remainder of the ED2 period and early ED3 will then be a critical time for the RESP to get to grips with the DNO network models and inputs – to maximise the RESP role in ED4.

An early role for the RESP process may be to look beyond energy sector planning to join up with spatial planning (for housing developments, data centres etc) to promote a more holistic approach where broader developments are planned taking into account what is achievable in the energy sector (and other utilities), rather than in isolation and then appear to be frustrated by constraints in the energy/utility sector that could have been taken into account at an early stage.

Q18. Can anticipatory network reinforcement be used to smooth the long-term build profile to avoid creating pinch points for the supply chain and workforce? What are the risks and trade-offs?

See answer to Q12 above. As the voltage level reduces, the case for anticipatory investment declines due to shorter lead times and differences in information (e.g. less reliance on a law of large numbers). More sharing of potential long-term build profiles, recognising the uncertainty would help provide a more informed basis to assess this question. Consideration of supply chain pressures should be seen in a wider context. The ED3 period may coincide with a peak period of concerted infrastructure spend and could therefore be the worst time to encourage more investment that isn't really needed yet, adding to failures to deliver and inflationary pressures.

In view of this risk that accelerating investment prior to the supply chain being ready could lead to cost escalation that more prior notice might mitigate, we note that Ofgem collects volumes of data from DNOs which would enable this to be monitored and mitigated through adaptation of plans. We aware of this information being assessed or published, which would seem to be an important step.

Q19. Do you agree that investment optioneering should aim to reduce the lifetime costs by sizing elements of works for long-term need, including considering the impact of thermal losses?

Yes

As set out in our response to question 60 we see it as vital that more attention is paid to losses and hence agree that these should be considered as part of investment optioneering.

Q20. Is a 5-year price control (2028-33) the right duration to achieve the objective of securing timely network capacity for the net zero transition at least cost to consumers over the long run?

The duration of the price control has become less significant as more changes are made mid-period. However, we think the risks of building up a backlog of forecast errors exceeds the benefits of longer-term certainty, so would not support delaying the next reset beyond 2033.

Q21. To what extent should the price control be more directive on specific anticipatory and strategic investments to achieve the 'networks for net zero' consumer outcome?

As explained above, we believe that the electricity distribution price control should be more directive on outcomes and incentives based on measures of those outcomes. There will be a case for pre-specifying some specific anticipatory and strategic investments at the highest voltages, but this is likely to be the exception rather than the rule.

So rather than a focus to "strengthen the accountability of DNOs for the delivery of an agreed investment plan" (para 6.52), which risks reducing the accountability of DNOs for outcomes such as avoiding delay to decarbonisation (and risks Ofgem repeating the mistakes of environmental regulation in the water sector), we would prefer to see the DNOs given ownership of the outcomes and tasked to find the most effective solutions. In some cases, this will involve more anticipatory investment, in others it may require investment in agility to respond quickly to emerging issues or in use of flexibility.

Q22. Do you agree with our characterisation of strategic and anticipatory investment and our expectation that these activities would have different regulatory drivers and controls?

The distinction drawn between strategic and anticipatory investment is not entirely clear in the consultation. We see value in some prescription of investment that is both strategic and anticipatory in nature at the higher voltages to ensure this is prioritised as early as possible in the price control period. We would expect less prescription beyond 2030 as uncertainty increases over time, although more definition may be possible once the full RESP is produced, perhaps through a limited re-opener.

Q23. Should the price control provide more guidance or guardrails around the use of particular network solutions to achieve the 'networks for net zero' consumer outcome?

The price control should focus on the outcomes sought and incentives to deliver those. In the main, distribution companies are better placed to judge which network solutions are the

best way to deliver the outcomes than Ofgem, if the incentives can be put in place. Use of additional constraints should be a last resort.

Q24. Should we consider how we might bring all network capex investment together within the framework, irrespective of driver (e.g. load, asset health, resilience), to ensure a common approach to future proofing and delivery?

If the question is whether use of a “plan and deliver” model should be applied to all network capex in a “big bang” change or first to load related expenditure, so that lessons can be learned, then the latter would be closer to good regulatory practice unless the current model is shown to be broken. The consultation document does not make a persuasive case to change the model.

Responsible business

Q25. How can we better strengthen accountability for consumer outcomes?

Q26. What are your views on ED company reporting and the overall transparency of performance and compliance?

Answer to both Q25 and Q26.

We agree with the consultation that more can be done, and that transparency is an important part of this. However, this requires a significant change in approach by Ofgem rather than by the DNOs.

Transparency of performance and compliance is poor and has weakened over time as Ofgem has deprioritised this area. “Improvements” to regulatory reporting that are referenced within the consultation have not provided any improvement in information for stakeholders. Requiring DNOs to publish glossy reports in incomparable formats does not help. Stakeholders do not have the resources to dig deep for comparable information and it would be more efficient for the comparison and summary to be done centrally and provided for all, which is also more likely to provide unbiased information. Ofgem must take the lead on ensuring comparative reporting happens, albeit there are alternative approaches to delivering this. We would be happy to discuss with Ofgem in more detail how this could be achieved.

Ofgem has committed customer funding to deliver business plan commitments but does not hold companies to account for delivery. While the ISGs can monitor delivery, they lack the means to hold the company to account (i.e. to take action consequent on non-delivery) without support from Ofgem. There is scope for more collaboration between ISGs and Ofgem to be more effective than either could be alone.

Where the incentives on DNOs are reputational, whether as formal reputational ODIs or through other reporting, then Ofgem needs to do more to make reputational incentives effective. This can be done at relatively little cost to Ofgem, partly through comparative reporting but also potentially through use of panels to evaluate and report on DNO performance and/or through open hearings where DNO executives can be questioned.

From a stakeholder perspective, we see two changes to how communication happens. Firstly, the information should be communicated with the audience in mind, which implies a range of reports responding to the interests of different stakeholders (e.g. customer service, environmental, customers in vulnerable situations, community impacts etc). Secondly, proactively informing stakeholders of what is available when and where, rather than assuming they know what exists and will have time to find it.

While not perfect, we think it is worth exploring development of a common approach to social return on investment metrics as a supplement to traditional cost benefit analysis. This helps to better capture whole system value (not just energy system value) including growth and big picture efficiencies. We are currently carrying out some research on best value social value metrics and would be happy to share this once it is complete.

Q27. Do you consider that ISGs alone are sufficient to ensure high quality and effective consumer and stakeholder engagement throughout the ED3 price control? What alternative or complementary approaches should we consider?

The ISGs can play a valuable role, but other steps would also help. We outline some options below.

ISG role

The ISGs have led to improvements in consumer and stakeholder engagement by DNOs. However, they can't do it alone. They need to have the support of Ofgem to be truly effective. To support them in their role it's important that Ofgem:

- Ensure there is a mechanism in price control frameworks to incentivise engagement (carrot and/or stick) so as to drive further improvements in company engagement maturity. This is especially important to encourage effective partnership working and cross-sector collaboration which they may be less likely to do as it can be more expensive, complex and time consuming. e.g. if the company fails to reach the appropriate standard, they may face a penalty or not be able to access financial rewards. This sends a clear message to companies that engagement is valued by the regulator.
- Reference consumer research and insight in any Ofgem draft determination to demonstrate that Ofgem has genuinely considered engagement findings.
- Continue to set standards for high-quality engagement (not all ISGs naturally set the same bar as to what good looks like) and share examples of good and innovative practice. Linked to the latter ensure all groups have research and engagement experts on them – this is not always a given.
- Set expectations as to what good ISG engagement scrutiny might entail. There's significant variation in the breadth and depth of ISGs' challenge of engagement. For example, as a minimum, ISGs should review the company's proposed strategic engagement approach including any gap analysis to ensure value for money (too much engagement is duplication of work already done) and review the key engagement questions being asked – are they the right ones at the right time in the process. Also observe key pieces of research as there can be a disconnect between how research is described by companies in their write-ups and how it is delivered in practice. In addition, review the company's approach to representation and inclusivity, triangulation and reporting. For example, to ensure DNOs report not only the views of those that support their proposals, but minority voices and dissenting views – explaining how they considered these voices and trade-offs made. We are happy to discuss this further.
- Continue to require companies to submit a clear strategy and plan for consumer and stakeholder engagement during the price control period to Ofgem. This strategy should be informed by the ISGs and describe how the companies will incorporate best practice.
- Continue to require companies to document how they have responded to recommendations and challenges made by their ISGs.

Centralised engagement

We support some centralised engagement by regulators/companies in order to inform common standards across all providers and therefore common minimum service standards for all consumers regardless of their location or provider. This can also be especially useful for engagement for customers in vulnerable situations or harder to reach groups, which can be more expensive to deliver. In designing this central engagement, we would encourage Ofgem to ensure that it benefits from the challenge and expertise that has been provided by ISG experts.

However, beyond those minimums, Sustainability First argue that engagement in the monopoly water and energy sectors should be owned and led by companies, whilst avoiding inconsistent approaches which undermine regulators' willingness to use the research findings. Structures should where appropriate recognise the growing role of local decision making, especially in energy, and companies should have the flexibility to respond to community need, deliver cross sector solutions that can maximise public value where they have appropriate assurance mechanisms in place.

For example, in the water sector for PR24, Ofwat worked collaboratively with the statutory consumer watchdog CCW and the industry to develop common centralised research. The equivalent of the ISG Chairs group Chair also sat on this group and fed back to the other ISG Chairs. Some research was directly designed and delivered centrally, other research was designed centrally and delivered by the companies' own providers. Ofwat's decision to centralise research was intended to drive cost efficiencies, acknowledged the different challenges of engaging between different sized companies, and was driven largely by the fact that the regulator had found it hard to compare the results of research and have confidence in the quality of findings during the last price control PR19 due to variations in approaches. Carrying out centralised research appears to have given Ofwat more confidence in the research findings. However, the process has not been without its problems. In particular, it had the unintended consequence of discouraging some companies from carrying out their own research – arguably putting back the consumer centric culture change that had been achieved during the previous price control; the whole process didn't sufficiently recognise regional variation in consumer needs, expectations and priorities and perhaps most disappointingly, appears to have discouraged innovation in engagement and in proposals. This was a shame, as some of the more innovative performance commitments in PR19 became common outcomes in PR24. Others that had been co-developed with key community and stakeholder groups and strongly supported in PR19 were dropped causing frustration to stakeholder involved in their development. The quality of engagement (design by committee arguably didn't enable the best quality research) was also criticised by many of the ISGs and there was the lack of transparency around the process. Where research was delivered by the companies, there was still variation in approaches, so it was an imperfect process.

We recognise that the situation in energy is different from that in water. We see an important role for collaborative research in ED3, especially deliberative engagement on some vulnerability issues and also common themes e.g. customer views on reliability, intergenerational fairness, attitudes towards cross-subsidising energy efficiency and affordability support and how to develop inclusively designed services.

Public forums

In the water sector the companies were also required to set up 'Your Water, Your say' discussions. These were public forums where customers and stakeholders had the chance to directly question and challenge water companies' future business plans in public meetings. These were independently chaired by someone recruited by CCW. Ofwat attended the meetings which were facilitated by CCW, and companies were required to report on how they had responded to issues raised. These meetings varied in quality and representativeness between water companies and had advantages and disadvantages which we are happy to discuss.

On balance, we think this kind of approach would be difficult to apply for ED3 as a whole as the DNO are less directly consumer facing and we suspect that there would be a fair bit of confusion between DNOs role in the energy system and that of energy suppliers or

generators which may make a short open public forum of this kind less productive. If the necessary improvements in transparency of DNO performance that we recommend above are made, there could be scope for public fora to discuss

RESP structures

We agree the development of RESPs provides a further (exciting even) opportunity for place-based engagement. We welcome that DNOs will be expected to work closely with the NESO, local and regional government, communities and developers of energy services and projects, to support the development of RESPs. As we outlined in our response to Ofgem's consultation, there are a number of safeguards and steps that will need to be taken to ensure community and consumer views are genuinely part of the conversations at this level including the provision of funding.

Delivering engagement related culture change

Innovation funding is always powerful in driving a focus on better engagement as is including engagement in any assessment of the business plans or performance.

We strongly encourage Ofgem to develop a stakeholder engagement satisfaction performance metric to capture the views of key community groups, NGOs, charities and wider civil society groups. ISGs would need to be involved in the shaping of this metric so that companies didn't just include those organisations they fund and directly work with.

If they don't have it already, Ofgem could also encourage DNOs to include consumer and engagement performance as part of their staff performance incentive schemes. We understand UKPN did this and it had a very positive impact on its customer satisfaction scores.

Proportional engagement where it matters

We continue to emphasise the importance of a proportional approach to engagement and activity being focussed where it is most needed and can have the biggest impact. Materiality however cannot be judged on financial impacts alone, as many decisions which involve relatively small sums of customers' money are of high importance e.g. in terms of reputation, trust, satisfaction, impact on day to day lives. DNOs must have the flexibility and incentives to engage on these issues at a local level.

For more detail on how engagement can maximise public value in the energy sector see our report.

Q28. Do you agree that Ofgem should adopt research approaches, such as deliberative techniques to ensure that the consumer voice is heard and considered throughout the ED3 and company Business Plan process?

It is critical that Ofgem's decisions are informed by consumer and community views. Good practice is to identify the research questions that need to be answered. To then carry out a literature review of what insight is already available (gap analysis), assessing its quality, and then undertaking research to plug or update any gaps in understanding. The kind of research (whether, qualitative, including deliberative, or quantitative) to be used will depend on the type of research question to be asked and who is being engaged.

We have consistently advocated for making more use of deliberative techniques to provide insights into complex issues, and trade-offs around the energy transition and fairness issues

including what is a fair return, the role for choice in the transition, and intergenerational fairness. Deliberative engagement can be especially useful to understand the values that drive decisions. Values can remain remarkably consistent over time while individual policies may need to change.

Sustainability First with Yonder recently undertook some deliberative research for National Grid to explore consumer attitudes towards bill profiles and trade-offs between short and long-term affordability and investment in infrastructure. This in turn also informed the design of quantitative engagement on the same issue which improved the insights from this research. The research has been shared with Ofgem's Board who can provide feedback on the benefits.

It should be noted that deliberative engagement takes time and expertise to do well. In particular to design and develop the right framing and materials to inform discussion in a neutral way and facilitate appropriately. The regulator should also be mindful that the public can give different answers to the same questions dependent on whether you ask them as a customer i.e. a bill payer or as a citizen (taxpayer/community member). This is especially relevant to Ofgem's more societal focused duties.

Capturing the story of deliberative engagement can also be powerful and has great value. There's a body of evidence that suggests the process of decision making and transparency around how decisions are made is as important as the decisions themselves to building trust, acceptance and legitimacy in decision making.

There is also strong stakeholder support for further research to better understand public attitudes towards net zero policies and involving consumers more in decision making.

Customers understand compromise, and that no outcome is perfect. Deliberative studies remind decision makers that the public are not expecting the ideal per se. Evidence that efforts are being made to strive for the best outcome possible are likely to be important in achieving acceptance of approaches and changes that are not in line with their views and values.

Beliefs about 'procedural justice' such as having a voice in the processes used to make decisions about the energy system, and perceptions of being treated with respect, openness, and honesty from energy companies and regulators help to build trust and strongly influence levels of acceptability and willingness to pay.

SF's associates include a number of deliberative engagement experts, including one of the pioneers of citizens juries, those involved with consumer labs, and professionals who have previously run Ofgem's consumer panels. We would be happy to discuss this further and share learning.

Q29. How should our approach to enhanced stakeholder engagement be adapted to better include the perspectives of all vulnerable customers, including those that are seldom heard, digitally disengaged/excluded and those that are worst served?

We make the following comments:

Further strengthen Ofgem's engagement culture.

- Ofgem needs to strengthen its own engagement processes. This includes improving engagement planning and representativeness (working groups for example are often industry dominated as third sector organisations lack resource to attend); properly map its interested and impacted stakeholders; update and share of best practice regulatory engagement and systematically train all policy staff in stakeholder engagement so they have the tools and confidence to engage well. There needs to be more timely sharing of key data and insight; the strengthening of the voice for the longer-term in decision-making and where possible cross-regulator engagement strategies on shared issues.
- As a simple step Ofgem should *proactively* reach out to interested and impacted stakeholder groups who work with and for those in vulnerable situations and who are seldom heard - explain what ED3 is and how it impacts them, ask them how they would like to be engaged, and explain how they can get more involved. This involves tailoring communication.

All parties should support and build the capacity of public interest groups and hard to reach people so their voice can be heard.

Third sector charities, NGOs, and civil society organisations in particular, can be resource constrained, unable to fund travel or take the time to engage including responding to consultations. Local authorities are also heavily resource-constrained and can find it difficult to participate in engagement. Ofgem and companies should recognise and respond to this.

Engagement standards

- Continue to set high-quality engagement standards for representative and inclusive engagement and require companies to follow these with ISG scrutiny. Ofgem should also follow them themselves – (walk the talk) and provide detail on what good looks like. The following checklist is taken from Cadent Gas's RIIO-2 CEG's Quality of Engagement Assessment Framework. It applies equally to regulators as to companies.

Criteria 2 – Inclusive

Of all stakeholders, including consideration of hard to reach groups as well as the needs of both existing and future consumers

Key areas of consideration	Evidence
Inclusive of all stakeholders	Has the company effectively engaged with and understood the needs and requirements of its different customers and stakeholders (as appropriate) including: • Circumstances that make them vulnerable? • Views across the whole of its geographic regions? • Different types of businesses • Younger people/future consumers? • Its staff? • Its board, including shareholders? • Community and public interest groups?
Accessible engagement	Did the Company make business plan engagement as accessible as possible? For example, in consideration of: the tasks and timelines; contact persons; technologies; ground rules; comfort requirements; accessibility of locations and materials; resource requirements; budgets; channels of communication; monitoring and evaluation; neutrality of locations; need for anonymity; religion; family and other responsibilities; time; language barriers; disability. • Are the company's communications clear and inclusively designed (easy to read, understand, in plain English)? • Was the engagement approach appropriate to the group's level of knowledge, interests, and nature of its relationship with Cadent?

- In good practice engagement you engage the right people, on the right issues at the right time. This acknowledges that you don't have to engage all people on all issues. Thus, it's important for Ofgem and companies to have a clear understanding of its

engagement questions and who its impacted and interested stakeholders are. This requires properly mapping stakeholder groups and asking them what they are interested in and how to best engage with them.

Common weaknesses

In our experience, common weaknesses are:

- Not properly defining the research aims and consequently there is a lack of understanding of the circumstances that make people vulnerable or harder to reach that are relevant to the given piece of research: e.g. research too often only considers different socio-economic groups, those on low incomes and people with disabilities. In a piece of research considering who may be left behind in the energy system transition for example, other factors may be relevant such as whether a person has a smart meter or not, whether they live in a flat or rented accommodation.
- Domestic consumer recruitment samples for affordability studies should include a range of different segments. Our research has found that attitudes towards energy bills and affordability vary not just by socio-demographic group but by tenure, payment method, location and whether the person is the key decision maker on the bill, joint decision maker or not responsible.
- Take care not to under-represent those in severe financial difficulty in recruitment given the relatively high proportion of customers that self-report as heavily financially burdened by domestic bills or finding it difficult to cope (at least a quarter in FCAs 2024 report). Linked to the latter, ensure fuel poverty screeners are fit for purpose. Given that some surveys report that more than half of consumers have reduced energy use or cut back on food to cope with the cost-of living crisis, asking customers if they have cut back on essentials is no longer likely to be a reliable screener question to identify those in deepest financial difficulty or fuel poverty. Yet capturing the voice of the poorest groups is increasingly important.
- For those offline, a standard approach is to use face to face or phone engagement. However, too often the locations selected for face-to-face engagement and materials provided are not accessible e.g. there are no lifts in the building, it's not close to public transport, materials provided are too small to read and pre-tasks are often still online.
- Ultimately the research method adopted, and design needs to be tailored to the question being asked and the audience that needs to be engaged with. That said, there are some basic sound practices. Using a research agency or third party to recruit people from the target groups can help improve reach; participants would typically receive a voucher as a thank you for participating (gets round benefit rules) and support provided for transport costs, child and other care requirements etc. It's worth noting that some people disengaged from services prefer digital communication methods.

SMEs

SMEs are relatively forgotten in energy transition research. There would be value in dedicated future research with SMEs as the evidence base is weaker than for domestic customers.

Plugging this gap is especially important to the growth agenda as SME firms represent 99.9% of the UK business population (5.5m) and employ the majority of the UK workforce. SMEs are also accountable for around half of the nation's non-domestic emissions. As well

as presenting a significant decarbonisation opportunity in themselves, many SMEs will facilitate wider decarbonisation, working with and influencing households and bigger businesses, and can be key opinion formers

Small businesses are too often poorly represented in research, often an add-on to existing research. SMEs' experiences and attitudes often vary dependent on the size of the business, the sector and type of business, and whether they are highly energy dependent. Ensuring a representative spread of different businesses is therefore especially important. Identifying high electricity users may be difficult as some research highlighted that many businesses don't know how much they spend on energy. Ofgem's own research concluded sole traders, and micro businesses spend a higher proportion of their business costs on electricity. Also, that those in the hotel and catering, transport and storage, and manufacturing sectors are identified as more likely than other businesses to spend a larger proportion of overall costs on electricity. These may be useful proxies for recruitment in some instances.

Other

- Engaging more vulnerable groups and seldom heard voices can be more time consuming and costly. Ofgem and companies need to allow for this in their planning and resourcing. As mentioned, there is particular benefit for collaborative research here.
- Require companies to publish their existing research with these groups and share learning. Too much useful insight, paid for by consumers money, is not in the public domain. This results in unnecessary duplication of research with the real questions of importance not tackled.

Q30. What alternative or additional approaches might we use to ensure that the consumer voice remains central to our policy setting process?

See previous answers and question 32 below

Q31. Has the BMCS incentive served its purpose in driving performance improvements and how can we adapt the metrics to better incentivise performance across a wider range of interactions between DNOs and their customers, particularly relating to connections?

Q32. How should the CVI be adapted for ED3 and should we consider greater alignment with the GD sector?

We would welcome Ofgem hosting a dedicated workshop on these two questions with consumer groups and ISGs. Groups should be proactively contacted to notify them about it. While we have strong views on the outcomes we'd like to be achieved and were involved in the development of the metrics and incentives for RIIO-2, we've not had the time to monitor and review how companies are performing against the frameworks and how their approaches have evolved as a result. This would enable us and other consumer groups to meaningfully provide views on these questions. We'd welcome hearing from ISGs on how they think the frameworks have operated. This response also links back to question 30.

Q33. Should DNOs have a role in delivering energy efficiency measures to homes and businesses? What might the scope of these services be and how should they be funded?

We are disappointed that the consultation document does not reflect all of the work that been undertaken to date in this area. This includes multiple DNO projects on energy efficiency funded via the Network Innovation Allowance and also the Strategic Innovation Fund, that included a helpful evaluation methodology. Sustainability First also produced a comprehensive paper to Ofgem in March 2021 on 'What is the DNO Role on Energy Efficiency?' - Sustainability First - Energy Efficiency - what is the DNO role in ED2 . The proposals remain very relevant for ED3.

In the light of this existing body of evidence and given Ofgem's conclusions in ED2 to preclude extensions of DNO roles, it is hard to see DNOs or stakeholders investing considerable time and effort to properly develop proposals, which we do think could have value, without a clearer message from Ofgem.

We note Ofgem's concerns about a postcode lottery in this area. In our view, this is misplaced. Where new roles for DNOs are considered, the best approach, in line with good regulatory practice, is likely to be to trial alternative approaches to the new role in limited areas, before deciding which, if any to roll out on a national scale. We had made a clear proposal in 2021, sadly not pursued, for a beacon project of just this kind on energy efficiency, to enable a clearer view on next steps for the start of ED3. Such an approach to addressing the evolving role of DNOs, whether on energy efficiency or other areas, would likely to lead to far superior outcomes to spending time and resources trying to figure out the best model in theory and then launching it everywhere in one go. As we have seen from DNOs' innovation work and some previous Ofgem trials (e.g. on retail out-in and opt-out switching models), the challenge is then to take a decision to deploy one model more widely, but that is still from a better-informed position. Hence Ofgem should support alternative approaches in different areas in the short-term, with any concerns about a postcode lottery only relevant, if at all, to the longer-term approach.

In our independent research for SGN of 15 expert energy stakeholders, respondents highlighted that energy networks regional footprints mean they are well placed to tackle pockets of housing with low thermal efficiency. Reducing energy use also helps to reduce the need for network reinforcement so is directly within the boundary of their responsibility.

There was particular support in the research for energy networks delivering low-cost energy efficiency measures (if the household was identified as vulnerable and on low incomes) e.g. boiler or pipe lagging, foil reflectors behind radiators, draught exclusion, energy efficient light bulbs - and perhaps installing these while in situ if that was relatively quick and easy to do.

One respondent highlighted that their impact assessment had found that when domestic customers switch from halogens to LEDs, they save around £3 per average per bulb each year. This can be much more in Scotland where there are fewer daylight hours and longer nights in winter.

In the words of two stakeholders:

"Any chance they have when with someone in the property they should make the most of. Things are most effective when you are in the door… They should make the improvement if it only takes 40 minutes. Getting into the house in the first place is the hard bit."

"Any contact point with customers, particularly with customers who are less digitally engaged or in vulnerable situations needs to be leveraged"

Smart meters

We also think Ofgem should explore a role for DNOs to support the smart meter rollout. DNOs are well placed and have the expertise to do that. In our research, most energy experts thought networks would do a better job than suppliers, in part as networks commercial incentives – benefits from demand reduction – were better aligned than suppliers.

There may be particular value in DNOs piloting installations in areas with very low take up. Networks have the advantage that they could go street by street, house by house and explain about the benefits of smart meters.

Q38. In the context of greater electrification, is our current approach towards regulating reliability appropriate for ED3?

We support the proposal to re-assess the value that customers place on avoiding outages. We note that average customer minutes lost has improved significantly in in the last couple of decades and may be reaching diminishing returns – demonstrating the value of effective incentive regulation. Performance is much more questionable in metrics that have not be subject to similar incentives, such as the number of customers off supply for more than 12 hours in normal weather conditions, customers experiencing multiple long duration outages and short interruptions. Proposals to rebalance the regulatory framework in this way should be based on understanding the impacts of different interruptions on customers. Another perspective could be to question whether leaving hundreds of thousands of customers without electricity for more than 12 hours in normal weather each year is compatible with a 21st century electricity system.

Q39. What role should bespoke outputs and CVPs have in ED3?

We suggested at ED2 that a number of the CVPs should be funded but not rewarded. There is merit in enabling companies to seek additional funding for specific discrete projects that deliver demonstrable value to customers beyond BAU. There could be particular value in allowing CVPs for proposals on "no one left behind" in the energy transition. It supports innovation and enables companies to better reflect stakeholder and public priorities in their areas.

To the extent that commitments in business plans are funded, whether termed bespoke outputs or CVPs or not (and recognising that most are not), Ofgem should ensure they are delivered, perhaps through working with the relevant ISG and cross-checking comparable standards are used across ISGs to monitor delivery.

Q47. What are the key factors (including benefits and costs to consumers) that Ofgem should take into consideration when conducting its review of the appropriate approach to regulatory depreciation in ED3 and beyond?

A key requirement is that Ofgem is clear what the future bill profile will look like under different scenarios for regulatory depreciation, through to 2050. This is essential to enable

the issues around inter-generational fairness to be assessed. Ideally this should involve looking at the full bill impact across the whole system which is not transparent as things stand.

Smarter networks

Q48 to Q54 – general comment:

Sustainability First has a long-standing interest in the topic of access to smart meter data for a public interest purpose and in the past led major research on this - https://www.smartenergydatapiag.org.uk/ . We continue to advocate that DNOs must make better internal use of the smart meter data to which they have access across their all of their operations and planning activity. DNOs should also continue to explore ways to make smart meter data more generally available for a public policy purpose, while remaining compliant with rules and guidance on data-security, privacy and anonymisation.

Resilient and sustainable networks

Q56. Do you agree that we should consider a more integrated approach to managing asset health, together with load-driven expenditure, given the need to future proof for resilience (climate, cyber and physical security) and future demand? What might the risks and benefits of this approach be?

The RIIO-3 price control presents a pivotal opportunity for Ofgem to embed resilience to climate change at the core of the UK's energy system. Climate-related challenges, including extreme weather events, rising temperatures, and shifts in energy demand patterns, threaten the stability and reliability of energy infrastructure. Addressing these risks through RIIO-3 is essential to ensure a resilient, sustainable, and equitable energy transition.

Key Challenges

1. Physical Risks to Infrastructure: Increasing frequency and intensity of storms, floods, and heatwaves pose direct threats to energy assets.
2. Operational Disruptions: Changing weather patterns impact demand and supply predictability, requiring adaptable grid management.
3. Consumer Vulnerabilities: Climate change exacerbates challenges for vulnerable consumers, including energy affordability and access.

Examples of Opportunities for Action

1. Investing in Climate-Resilient Infrastructure:
    - Incentivise network operators to upgrade and adapt infrastructure to withstand extreme weather.
    - Encourage adoption of nature-based solutions, such as flood protection and cooling green spaces near substations.
2. Promoting Decentralised Energy Systems:
    - Support local renewable generation and storage to enhance grid flexibility and reduce dependency on centralised infrastructure.
    - Enable community energy projects to build local resilience and foster public engagement.
3. Encouraging Innovation in Forecasting and Adaptation:
    - Invest in advanced data analytics and predictive modelling for climate risks.
    - Incentivise innovative technologies, such as dynamic grid control and smart energy systems, to respond to climate-driven variability.
4. Embedding Climate Resilience in Consumer Protection:
    - Ensure Priority Services Register (PSR) provisions reflect climate risks, including services for those vulnerable to heat or flooding.
    - Encourage energy companies to support vulnerable households with tailored advice and proactive interventions during climate events.
5. Integrating Long-Term Climate Goals:

- Ensure that there is an alignment between RIIO-3 investments and the UK's Net Zero strategy and the National Adaptation Programme.
- Require network operators to integrate climate risk assessments and resilience measures into business planning.

Q57. In the context of making anticipatory investment decisions, what do network companies and other stakeholders need to enable the planning and delivery of cost-effective network resilience measures against our changing climate? What risks and opportunities do you see linked to an input-based approach to these investment plans?

We have commented on the anticipatory and input-based approach above. One point to note is that the approach in the consultation appears predicated on DNOs only taking action on climate resilience that is bespoke to their own assets. There may be situations where more cost-effective approaches could be achieved by DNOs working in partnership with others to improve the resilience of a location which covers both the DNO assets and other assets. Where efficient this should be encouraged rather than inadvertently precluded.

Q60. Do stakeholders agree with retaining and strengthening the main components of the environmental framework from RIIO-ED2?

We comment initially on the overall approach to the environmental framework and then reflect on some of the specific components (losses, SF6, biodiversity and other issues)

We agree that there should be a continued but stronger focus on the environmental framework in ED3 as Ofgem's current approach is failing. We have consistently raised concerns about the reliance on wider stakeholders holding the companies to account through the publication of Annual Environmental Reports. Stakeholders (even those with an active interest in this area like ourselves) do not have the resources to review performance across companies and cannot dig beneath the headline figures to understand reasons for varying levels of performance. While we recognise there can be a role for reputational regulation, Ofgem needs to think more carefully about the behavioural drivers and to play a much more active role in reviewing performance and challenging the companies as they would in other areas such as reliability if this approach is to have any prospect of success. For example, we see league tables or open hearings as effective ways to focus senior level attention in the companies. Annual reports on performance by Ofgem can help stakeholders play their part in holding the companies to account – we recognise that Ofgem has been unable to deliver this so suggest that an alternative approach should be taken such as working with partners to ensure consistent and accessible reporting. We would be happy to discuss further how this could be done.

This is a long-standing concern that we highlighted in ED2 and as a result Ofgem committed in Final Determinations to carry out a mid-period review of the AERs: "*We will further strengthen the AER within RIIO-ED2 by including a midperiod review. We will continue to work with stakeholders to define what this looks like in practice. We will further explore the potential for Ofgem to publish or commission a report during RIIO-ED2, drawing upon the AER submissions from the companies and which looks at the performance of all DNOs to*

date on a comparative basis, where possible"[1]. We have not heard anything further about this but would encourage Ofgem to honour this commitment which should also yield valuable insights on how to best build on the approach for ED3.

Losses

We warmly welcome the much stronger emphasis that is placed on losses in this Framework consultation compared to ED2. In particular we welcome the acknowledgment that this is about whole system costs and not simply carbon emissions as part of the company's business carbon footprint (although we note that the Framework document only includes charts of the carbon emissions not the actual level of losses).

As part of the call for evidence on ED2 we produced a comprehensive report on losses[2] including a summary of the history of the regulatory treatment of losses, an assessment of the companies' losses strategies and recommendations on the way forward. The evidence presented there is still very relevant, and we would encourage Ofgem to revisit that report as it thinks about ED3.

With distribution losses currently running at around 7% and set to increase (potentially significantly) as network utilisation increases, a focus on losses could have a material impact on our ability to meet the Clean Power 2030 target. The more energy that is lost on the distribution networks the more generation (and likely also transmission) capacity that will need to be built.

While the traditional measure of losses is as a % of overall system demand what actually matters from a whole system perspective is the % losses at peak time. With losses increasing with the square of demand, peak losses will be proportionately much higher. We are not aware of any data on this for GB but a report from the US[3] suggests that marginal peak losses could be perhaps three times the % for average losses. We flagged in our report the need for a more granular view of losses (noting that current valuations use average price and carbon intensity which will understate the full cost of losses given they are higher at peak). Despite flagging the need for more work in this space we are not aware of any progress being made. Moreover, for investment appraisal we would argue that it is the marginal impact that matters.

While the focus on losses in the Framework consultation is welcome, the challenge is how this is then given effect through the price control. As we stated at ED2, there is a need for some form of financial incentive in this area to focus senior level attention in the DNOs. The current arrangements of a high-level licence obligation and reporting through the AER are inadequate.

The licence obligation requires companies to keep losses as low as possible and requires companies to have a losses strategy. Not all companies have updated their published losses strategies since the ED2 Business Plan submissions, and we are not aware of any innovation projects which would provide evidence of proactive steps by the companies to reduce losses. As a minimum Ofgem should be actively monitoring company performance in this area with the threat of compliance action as a way to focus attention.

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[1] Core Methodology Decision para 3.136

[2] https://sustainabilityfirst.org.uk/publications/project-research-reports/dno-losses-strategies-a-commentary-by-sustainability-first/

[3] https://www.4cleanair.org/wp-content/uploads/Documents/Chapter_10.pdf

In terms of a financial incentive on losses for ED3 we recognise the challenges in developing a robust metric and carrying out suitable baselining given the acknowledgment that higher losses are to be expected with increased network utilisation. There are also risks in focussing on overall losses if that distracts attention from peak losses which are less well understood. There are also interactions with voltage management which the companies need to manage. We are disappointed that the opportunity was not taken in ED2 to put more emphasis on the need to develop better measurement and reporting (e.g. using smart meter data / LV monitoring) to help in designing an incentive for ED3. This work should start now.

While the Losses Discretionary Reward in ED1 was not seen as a success, in our view it did drive innovation in this area at least in the early years although Ofgem's decision not to make any awards ultimately diminished its credibility as a tool with the companies.

In our view it should be possible to design an effective discretionary reward mechanism that encapsulates both narrative on actions taken and performance against particular targets (but without these being used mechanistically to determine rewards where there are concerns about data quality or unintended consequences).

As well as thinking about incentive mechanisms for losses we would encourage Ofgem to review the investment appraisal framework / CBA methodology to ensure that the full whole system value of reducing losses is properly taken into account (and noting the point above about looking at the marginal impact).

SF6

Again, we welcome the focus that is given to this area. We provided a comprehensive report[4] on the DNO ED2 SF6 strategies in response to the Call for Evidence and also supported the dissemination of the Grid Edge Policy report[5] on the wider issues around SF6 at transmission and distribution level. We hope that this work was helpful to Ofgem in shaping its thinking on SF6 but would encourage Ofgem to revisit both of these resources in developing its approach for ED3.

Based on our work we would agree that the company plans for ED3 should focus on:

• further improvements in asset management practices (through sharing best practice and increased use of monitoring and data analytics); and

• working with other industry parties to jointly collaborate with the supply chain on expanding the availability of SF6 free and environmentally sustainable alternatives.

However, we would also note:

- There are issues with the measurement of leakage in unsealed equipment at higher distribution voltages (which is based on top-up of the gas for assets that remain in service at the year-end) which would merit review along with the way in which SF6 in end-of-life assets is treated.
- Some of the variations in performance across DNOs may reflect the fact that 132kv (where the transformers are larger and hence SF6 volumes are higher) are transmission in Scotland but distribution in England.

[4] https://sustainabilityfirst.org.uk/publications/project-research-reports/sf6-ed2/

[5] https://sustainabilityfirst.org.uk/wp-content/uploads/2024/01/sf6_in_GB_networks_final_201123.pdf

- The DNOs should also be looking to learn from and collaborate with transmission networks.
- We are pleased that DNOs must now provide granular reports to Ofgem via their environmental reporting, including on the volumes, location and age of their SF6 assets. It is vital that DNOs have a good understanding of their bank of SF6 assets and a long-term strategy for dealing with them to avoid a situation like the one we have had on PCBs with the need to rapidly replace a large number of items of equipment.

Ofgem continues to favour a reputational approach to regulation of this important area of DNO asset risk management and greenhouse gas curtailment. We think this is misplaced, and had hoped that by the start of ED3 there would be an unambiguous set of targets and agreed metrics from which to develop an incentive-based regulatory approach. Not least, we noted in our comments on ED2 that there was a very significant variability in the quality of the strategies produced by the networks (from a one pager as part of the EAP to stand alone comprehensive strategies). It is important that Ofgem reviews the strategies and sets a higher bar in ED3 for what it would consider acceptable, as part of the Business Plan Incentive (to ensure adequate focus in this area).

Biodiversity and other issues

We are disappointed that there was no mention of nature and biodiversity in the Framework beyond a very open question around how this fitted with social purpose (para 7.6). Given the growing recognition of the urgent need to address the loss of species and habitats in GB we would expect Ofgem to be demanding action from the networks given their essentially “place based” nature, both for their existing sites and going beyond the net gain requirements for new projects. We would note that Ofwat have introduced a nature incentive as part of PR24 and have encouraged the water companies to emphasise nature-based solutions to flooding, for example.

Other aspects of the environment which we would expect Ofgem to require DNOs to consider:

- targets on use of recycled construction waste/aggregates and for onsite reuse.
- targets on water use: both in offices but also more widely.
- a zero-carbon fleet except where this can be shown to be impractical because of lack of refuelling.
- sustainable procurement: FSC certified timber, scope 3 carbon reduction etc.
- minimise noise from construction and addressing the impact on local communities of substations as well as continuing to address visual amenity from overhead lines.