

**Northern Powergrid Customer Engagement Group
2nd Interim Report
August 2021**

1 Executive Summary

- The Independent Northern Powergrid Customer Engagement Group (CEG) was established in 2019 in line with Ofgem’s requirements for Enhanced Engagement during the RIIO-ED2 process. Since then, the CEG has been scrutinising Northern Powergrid’s preparation of its business plan for 2023-2028.
- The CEG has been well supported in its work by both Northern Powergrid and Ofgem. It has already made a difference to the company’s plan, which as a result better reflects the needs and preferences of customers and stakeholders – though there is more still to do.
- Northern Powergrid, in preparing its draft business plan, has undertaken extensive stakeholder engagement. The CEG recognises that the company has sought to reflect the balance of the feedback received in its plans and has been broadly successful in doing so. However, there are significant limitations in the extent to which many stakeholders and most domestic customer groups are able to offer informed views about the many highly technical choices involved in developing a business plan of this nature.
- The strategic priorities and choices set out in the draft plan which focus on balancing decarbonisation with affordability are broadly in line with the balance of stakeholder views.
- The draft plan contains an extensive set of deliverables, many of which do not have associated targets or metrics, and so will need careful ongoing monitoring to assess delivery against promises. Specific customer benefits still need to be articulated for a number of propositions, and in a number of areas the plan would be strengthened by more specific targets.
- The company has worked extensively with both local and national partners to develop a set of potential load scenarios as the country progressively decarbonises the economy and moves towards net zero carbon emissions. Its ‘best view’ load scenario is based on thorough analysis of the available data and appears likely to be robust against all credible pathways.
- This engagement work on planning for the transition to net zero has highlighted the relatively early stage of plan development and significant capability gaps (for wider energy planning, not just engagement with the electricity industry) that currently exist at local level. The CEG notes the consequent need for extensive future engagement

by Northern Powergrid to support the development of evidence of suitable quality to inform investment plans for ED3 and beyond.

- The overall programme of asset investments in the plan appears to be robust against the risk that network capacity constraints might delay the transition to net-zero. However, the CEG would welcome wider discussion about how to use uncertainty mechanisms to manage the risk of investing too early or even unnecessarily in the network if alternative net-zero pathways should eventuate.
- The justifications underpinning individual investments in assets in Northern Powergrid's plan, and so in the Network Investment Strategy overall, are being scrutinised by a panel of independent technical experts (the "Technical Panel" – see Annex 1). This scrutiny is not complete and will continue up to the submission of the final business plan. So far, it has not given rise to any specific concerns about the appropriateness of the proposed investment, but further information and analysis is required to inform our final assessment.
- Investments in asset resilience represent the largest single area of investment in the plan. The CEG recognises that there is a highly sophisticated approach, developed jointly between Ofgem and DNOs over many years, to assessing asset resilience. However, this work does not result in assessments of risk that are easy for others to interpret and so the CEG is not in a position to express anything other than a general opinion on this substantial investment area.
- The Distribution System Operator (DSO) strategy appears to be well framed and appropriate to the current state of knowledge about DSO, the transition to which entails greater uncertainty and so risk than other plan areas. The estimated benefits are consistent with the level of investment. As noted in the body of our report, the plan would be stronger with more detailed SMART¹ targets, more detailed articulation of the risks and associated mitigations, and with stronger evidence behind the benefits estimates.
- The assumptions about flexibility have significant risks associated with them given Northern Powergrid's limited experience in contracting in this area, and the reliance on suppliers incentivising consumers (which is largely outwith the company's control).
- The strategy for the transformation of the company's use of data and digitalisation is at an earlier stage of development than engineering plans and, while it is developing in the right direction, needs urgent focused attention.
- The proposals to support vulnerable customers represent a step change increase in expenditure and are ambitious, but some need further development to articulate how they will benefit vulnerable customers.
- The draft plan includes four proposals for Customer Value Propositions (CVPs). The CEG supports the concept of each of these but notes that at this stage they are less well developed than other parts of the plan. We look forward to scrutinising the detailed proposals when they become available.

¹ Specific, Measurable, Achievable, Realistic, Time-limited

- The CEG recognises that Northern Powergrid is aware of its importance to the communities it serves and the local economy, and has a stated commitment to be a force for good in those communities. The CEG believes that there are opportunities for the company to enhance its positive contributions to those communities both by enhanced supply chain management and by increasing the diversity of its workforce. This latter point will be of crucial importance for the medium-term development of the company's skills-base.
- Northern Powergrid recognises that it is a part of a much wider energy system undergoing a substantial transformation as a result of the decarbonisation agenda, and that this has major implications for the company. Success in navigating this transformation will require a significant shift in the company's culture to become more outward looking and adaptable, while preserving its traditional strengths of dependability and efficiency. The proposals in this plan include some important steps in that direction, but many more will be needed in the coming years.
- Overall, the CEG's initial assessment is that Northern Powergrid has produced an ambitious plan which reflects the imperatives of avoiding the electricity network becoming a constraint on progress towards Net Zero, continuing to provide their wider functions to a high standard, and limiting the risk of unnecessary expenditure (within the prevailing regulatory and policy environment). As mentioned above, the CEG would welcome further discussions about the use of uncertainty mechanisms to mitigate this last risk.
- The main risks to delivery of this plan stem from the uncertainties over the pace and pathway of decarbonisation in practice, over the uptake of customer flexibility, and over Northern Powergrid's ability to develop its organisational and workforce capability to deal effectively with all the associated challenges. The CEG believes that the company's planning is making good progress towards identifying effective mitigations for the first two of these uncertainties but that significantly more work is needed to address the future workforce capability.
- The CEG will continue to scrutinise Northern Powergrid's work developing its business plan until the final version is submitted in December of this year. We welcome input to our work from any of the company's stakeholders, and would particularly value comments on this interim report or suggestions of topics that would benefit from focused attention now.

2 Establishment of the Customer Engagement Group and Ways of Working

- 2.1 The independent Customer Engagement Group (CEG) was established by Northern Powergrid in 2019 in response to a requirement from Ofgem for each Electricity Distribution Network Operator to have such a group scrutinise its business plans for the next price control period, known as RIIO-ED2, which will run from 2023 to 2028.
- 2.2 The role of the CEG is to provide independent challenge to the company on its business plan for RIIO-2 and provide its own views to Ofgem and the public on whether the company's business plan addresses the needs and preferences of consumers.
- 2.3 The CEG operates at arm's length of both the company and Ofgem so that it can independently act in the interests of the company's customers and stakeholders. To ensure this independence the Chair was selected after an open competition (including a search run by a recruitment consultancy) overseen by one of the company's Non-Executive Directors, and with Ofgem approving the shortlist of candidates.
- 2.4 The Chair then selected the Group members following another open competition. Information about the Chair and members can be found here: <https://ceg.northernpowergrid.com/#members>
- 2.5 Our early meetings were devoted to briefing members on the role of the CEG, their part in the RIIO-2 process, briefings on Northern Powergrid and its activities, and on discussing our Terms of Reference and ways of working.
- 2.6 The Terms of Reference were drawn up to reflect and conform with Ofgem's guidance on enhanced engagement for RIIO-2 and have been agreed with the company. These are at Annex 2.
- 2.7 Independence and transparency are key principles underpinning all of the CEG's work. Therefore, the CEG has put in place a set of arrangements to demonstrate how they are secured.
- 2.8 The CEG has maintained extensive records of engagement with Northern Powergrid, and internal exchanges that underpin the rationale and analyses that support the views provided in this report.

2.8.1 Independence

- While observing its Terms of Reference, the CEG has had regard to all relevant guidance from Ofgem.
- Members (including the Chair) have been appointed following open advertisement of the vacancies.
- Each member has been appointed in a personal capacity and agreed to declare any potential actual or perceived conflicts of interest.
- Support for the CEG is provided by a Support Manager who has a clear duty of confidentiality to the CEG.

2.8.2 Transparency

- The CEG maintains a microsite setting out:
 - Role of CEG, and Terms of Reference
 - Membership of CEG
 - A register of interests
 - Reports of CEG and subgroup meetings
 - A list of Challenges to Northern Powergrid raised by the CEG, and a brief description of their status

<https://ceg.northernpowergrid.com>

Our Discussions

- 2.9 The CEG has met regularly since its formation towards the end of 2019. Since the introduction of restrictions related to COVID-19 all meetings have been held by video conference, but there has been no interruption to or delay of our schedule of work (except that some planned familiarisation visits to Northern Powergrid have had to be put on hold).
- 2.10 Many of our discussions have involved Northern Powergrid staff presenting to us their plans and approaches to developing them. Initially we also had induction sessions on the company and its activities (which included visiting some parts of the business) and a briefing on the regulatory framework from an expert consultant. We have also had discussions with senior members of Ofgem's RIIO-ED2 team and our Chair has had regular meetings with Ofgem staff and the Chairs of the other CEGs.
- 2.11 The effectiveness of our scrutiny role depends on our access to information about Northern Powergrid and its activities, and the openness of its staff in discussion with us. We have been given timely access to all the information that we have requested and our discussions with staff have at all times been open and constructive. We have had contacts with staff at all levels in the company from Chief Executive to front line workers, and access to Non-Executive Directors. While we have had less contact with Ofgem staff, they too have been helpful and supportive. We have received all the support from both the company and from Ofgem appropriate to our role.

Scrutinising Northern Powergrid's Stakeholder Engagement work

- 2.12 The CEG has observed a substantial number of the company's stakeholder engagement events in order to form an independent assessment of their quality and effectiveness. Covid restrictions have meant that almost all these events have been 'virtual' using digital platforms and this has enabled CEG members to observe more than would have otherwise been possible.
- 2.13 In total CEG members have observed over 100 events covering a diverse range of topics and involving many different types of stakeholder. A table showing the range of events observed by CEG members is attached at Annex 3.

Work with others

- 2.14 Northern Powergrid established 9 years ago a Social Issues Expert Group (SIEG), Chaired by Derek Lickorish (former Chair of the government's Fuel Poverty Advisory Group), to provide advice on its work in relation to vulnerable customers. This panel has provided input to inform the development of its ED2 business plan, and had contributed to the design of the company's propositions on Vulnerability. The CEG has sought and received the SIEG's views on the company's customer vulnerability proposals.
- 2.15 Northern Powergrid established in 2020 a Technical Panel of independent experts, chaired by Prof Phil Taylor (one of the company's Non-Executive Directors), to scrutinise the technical aspects of its ED2 business plan. The panel includes members who are expert in a wide range of aspects relevant to the company's business plan. The make-up and remit of this Technical Panel are set out at Annex 1.
- 2.16 The CEG has sought and received input from this panel on many of the critical aspects of the company's engineering investment plan, and we have used this input to underpin our own assessment of Northern Powergrid's plan.

Issues and Challenges raised by the CEG

- 2.17 In the early stages of our work, when we were scrutinising preparations by Northern Powergrid for its consultation on the main aspects of its plan (launched in September 2020) we raised a number of Issues that we asked the company to consider and respond to. These related to the thinking at the time on the development of the company's business plan, and the proposals for consulting local stakeholders about it.
- 2.18 In total we raised 134 Issues, many of which were aimed at improving the effectiveness of the company's stakeholder engagement. But these Issues also covered matters such as: the proposed approach to protection of the interests of vulnerable customers; decarbonisation of the energy system; innovation; resilience; customer service on connections; supply chain strategy; supporting the Government's plans for a post COVID 19 economic 'Green Recovery'; improving reliability (particularly for worst served customers); and ensuring independence in the scrutiny of the highly technical aspects of their plans which most stakeholders will not be able to assess.
- 2.19 The company responded positively to the Issues we raised and, in many cases, modified its proposals as a result of our interactions. So far, 124 of these Issues have been closed and we continue to monitor progress on dealing with the remainder. Further information on this can be found in Section 5 of this report.
- 2.20 Following the completion of the company's major engagement exercise on its developing plan we have raised 6 Challenges to the proposals being considered for adoption into their business plan. We comment in Section 5 of this report on the company's responses to these Challenges. The Challenges and the company's responses to them are set out in detail in Annex 4.
- 2.21 Northern Powergrid's consideration of the Issues and Challenges raised by the CEG, and the dialogue between the company and the CEG, over the last 18 months has led

to many modifications to the propositions contained in the business plan. We believe that this has resulted in a plan that better reflects the needs and preferences of customers and stakeholders.

3 Northern Powergrid's Stakeholder Engagement Work

- 3.1 Northern Powergrid has undertaken extensive engagement with its stakeholders as part of the process of developing its business plan for ED2, and has used expert agencies to support its work. So far the engagement has been split into three stages, or 'waves'. A fourth stage, to test the acceptability of the plan, is to be undertaken after publication of the draft plan.
- 3.2 The company identified different customer and stakeholder segments, including 'seldom heard' and future customers (in addition to the more traditional groupings of vulnerable, domestic, SME, and major customers), and used a range of engagement methods to facilitate engagement with each group.
- 3.3 The pandemic forced a significant change of approach, with no face-to-face engagement since March 2020. The facilitation of virtual engagement events was constantly refined following feedback sessions with CEG members and Northern Powergrid business leads.
- 3.4 Northern Powergrid ensured the agencies it used undertook trials and tested survey and workshop materials to ensure they would be understood, particularly where there was little prior knowledge of the company or the specific topic. Consultation materials and surveys were then revised in the light of this testing, and also after feedback from the CEG on some topics. Even so, agency staff experienced in engagement sometimes struggled to explain the concepts and propositions they were seeking views on. Subsequent involvement of business leads provided a more authoritative/technical view when this was needed.
- 3.5 There were a number of lessons learned along the way which Northern Powergrid should observe in delivering future engagement exercises. These included: the importance of coordinating the work of all the agencies; the benefit of simplification of issues; and the value of using graphic or visual materials to aid understanding of complex issues.
- 3.6 Northern Powergrid undertook a major consultation on options for the business plan during the second half of 2020, based on a document entitled "Emerging Thinking". This document offered costed options across all output areas with a range of levels of ambition together with their estimated bill impacts. Customer preferences identified from this exercise are reflected in the draft plan.
- 3.7 Differing customer views have been taken seriously and have been weighted using a new methodology, developed by the company for this purpose. This was designed to help ensure that, where there were conflicting views, greater weight was attributed to those from people with expert or local knowledge and those most impacted by the proposal under consideration.
- 3.8 An important part of the company's engagement work has been focused on developing its future load scenarios, through the Distribution Future Energy Scenarios (DFES) process, using data from the National Grid Electricity System Operator (NGESO) as a starting point. The company has worked with the Open Data Institute and has encouraged local stakeholders to engage with and inform this process. The scenarios and their underlying assumptions have been available throughout for public scrutiny. The CEG has observed some of Northern Powergrid's interaction with stakeholders on

the scenarios and recognises that stakeholders have valued and understood Northern Powergrid's scenarios, although stakeholders have not generally had any additional or alternative views to propose.

4 General Findings from Northern Powergrid's Stakeholder Engagement

- 4.1 Northern Powergrid has included summaries of the results of its stakeholder engagement in the draft business plan, and we comment on the specific feedback on individual plan sections as appropriate in section 5 of our report below. But there are some general points identified during the engagement work that are more usefully reported here.
- 4.2 Most stakeholders consulted are seeking fast progress towards decarbonisation, but are mindful of the importance of affordability.
- 4.3 There is an assumption by most customers that safety and reliability are givens and the focus was therefore on the changes needed for the pathways to decarbonisation.
- 4.4 Also, many customers don't make the distinction between different aspects of service in the way Ofgem require outputs to be defined (e.g. between reliability and resilience). This is a further complication in interpreting feedback.
- 4.5 Many of the aspects of the business plan are inherently difficult for people without specialist expertise to grasp at a sufficiently granular level to give meaningful feedback on their preferences except in general terms. This places a clear limitation on the precision of any steer from engagement on these topics. Examples of this include investment in Asset Resilience and Data and Digitalisation. The CEG has used both its own expertise and that of other expert groups to augment stakeholder feedback by making its own assessment of customers' needs in these highly technical and complex areas.
- 4.6 Bill impacts also proved to be a complex topic to explore, and remained difficult for some customers to grasp fully despite extensive work in this area by Northern Powergrid. Although the company focused its consultation on the impact of choices for its business plan (ignoring the impact of changes in financing costs, etc which would have further complicated the picture), testing demonstrated that a substantial minority of those involved had not properly understood the impacts of the choices on offer, although this improved following simplified explanations of how costs are recovered. As a consequence, the results of the Willingness to Pay exercise have limited value in themselves. Planned wider Business Plan Acceptability Testing will need to ensure that the benefits to customers are fully explained particularly where cost increases are material.
- 4.7 The DFES work has demonstrated that, although many local authorities have declared climate change emergencies and have targets to achieve net zero in advance of the national 2050 target, planning at a local level is generally not sufficiently far advanced to provide evidence approaching the quality envisaged in the Energy Systems Catapult guidance² on Local Area Energy Plans. It is clear that local authorities will require substantial support during ED2 to enable them to develop evidence of suitable quality to inform investment plans for ED3 and beyond. This will need to include expertise on and local knowledge of energy systems, which Northern Powergrid (working with Northern Gas Networks – NGN, as they are publicly committed to continue doing) is ideally placed to provide. The company's plan makes provision to build on their current work in this area with a significant capacity increase in ED2.

² <https://es.catapult.org.uk/reports/local-area-energy-planning-the-method/>

5 CEG views on Northern Powergrid's Draft Business Plan

General Comments

- 5.1 The CEG welcomes the transparent approach that Northern Powergrid has taken by publishing its full draft Business Plan and most of the Annexes. This will enable its stakeholders to make properly informed responses to its consultation on the plan.
- 5.2 In preparing this draft plan the company has undertaken extensive stakeholder engagement. The CEG recognises that the company has sought to reflect in this plan the balance of the feedback received and believes that that the strategic priorities and choices set out in the draft plan, balancing decarbonisation with affordability, are broadly in line with the balance of stakeholder views.
- 5.3 Northern Powergrid recognises that it is a part of a much wider energy system undergoing a substantial transformation as a result of the decarbonisation agenda, and that this has major implications for the company. The proposals in this plan include some important steps in that direction, but many more will be needed in the coming years.
- 5.4 The main risks to delivery of this plan stem from the uncertainties over the pace and pathway of decarbonisation in practice, over the uptake of customer flexibility, and over Northern Powergrid's ability to develop its organisational and workforce capability to deal effectively with all the associated challenge

Comments on Specific Plan Sections

Track Record and Business Plan Commitment

- 5.5 The CEG's focus has been forward looking and ED1 performance is only relevant to our work insofar as it related to the prospects for ED2. Our comments on it are therefore contained in the sections below about the other business plan sections.

Giving Consumers a Stronger Voice

- 5.6 The CEG's comments on this aspect of Northern Powergrid's business plan are contained in section 3 of this report.

Delivering an Environmentally Sustainable Network

Decarbonisation

- 5.7 The CEG recognises the difficulties faced by all parties (DNOs and Ofgem) in dealing with the challenges and uncertainties associated with decarbonisation and the journey to net zero. The CEG is of the view that Northern Powergrid understands its key responsibilities to enable decarbonisation, and the need to strike an appropriate balance between early investment to ease decarbonisation and avoid holding any progress up on the one hand, and the implications of the increased costs for customers on the other.

Scenarios and Investment

- 5.8 In developing its forecast scenarios, Northern Powergrid has engaged with many relevant stakeholders to understand the broad range of possibilities and has developed a 'best view' scenario in line with Ofgem guidance. In doing this, it has used appropriately expert consultants and the sharing of relevant scenario data with NGENSO and other DNOs. The Technical Panel has scrutinised this work and is satisfied that the pathway identified provides an adequate mitigation of the risks stemming from the uncertainties associated with the pace and pathway of decarbonisation.
- 5.9 The CEG accepts Northern Powergrid's view of how its investment plan relates to the range of scenarios considered and the implications for ED2 and future review periods. The investment plan does not yet account for uncertainty mechanisms which are still being defined by Ofgem, but instead includes all the anticipated load related expenditure in the base investment case. Until the uncertainty mechanisms are determined, there is still a question as to how much of the investment should be firmly committed now and how much could be deferred or regarded as provisional until more information about load growth and patterns is available. The need for such future investment would then be driven by mechanisms such as volume drivers. This also raises a question about what investment might be needed to monitor the volume drivers and to build the capability to respond to them rapidly/ with agility.
- 5.10 The CEG has raised concerns about the visibility and accommodation in the plan of hydrogen as an industrial power source. The CEG understands that Northern Powergrid will continue to develop the plans to address this between now and the final submission.
- 5.11 The CEG notes Northern Powergrid's interaction with stakeholders who might be providers of flexibility service in the near future, but was not fully satisfied that this has been sufficiently extensive to date. This is an important area in view of the benefits from flexibility assumed in the plan and the possible extra costs of reinforcement if the flexibility does not materialise.

DSO Strategy

- 5.12 Northern Powergrid published the first version of its DSO Strategy in December 2018, with an updated version in October 2019. It has used these documents as the basis for a substantial programme of engagement with stakeholders, both within the region and across the wider energy system.
- 5.13 The vision and objectives set out in the business plan are consistent with the feedback received through its stakeholder engagement (noting that this is a specialist area, so many stakeholders will not hold strong views on how the company should approach becoming a DSO).
- 5.14 The strategy is less clear on specific details and SMART targets. This partly reflects the general lack of consensus across the sector as to the precise nature and role of a DSO – while the broad functions are agreed, there is still considerable debate about the details and appropriate metrics are still being defined.
- 5.15 Northern Powergrid expects the details to become clear only as DNOs gain some experience of acting as DSOs and the boundaries of what is feasible and desirable for a

DSO to do become clearer through experience. It is therefore adopting an iterative approach to defining its exact role and functionality as a DSO, within the broad framework agreed by Ofgem and the industry.

- 5.16 The CEG believes this is a realistic strategy, but it does raise challenges for monitoring progress and assessing the effectiveness of the company's strategy. We would welcome more detailed thinking on an ongoing monitoring framework in the final version of the plan.
- 5.17 We would also welcome more detail on how the estimated benefits have been calculated, and the range of uncertainty associated with these estimates. Without this detail, it is difficult to assess factors such as the deliverability of the benefits. Likewise, it is not clear how much of the £170m of reinforcement cost saving is avoided entirely, versus how much is simply deferred to a later period. In the latter case the real saving might more accurately be presented as avoiding N years of cost-of-capital rather than the full capital expenditure in the ED2 period.
- 5.18 DSO is a new and innovative function, so the baseline for efficiency is still being established. The CEG would welcome more thinking on potential metrics here, so that a clear baseline could be established as DSO functionality is rolled out. For example, well defined metrics around network utilisation, losses, etc, could help to make it clear how effectively and efficiently the DSO is acting to optimise load flows across the network.
- 5.19 Finally, the the strategy tends to focus on the technical aspects of becoming a DSO. The CEG is conscious that the transition will entail considerable organisational and cultural change, and would welcome more detail on how this will be managed and on how optionality to separate the DSO from the DNO functions will be maintained.

Enabling Whole System Solutions

- 5.20 Northern Powergrid has adopted a broad definition of "Whole Systems", addressing a wide range of energy sources, distribution vectors and stakeholders within and adjacent to the energy system. The CEG welcomes this breadth of vision and the collaborative approach embodied within it.
- 5.21 Appropriate to this approach, the company has collaborated with a wide range of stakeholders in developing the strategy, as well as building plans to continue this collaboration throughout the ED2 period. The CEG believes that the plan appropriately reflects the feedback received during consultations to date.
- 5.22 In discussions with the CEG, the company has noted that "Whole Systems initiatives are largely about bringing a way of thinking to the organisation. Whole Systems thinking identifies issues affecting the wider energy system. It helps define key problems and the role that Northern Powergrid plays in addressing those problems (it might lead on some, collaborate under others' leadership on some, and simply maintain a watching brief on others). It may then initiate innovation or operational projects to address specific issues."
- 5.23 This essentially frames Whole Systems as a key part of the wider cultural and organisational change that Northern Powergrid is undertaking in order to become a DSO and to support the energy transition to which the UK has committed with its decarbonisation targets. The CEG has encouraged the company to clarify how it is

undertaking this change and the part Whole Systems will play in it. We expect to see more about this in the final business plan.

- 5.24 As with the other sections, we would welcome more details on SMART targets and metrics and specific, tangible customer benefits and how they're calculated.

Environmental Action Plan

- 5.25 The CEG has encouraged Northern Powergrid to be bold in terms of its aspirations for the Environmental Action Plan (EAP) in line with stakeholder feedback. It is noted that Northern Powergrid has acknowledged and responded to a number of CEG challenges, resulting in a more engagement driven plan with stronger community initiatives.
- 5.26 The CEG is broadly content with the current position as articulated in the EAP although an open Challenge exists with regard to engagement with suppliers and the cascading of environmental (and other) commitments throughout the supply chain. The CEG understands that the supplier code is being developed in-house and is to be a policy driven document with high level objectives. Northern Powergrid has indicated that it will rely upon self-assurance. The CEG asked about control measures and we were informed that the code is to be an extension of the existing contract documentation. Discussions (and follow up meetings) are ongoing with regard to this issue.
- 5.27 In respect of SF₆ the CEG challenged the assessment of the target and Northern Powergrid identified the need to strike a balance between what is reasonable and what is achievable. From a cost perspective there was a need to be careful not to incur undue costs in replacing assets. The CEG noted that Northern Powergrid had looked at 3kg and 7kg scenarios before coming up with an engineering rationale for 5kg. The CEG accepts this position.
- 5.28 The CEG enquired about the embedded carbon agenda and Northern Powergrid reported that the methodology is under development. The CEG welcomes the commitment to monitor and report the impacts of new projects in ED2. The link to science-based targets for Scope 1&2 emissions is welcome and the CEG expressed an ambition to review the documents in due course.
- 5.29 With regard to the potential to increase or enhance biodiversity, the CEG welcomes the initiatives and encouraged Northern Powergrid to be bold and ambitious in terms of its approach of managing above ground assets. This is in line with stakeholder feedback.
- 5.30 In terms of waste management, the CEG challenged whether the proposed targets are ambitious enough and requested targets be reviewed and a (caveated) stretch target be potentially included.
- 5.31 The CEG recognises the ambition to reduce the carbon and air quality impact(s) of the fleet within performance criteria required by the duty and lease cycles of the various vehicles.
- 5.32 The CEG also encourages Northern Powergrid to look at collaborative or partnership driven approaches to installing Electric Vehicle (EV) infrastructure. As a related point, the CEG also encourages the strong cross reference between the environmental/sustainability agenda and a robust and targeted approach to innovation.

Maintaining a Safe and Resilient Network

Safety

- 5.33 The CEG recognises Northern Powergrid’s commitment to the health and safety of the public and its staff, and the company’s strong track record. The general proposals Northern Powergrid is making for improving the health, safety and wellbeing of its staff seem appropriate, although we note that plans may need to be changed as the impact and legacy of COVID-19 works its way through.
- 5.34 The CEG significant interaction between Northern Powergrid and stakeholders and customers, and was satisfied that Northern Powergrid explained the issues appropriately to them. The CEG is also satisfied the plan has been shaped to appropriately reflect stakeholders’ views.
- 5.35 However, the CEG was not fully convinced that Northern Powergrid was setting itself, and its contractors, sufficiently challenging targets for the safety of contractors’ staff, even allowing for the generally higher risk profiles of the activities that contractors undertake in comparison with those of Northern Powergrid’s own employees.
- 5.36 The CEG also has a specific concern that the proposed single headline OSHA³ reportable incident rate is insufficient and does not give the leading indications of underlying performance that is revealed by monitoring the wider spread of lesser (non-reportable incidents). The CEG is also concerned that Northern Powergrid has not proposed any metrics for the health and wellbeing of employees. Headline metrics at least will be required.
- 5.37 Finally, the CEG the CEG has not observed any discussion about the safety implications, if any, for staff and public of the increase of power sources in and around customers’ homes (i.e. storage, EVs, PV generation etc).

Reliability and Availability

- 5.38 The CEG notes that most customers are broadly content with current levels of reliability and availability. Despite this the CEG agrees with Northern Powergrid that investment to catch up to, and remain abreast with, other DNOs in these areas is necessary and appropriate. This is a particularly important judgement given the increases in costs. Customers do care deeply about reliability, but also take it for granted and do not see that they should be paying more for it.
- 5.39 Northern Powergrid has engaged extensively and appropriately with customers and stakeholders, recognising that customers’ experience of interruptions, or lack of it, does tend to condition their responses. Northern Powergrid’s plan to catch up with other DNOs, which will run over ten years rather than five, represents an appropriate response to the balance of feedback, and lines up with customers’ wishes and expectations.
- 5.40 Northern Powergrid is making a commitment to improve supply reliability for customers whose experience falls well outside of the system wide averages (even though many of these do not fall within Ofgem’s narrow, system focused definition of Worst Served

³ Occupational Safety and Health Administration, USA

Customers). This commitment will cover a number of customers experiencing repeated interruptions, and those suffering interruptions of more than 12 hours and more than 6 hours. The CEG agrees that these customers should be the top priority for reliability improvement work, noting that the investment in system automation will also contribute positively to this area.

- 5.41 The CEG welcomes Northern Powergrid's initiatives to use mobile batteries to help with supply restoration, and also supports the concept of trialling microgrids as a solution for some of the customers with the worst reliability experience. However, we believe that there are important questions still to be addressed about the most appropriate business model for exploring the potential for the microgrids approach.
- 5.42 The CEG has challenged Northern Powergrid on the possibilities of using customer flexibility to support partial restoration of supplies (i.e., where customers' heavy power appliances, such as EVs and heat pumps etc, are temporarily constrained whilst the network capability is restored to full capacity). Northern Powergrid has only partially responded to this challenge, more fully in relation to Extra High Voltage (EHV) faults and industrial demand. The CEG notes that this is as much a DSO initiative as a reliability one.
- 5.43 The CEG has also challenged some of the fault incidence forecasts in the plan, given all the initiatives; we expect the final plan forecasts to reflect better the benefits of the investments.

Overarching approach to Resilience

- 5.44 The CEG notes that Northern Powergrid has set out a collaborative, forward looking approach to resilience in an annex to the main business plan. The emphases on continuous improvement and on monitoring of changes in the threats to be managed are welcomed. We have asked for further information about ensuring the company's operational response is sufficiently robust, and we look forward to seeing more about this as the workforce resilience plan is developed later this year.

Asset Resilience

- 5.45 The CEG notes that the scale of the investments in this area is larger than in any other plan area, even decarbonisation. This means that even a relatively small part of the replacement investment programme involves a spend that is bigger in absolute terms than certain other components of the plan that are examined in great detail. For example, Customer Service and Connections are both dwarfed by just the overhead line clearance programme. In addition, this is a highly technical part of the plan, and so does not lend itself well to wide stakeholder input.
- 5.46 Northern Powergrid has tried hard to explain this area of the plan to stakeholders and customers. This was naturally challenging given most stakeholders lack of familiarity with electricity assets and how they individually contribute to the unnoticed service that customers enjoy. Nevertheless, the CEG is satisfied that Northern Powergrid's plans as presented do broadly represent what customers want and value – particularly in balancing the need to make progress towards net zero and keeping bill affordable.
- 5.47 The CEG has been scrutinising the company's plan and its major components both with Northern Powergrid in-house experts and also with the Technical Panel. This scrutiny is

not complete and will continue up to the submission of the final business plan. So far, it has not given rise to any specific concerns about the appropriateness of the proposed investments, but further information and analysis are required to inform our final assessment.

- 5.48 Northern Powergrid points out the obvious synergies between replacing assets and reinforcing the network by sizing the replacement assets to meet projected demand as assets are replaced. The CEG is not in a position to scrutinise such decisions in depth (and assumes Ofgem will), but the logic of the approach and the claimed benefits seem reasonable. Some of the details of the synergies identified are contained in the Engineering Justification Papers, and the CEG is looking forward to seeing the results of the technical panel's assessment of these documents.
- 5.49 The CEG recognises the joint work done over decades between Ofgem and the network companies to agree an appropriate approach to managing DNOs' regulated assets. The CEG acknowledges its detailed complexity and assumes that Ofgem believes it to be fit for purpose in managing these extensive dispersed asset bases.
- 5.50 The CEG would welcome a more accessible set of metrics to describe asset health. For example, Northern Powergrid is planning on a 9% deterioration in the monetised risk of its asset base during ED2 (which it plans to recover by 2050). The CEG simply cannot interpret whether or not this is an appropriate shift in asset health for the ED2 plan period, particularly in the absence of any historical or benchmarking comparisons.
- 5.51 The CEG believes that better collection, integration, and management and analysis of data could yield significant benefits in cost effectively safeguarding asset resilience. We have commented further on this in the section on Data and Digitalisation below.

Climate Resilience

- 5.52 The CEG has closely engaged with this agenda throughout the evolution of Northern Powergrid's thinking. We have had a number of detailed engagements and are broadly content with the current position.
- 5.53 We note the fact that the current outline presents a primarily asset driven strategy. The approach to asset management seems appropriate given the information provided during our various interactions. Stakeholder feedback indicates that customers think that it is right and proper to invest in substations to protect against long term risks. The emphasis on rain and flood related impacts (and very limited focus on snow and ice) has caused the CEG some limited concern. However, Northern Powergrid's approach seems to be in line with models and regional expectations. In a related point, it is noted that the response to emergencies is couched in terms of storms and floods but it is recognised that a broader set of issues may need to be addressed either within this section or elsewhere in the final document.
- 5.54 It was, however, also noted that, despite the well evolved approach to asset management, the outline has very little focus on operational capacity and the associated resilience. This has been an issue of concern and focus for the CEG as evidenced by previous comments, feedback and challenges.
- 5.55 The CEG supports Northern Powergrid's preference to act alongside other agencies and see funds directed into more collaborative activity to widen resilience. This would see a

move away from focusing on defending individual assets to reducing the background risk. This is considered to be in line with the systemic nature of climate risk. Feedback from 'Willingness to Pay' work suggests that stakeholders have understood the importance of the shift to a more collaborative approach to working.

- 5.56 In due course we would anticipate having more detailed objectives, targets and associated metrics in place to reinforce the commitments that, at present, feel broadly aspirational.

Physical and Cyber Resilience

- 5.57 The CEG notes the strong linkages between physical and climate resilience and is content that the propositions for physical resilience are appropriate, understood by stakeholders and supported. The CEG notes that Ofgem's guidance on Enhanced Engagement states "CEGs should not attempt to scrutinise matters of cyber Information Technology (IT) and cyber Operational Technology (OT)".
- 5.58 The CEG recognises that physical and cyber resilience are important and complex matters and represent an area of focus and concern. As the industry increasingly embraces digitalisation in the operation of its networks, cyber-attacks present an ever-increasing threat.
- 5.59 The CEG notes that Northern Powergrid has made this agenda a primary focus during ED1 and significant progress has been made in addressing the risks to current operations.
- 5.60 The CEG was careful to test the level of understanding/expertise within the stakeholder group around the more complex issues of cyber security. It seems that the threats and the risks and the need to respond are well understood, although there seems to be much less understanding about how the identified challenges could be solved.
- 5.61 Similarly, the CEG was keen to understand the level of expertise upon which the propositions relied. We were informed that the expertise comes from NICS and Ofgem (with the cyber and engagement teams). It was also explained that Northern Powergrid has relationships with technology firms with expertise in this area.
- 5.62 The potential exposure of Northern Powergrid to attack via external systems (such as those within the supply chain and associated with buying flexibility to deliver network reinforcement) remain a concern. The CEG also notes the significance of ensuring the resilience of the telecom systems upon which connectivity depends.

Meeting the Needs of Consumers and Network Users

Customer Service

- 5.63 Northern Powergrid has historically not been a strong performer in this area. We heard that systems improvements made during ED1 (new Customer Relationship Management (CRM) software) have led to improved customer satisfaction scores (up to 90.5% in 2020 from 82% at the start of ED1). The company has set a more ambitious customer satisfaction target of 93.5% for ED2 and has declared an aspiration of becoming the leading DNO in this area.

- 5.64 The proposed level of improvement is in line with the views expressed by customers during the consultation on the Emerging Thinking document. Although stretching, the CEG believes that it is achievable using new approaches and systems. It is not yet clear whether Northern Powergrid's proposals will meet Ofgem's new minimum Licence Obligations but they benchmark well against other companies' draft plans.
- 5.65 Proposals to further improve contact scores rely on increasing the number of communication channels and extending assistance during extended power outages. There is also a strong focus in the company's proposals on helping customers to decarbonise. This too is in line with the preferences expressed by customers, who have said they would trust Northern Powergrid to provide impartial advice on Low Carbon Technologies since they are not selling products.
- 5.66 The CEG has emphasised the importance of workforce training and company culture in improving outcomes for customers and other stakeholders. We are yet to see the company's approach to developing a Customer First approach fully described in the draft Business Plan.
- 5.67 Services to Flexibility Providers and other data users need to be better articulated and some engagement targets set. The CEG is also keen to understand the commitments to customer service that Northern Powergrid aspires to as a DSO.
- 5.68 The role of the proposed Community Energy Advisors is yet to be fully articulated to make clear: how they fit with the wider customer service functions; how they will collaborate with local/community organisations offering similar services; and the breadth and depth of skills/knowledge required.
- 5.69 Quite rightly this section references additional support to vulnerable customers (see below).

Vulnerable Customers

- 5.70 Northern Powergrid is proposing a much more ambitious programme of assistance to customers who are vulnerable or who, for a range of reasons, may become more vulnerable during power outages. Northern Powergrid will increase its expenditure to support vulnerable customers from £0.8M per annum to £3.9M per annum, and so it is particularly important to understand the added value this will bring to such customers.
- 5.71 The proposals within Northern Powergrid's Vulnerability Strategy seek to address and map the principles set by Ofgem and have been benchmarked against initiatives within and outside the sector. The company's independent Social Issues Expert Group has contributed to the development of the strategy and the design of the output proposals.
- 5.72 Over half of Northern Powergrid's customer base meets Ofgem's definition of vulnerability, however, currently only 900,000 households are registered on the Priority Services Register (rebranded Priority Services Membership as a term preferred by customers). Northern Powergrid has provided further segmentation which reveals that approximately 2.25 million people living in the area served by the company have high risk needs. Of those, fewer than one million are currently registered and known to the company. The CEG therefore welcomes that Northern Powergrid will seek to recruit 70% of these customers and refresh 100% of membership every two years.

- 5.73 Roughly half of the increased expenditure is to provide additional support to a greater number of vulnerable customers during power outages.
- 5.74 Around £1.8M in total (£1M development costs and £0.2M per year operational costs) is proposed for a new App aimed at vulnerable customers who are digitally enabled to provide a new communication channel offering a wider range of information services. This is also intended to free up additional resources to support those who are digitally excluded and are reliant on calling the company for information. (Please see CVP section below).
- 5.75 New delivery partners are being engaged who understand the needs of customers with different types of vulnerabilities, including those with transient vulnerabilities which are more difficult for companies to identify and then manage the duration of their Priority Services Registration/Membership.
- 5.76 A number of the proposals in this section of the business plan are still at a relatively early stage of definition: greater clarity needs to be provided on how the company will help 5,000 vulnerable customers through the energy transition with examples of the types of initiatives envisaged and how costs are apportioned; the proposition behind the proposed App needs further definition to set out what services will be provided and to whom; and closer definition is needed of how the proposed new roles of community outreach/vulnerable customer support and community energy advisors will link up.
- 5.77 Customers have been generally supportive of Northern Powergrid doing more to help more vulnerable customers but have been surprised at how much help they already offer. Therefore, it will be important to better communicate the new services and increase awareness of them.

Our Communities

- 5.78 The CEG recognises that Northern Powergrid's work in this area has both business and social benefits. The company's stakeholder engagement work has demonstrated that customers value this work when it is brought to their attention, but it is not well publicised.
- 5.79 Expansion of both its educational work (with a focus on deprived communities) and the support to communities where major schemes are taking place are supported by stakeholders. The educational programme encourages the study of the STEM subjects the company needs from future employees. It links to workforce diversity by encouraging applications from young people from more disadvantaged backgrounds and others who represent the make-up of the communities served by Northern Powergrid.
- 5.80 Using company employees as volunteers to deliver some of the education programmes may be a useful way for the company to ensure its employees are made aware of the issues facing children in deprived areas but ensuring that volunteers have the right skills sets to engage positively will be important.
- 5.81 Before Final Business Plan submission we would expect the company to develop its proposition regarding Community Energy Advisors more fully and seek formal views from other delivery bodies and partners. In particular further work is needed to establish the type of advice that Northern Powergrid can uniquely offer and which relates to

community take up of low carbon technologies, attitudes to flexibility offers, and impacts on the network of changing patterns in the use of energy. This advice should not cut across other agencies' areas of work and expertise, rather it should fill gaps and aim to transfer business knowledge both into and out of Northern Powergrid.

Connections

- 5.82 The CEG has been exploring the connections needs of customers, including larger customers, in some depth. The current proposition for new connections is broadly accepted by the CEG and we are encouraged by the commitment of Northern Powergrid to provide more clarity as to the full customer journey. It is recognised by the CEG that certain connection issues may be best addressed on an industry wide/ENA scale.
- 5.83 The CEG has not yet completed a review of whether Northern Powergrid's plan adequately addresses all of Ofgem's baseline expectations. Concerns have been expressed by the CEG in relation to the way in which the proposition is developed for current and future customers; particularly the owners of the potential 1.84M EVs that Northern Powergrid reportedly expects to see charging on the grid by 2030, and those installing domestic storage (including EVs in V2G⁴ mode). It is noted that the underlying focus of the proposition seems to relate to new connections to the grid (which it is speculated will primarily relate to new housing, measured in the tens of thousands of connections per year).
- 5.84 The CEG are mindful that there will be significant numbers wishing to add new Low Carbon Technology (LCT) devices to existing connections each year and that will likely represent a larger number than the new physical connections each year. We therefore wish to be assured that the proposed processes and services are tailored for this anticipated demand and are following this up with the company.

Openness and Transparency

- 5.85 Northern Powergrid has established high level aims that reflect stakeholders' feedback about the importance of enabling fair and open competition, stimulating flexibility, and openness in reporting, all supported by effective governance standards.
- 5.86 Most domestic customers favour a high level of ambition in placing transparency at the heart of the organisation and are interested to see how the company works with its supply chain ("ensuring > 95% of suppliers meet strict environmental management standards" is seen as a top priority).
- 5.87 The CEG welcomes the emphasis on open energy system data but notes that the data which Northern Powergrid can deliver will be highly dependent on the underlying data pipelines which are being developed under the Data & Digitalisation strategy (see below).
- 5.88 As in many other areas of the plan, Northern Powergrid is committing to a number of deliverables which do not have specific targets or metrics associated with them. It will therefore be essential that there are regular reports of progress against these deliverables, as well as against the metrics set out in the plan, in order for stakeholders to have confidence in the company's delivery of its plan commitments.

⁴ "Vehicle to Grid – The EV exports power to the network

Enablers

Innovation

- 5.89 Stakeholder engagement has demonstrated that customers support continued investment in innovation, especially if it is targeted on decarbonisation or reliability, but want the company to focus on delivering customer outcomes.
- 5.90 So far, we have been satisfied that the strategic framework being employed by the company is a reasonable approach to the issues it is currently facing, that the high level priorities seem appropriate, and that the plan is ambitious. We welcome the focus on collaboration and high standards of governance in relation to this work. We note that the Technical Panel has highlighted the potential benefits of further collaboration, both within the sector and more widely, and will be helping the company to identify further suitable partners.
- 5.91 We have not seen details of the justification for the claimed benefits from ED1 or the expected benefits during ED2. We note that the Technical Panel has identified the need for more objective measures of the benefits of innovation to avoid the risk of overstatement. We look forward to seeing more about this in the final plan.

Data and Digitalisation

- 5.92 This is a topic on which the CEG has had, and expects to continue to have, extensive engagement with Northern Powergrid. It is critical to achievement of many of the objectives within the business plan and it is not one on which the company has a strong starting position.
- 5.93 Northern Powergrid published its Roadmap for Digitalisation in January 2020, with an updated version in December 2020. It has used these documents as the basis for a substantial programme of engagement with stakeholders, both within the region and across the wide energy system. This engagement has complemented the extensive customer engagement activities undertaken by the company in developing its Emerging Thinking and Draft Business Plan for ED2, which has incorporated Data & Digitalisation alongside other elements of the plan. As noted below, we welcome Northern Powergrid's plans to explore use of tools such as ProductBoard (a software product management platform) to engage more closely with stakeholders on the digitalisation roadmap.
- 5.94 The strategy in the business plan sets a clear and ambitious vision for digitalisation ("Embrace digital platforms to enable an optimised whole energy system, providing a resilient and efficient service for our region"), built around 10 core areas. These areas are consistent with the feedback received through its stakeholder engagement (noting that this is a specialist area, so many stakeholders will not hold strong views on how Northern Powergrid should approach Data & Digitalisation).
- 5.95 Northern Powergrid's own assessment is that it is coming from a relatively low base on Data & Digitalisation. The strategy entails investment of £112m over the period. The company has not yet provided a quantified estimate of the benefits this will unlock during ED2 and beyond. This investment is embedded within all areas of the plan – partly in response to the CEG's Challenge (discussed next) the company has built a

clear thread of Data & Digitalisation investment as an enabler to all other aspects of the plan.

- 5.96 The CEG has raised a formal Challenge to Northern Powergrid on the level of detail in the digitalisation strategy. In response to this Challenge, the company has done a lot of work to link the Data & Digitalisation plan into other sections of the business plan. The CEG welcomes this – there are clear signs that Data & Digitalisation are more embedded into the overall business plan.
- 5.97 However, we would like to see more detail on:
- Quantified, SMART outcomes mapped to the substantial investment which the company will, rightly, be making in data and digitalisation during ED2.
 - How Northern Powergrid will build systems and processes to address data management, analytics and digitalisation.
- 5.98 For example, we believe more could be done to identify specific improvements that could be achieved through digitalisation: to the targeting of investment; the management of service failures; operational processes; and taking customer service to the next level. Making these clearer will help all stakeholders understand and assess the effectiveness of the strategy.
- 5.99 Given the materiality of Asset Resilience to Northern Powergrid’s investment plans, this is an area where better data collection, integration and management and analysis of data could yield significant benefits. Although Northern Powergrid has a number of innovation projects under way in this area, we would welcome more attention to specific initiatives to address better targeting of investment in their asset base, as part of business as usual. Similarly, better integration of static and dynamic data across its core data “silos” (e.g., for asset, customer and incident management) could yield significant benefits for targeting investment and operations in ways that yield maximum benefit to its customers.
- 5.100 We understand that Northern Powergrid has done a lot of detailed thinking behind the overall vision, but this is still work-in-progress. We look forward to working with the company over the coming months to understand these details and how they are embedded into the overall plan so we can be more confident of its deliverability and cost-effectiveness. We also welcome the company’s plans to engage in more dialogue with its stakeholders about the Data & Digitalisation roadmap, e.g., via digital tools such as ProductBoard.
- 5.101 Northern Powergrid is working on a Product & Services roadmap which will help clarify these issues, but we have not yet seen sufficient detail on the products and services, when they will be deployed and the benefits they will deliver.
- 5.102 As with the DSO strategy, the CEG believes it is likely that the Data & Digitalisation Strategy will develop iteratively as the company engages more actively with the data it is beginning to collect. Thus, we should plan for some refinement and adjustment of targets as the strategy evolves. This again raises challenges for monitoring progress and assessing effectiveness of the strategy, so a suitable monitoring framework will also need to be developed.
- 5.103 The CEG notes that effective Data & Digitalisation will also entail significant organisational and cultural change within Northern Powergrid. Initial thinking on what

this might involve has been done, and costs for it included in budgets. We would like to see more detail on how this change will be managed.

Workforce Resilience

- 5.104 Northern Powergrid is still developing its workforce resilience strategy. The CEG has raised a Challenge regarding the company's approach to diversity and detailed comments on this will follow further discussions with the company.
- 5.105 The company has a strong track record of attracting, training, and retaining people with the skills needed for a traditional DNO role. However, the CEG has not yet been convinced that it is doing enough to deal effectively with the new challenges associated with the net zero and DSO agendas. It will need to attract new people with a different range of skills as well as developing the skills of its current workforce.
- 5.106 The company has engaged with its workforce and has credible plans to work with them to adapt to the new challenges. But this is unlikely to deliver the full set of skills needed for the medium term development of the company (beyond ED2).
- 5.107 The company will be competing in a tight market for people with control, environmental and data science skills. In this context diversity represents a huge opportunity (particularly in the light of the gender balance of graduates in, for instance, environmental sciences).
- 5.108 Although the company has engaged with a range of external stakeholders with highly relevant experience the CEG has not yet seen credible plans for acting on the feedback received to enable it to attract a truly representative cross section of its communities, and particularly to attract people with the new skills required.

Customer Value Propositions (CVPs)

One stop App solution for vulnerable customers

- 5.109 The CEG is supportive of the principle of developing such an App. and recognises that it could add value beyond Ofgem's baseline expectations, but a more detailed proposition will need to be developed before the CEG could fully support this initiative.
- 5.110 We believe that there could be real long-term value to this, but it will depend on take up, functionality, and usability. Further research with different customer groups will be needed to ensure it is a useful tool.
- 5.111 The CEG is not yet in a position to comment on the value of this specific proposition as we have not yet seen sufficient details. We look forward to seeing the business case and associated evidence in due course.

Self-service analytics toolkit

- 5.112 The CEG is supportive of the initiative, as a logical and necessary digitalisation and customer service initiative. The CEG also noted Northern Powergrid's engagement with customers and the enthusiasm that some stakeholders have to expand Northern Powergrid's current capabilities in this area.

- 5.113 The CEG notes that an immediate and key use of such a tool will come from the growth of low carbon technologies that customers will be installing in their existing installation – particularly solar generation, storage, electric vehicles and heat pumps. The CEG is still seeking assurance that these existing customers are just as much the focus of the tool's development as customers seeking new physical connections to Northern Powergrid's network.
- 5.114 Northern Powergrid has stated that aggregators will benefit from the tool. The CEG cannot envisage how a tool designed to serve individual customers can be used by aggregators unless their needs are specifically included in the design of the tool.
- 5.115 The value of this proposition is also based on its imminent introduction but, so far the CEG is unaware of Northern Powergrid's target dates for implementation, recognising its functionality will be increased in stages.

Dynamic voltage optimisation for domestic energy efficiency

- 5.116 The CEG is attracted to the objectives of this initiative and to its method. However at this stage of development the CEG still has some reservations.
- 5.117 The headline energy saving stated per customer is attractive, but Northern Powergrid has not yet convinced the CEG that this will be a practical outcome. The CEG's uncertainty hinges on research and demonstrations undertaken by other DNOs and whether this is sufficient to draw such conclusions.
- 5.118 Northern Powergrid should provide some definite assurance about how vulnerable customers and the fuel poor will be affected both in the trials and eventual rollout. Importantly there must be checks built in to ensure that the reduced power input associated with reduced voltages does not compromise the warmth of such customers who rely on electrical heating.
- 5.119 The CEG is unsure that Northern Powergrid has appropriately assessed the internal resource that will need to be devoted to managing this approach if it is to be rolled out.

Phase one rollout of next generation energy system

- 5.120 The CEG thinks this is a solution that we (UK) should be exploring. It offers significant potential, both to improve reliability for customers and communities that are currently less well served and, more widely, to open up new functionality and cost/performance options for energy networks, local energy markets, etc.
- 5.121 However, the solution also raises significant questions about the boundary of the regulated network versus market solutions, with accompanying implications for system operations, customer service, financing, charging, etc. If the CVP only addresses the technical issues of building and operating microgrids without addressing these wider concerns, then it may be missing an opportunity, and may risk going down some blind alleys. So we would like assurance that these wider concerns will also be addressed. That almost certainly means engaging a wider body of parties beyond Northern Powergrid.
- 5.122 We do not think these questions should delay the CVP going ahead. This is an avenue that should be explored and getting on-the-ground experience of running microgrids like

this in a range of locations has to be part of that exploration. However, it needs to be explored in that wider context.

Costs

- 5.123 Ofgem has asked CEGs to comment specifically on efficiencies, on options appraisal, and on cost benefit analysis (CBA) methodology. These are areas that the CEG will be scrutinising in more detail later in the year.
- 5.124 The CEG notes the totex efficiencies set out in the business plan but has not yet had the opportunity to discuss the detailed explanations for all of them, particularly the substantial ones projected for after 2028 (and it will be important that these are captured in future price reviews). The CEG understands that there are considerable uncertainties relating to the largest item in ED2, “Flexibility and smart grid solutions”. In addition, we note that the largest contribution to this item comes from price driven customer flexibility which is not within Northern Powergrid’s control. We look forward to receiving further information from the company on all the other areas, and will comment on these in our final report.
- 5.125 The CEG is in discussion with the Technical Panel about its assessment of Northern Powergrid’s investment options appraisal and selection. This panel is at a relatively early stage in its assessment of the company’s Engineering Justification Papers (EJPs), which contain the justification for its individual investment decisions. At this stage, therefore the CEG is only in a position to offer conditional assurance on the appropriateness of the company’s decisions in this area. We anticipate being able to say more about this in our final report.
- 5.126 We note that Northern Powergrid has used the ENA Common Evaluation Methodology on some projects, but we have not yet looked into this in detail.

6 Next Steps

- The CEG will scrutinise Northern Powergrid’s ongoing work developing its business plan until the final version is submitted in December of this year, and continue to seek to influence the company’s development work to align it as closely as possible with the needs and preferences of consumers and stakeholders.
- We welcome input to our work from any of the company’s stakeholders, and would particularly value comments on this interim report or suggestions of topics that would benefit from focused attention now.
- We will discuss our findings with both Ofgem and the Challenge Group and carefully consider their feedback, using it to inform our work in the remainder of the year.
- We will publish our assessment of Northern Powergrid’s final business plan in January 2022.

Annex 1: Technical Panel and Remit

Technical Panel members

Panel established in June 2020

Prof. Phil Taylor (Chair): Pro Vice-Chancellor for Research and Enterprise at Bristol University

- Internationally leading researcher and industrial expert in energy systems, who has worked in industry and academia for over 25 years
- Co-Director of the £20m EPSRC National Centre for Energy Systems Integration (CESI)
- Leader of the £10m EPSRC Supergen Energy Networks Hub

Prof. Jianzhong Wu: Professor of Multi-Vector Energy Systems and Head of School of Engineering, Cardiff University

- Researches on Smart Grid and Multi-Vector Energy Systems
- Contributed to more than 50 EU, EPSRC and industry funded projects
- Published more than 250 peer-reviewed papers
- Co-Director of £18m UK Energy Research centre and Co-PI of £24m Flexible Integrated Energy Systems project
- Director of International UNiLAB on Synergies between Energy Networks
- Fellow of Energy Institute and Fellow of the Learned Society of Wales

Prof. Konstantinos Chalvatzis: Professor of Sustainable Energy Business at Norwich Business School (NBS), University of East Anglia

- Associate Dean for Innovation in Social Sciences and chairs the UEA-wide interdisciplinary theme ClimateUEA
- Research focuses on energy sector innovation including smart grid and storage and the role of energy in the sustainability performance of corporate organisations
- UEA's Principal Investigator in projects funded with over £22m by the EU, industry partners and investors
- Former Inaugural Chair of EU DG Energy's WG on Consumer Engagement with Smart Grid and Energy Storage systems
- Former consultant and project manager in the energy sectors of the Balkans, Eastern Europe, Caucasus and Northern Africa

Dr Robin Preece: Senior Lecturer in Future Power Systems within the Department of Electrical and Electronic Engineering at the University of Manchester

- Research focuses on power system operation with large numbers of volatile and variable low carbon technologies
- Consulted with energy companies on the dynamic impact of integrating new technologies and power electronics into large systems
- Active member of the IET, IEEE and Cigre
- More than 70 international publications on energy and power systems.

Scott Milne: Head of Insights, at Energy Systems Catapult (ESC), an independent, not-for-profit centre of excellence set up to accelerate the transformation of the UK's energy system and ensure UK businesses and consumers capture the opportunities of clean growth

- Consultant on exploring low carbon energy transitions, exploring; quantitative modelling of long-term energy and emissions trajectories and qualitative analysis of energy trends for the UK.

Geraldina Iraheta: Chief Commercial Officer at Digital Catapult
Joined the panel in May 2021

- Digital leader, technologist and strategic thinker with wealth of experience spanning a broad range of sectors including mobile telecoms, fintech, manufacturing, creative, and digital health.
- Helping businesses in driving competitive advantage through innovation, advance digital technology strategy and speed of executive in high growth and high tech environments. Working with a range of stakeholders, local governments, academia, large enterprises, start-ups and investors.
- Responsible for managing and growing £15+ Research Commercialisation and Collaborative R&D for Digital Catapult and its partners.
- Worked across multiple regions on multi million pound Technology and Innovation programmes across Latin America, USA, Europe, Japan

Beth Warnock: Power System Practice Manager at Energy Systems Catapult
Joined the panel in May 2021

- Technical expertise includes electricity system operation, modelling and simulation, investment planning and integration of renewable technologies onto the network and into markets.
- Over 14 years of experience with the Electricity System Operator in a variety of disciplines. Experience includes identifying future operability challenges including voltage, stability and fault level through the System Operability Framework.
- Collaboratively worked with several DNO's looking at whole electricity system operational solutions to connect DER in transmission constrained areas.

Remit of the Panel

1. The objective of the Panel is to act as a critical friend and provide a level of impartial scrutiny and quality assurance of the analysis carried out by Northern Powergrid as part of RIIO-ED2 business planning activity. This will include, but is not limited to, the choice and application of modelling methodologies employed, the inputs to that analysis and the outputs/conclusions of that analysis.
2. The Panel will test how robust and fit for purpose the investment planning process is, ensuring Northern Powergrid's plan is suitably balanced in terms of risk between company and consumer and in terms of the needs of current and future customers.

3. To enable this objective the Panel will have the freedom to question Northern Powergrid on any part of the operational cost base but with particular focus on condition/performance based replacement/refurbishment, reliability, resilience, environmental, innovation and network utilisation.
4. The Panel will be examining and discussing the engineering justification documents that support the business plan that will not be typically reviewed by the CEG.
5. The scope of the Panel will be a cross-cutting review ensuring that the net-zero predictions are core to our investment decisions regardless of the initial driver to intervene (condition, performance, safety etc.). The Panel will test the assumptions on use of customer flexibility, smart grid solutions, conventional solutions and smart grid enablers used to deliver a “net-zero ready” network for the least possible cost.
6. The Panel will assess the innovation strategy and digitalisation plan, as being important enablers of the net zero transition.

Annex 2: Customer Engagement Group Terms of Reference

1. Background

Northern Powergrid has established an independent 'Customer Engagement Group'. This group is being formed in response to Ofgem's requirements as part of its next price review (known as RII0-2) process, and its role is to represent the interests of the customers and communities that Northern Powergrid serves. Under the Ofgem process all electricity distribution companies are required to submit draft business plans to Ofgem, covering the period 2023-2028. The CEG will challenge the company to ensure that its developing plan properly reflects customers' interests and Ofgem's guidance on priorities for the price review. These priorities include ensuring that the electricity grid:

- is amongst the safest and most reliable in the world;
- keeps network charges on bills as low as possible;
- supports the target of net-zero carbon emissions for 2050 by enabling the rapid roll-out of low carbon technologies, including electric vehicles, and the development of a charging network to support them;
- supports new customers in getting connected to the grid quickly, efficiently and at least cost;
- enables people to produce their own energy and sell it easily;
- delivers great customer service; and
- helps fuel-poor households, and those that are most vulnerable from a loss of supply, by understanding their needs and tailoring their services in response.

2. Role:

- a. The independent Customer Engagement Group ("**CEG**") will operate at arm's-length, independent from both the Company and Ofgem, to provide challenge to the Company on its business plan for RII0-2 and provide its own views to Ofgem and the public on whether the Company's business plan addresses the needs and preferences of consumers..
- b. This work of this group is separate from the company's ongoing stakeholder engagement activities, which will continue. The CEG will not seek to duplicate these activities. Rather, it will assess and report on the quality and scope of the Company's stakeholder engagement, and the extent to which its findings are reflected in the Company's plan.
- c. The CEG will not have any decision-making powers in respect of the business plan. All such powers still rest with the Company. The CEG will not be jointly responsible for the business plan that the Company submits to Ofgem and the ownership of the business plan remains solely with the Company.

3. Duties and scope:

- a. In carrying out its purpose of providing challenge to the Company's business plan, the CEG will focus on areas where there is the need to improve customer outcomes, and where it has the expertise to scrutinise and challenge.
- b. The CEG's report will consider the following areas (including but not limited to):
 - i. the Company's overall priorities and approach;
 - ii. the Company's approach to sustainability and resilience;
 - iii. the Company's proposed outputs and associated total expenditure (including level of cost efficiency improvements);

- iv. the quality of stakeholder engagement the Company has undertaken to inform their proposals;
- v. the approach and support that the Company provides to vulnerable customers;
- vi. the Company's approach to innovation, including incorporating innovation into its business;
- vii. the range of scenarios that the Company has taken into account to anticipate future network requirements and the Company's approach to managing uncertainty and associated risks;
- viii. what alternatives to the investment proposals the Company has considered including from parties offering alternative and non-network based solutions;
- ix. any issues of particular relevance to the region served by the Company, including any significant investment choices in the area, and provide challenge to decisions made by the Company when considering competing interests and perspectives.

This list will be kept under review and amended as appropriate.

- c. The following is outside the scope of the role of the CEG:
 - i. the consideration of financial issues, such as the cost of capital, treatment of debt or the level of gearing in the Company. This is reserved to Ofgem.

4. **Outputs and deliverables:**

- a. The primary output from the CEG will be an independent report to Ofgem on the Company's business plan. This should be submitted directly to Ofgem at the same time as the Company submits its business plan, and made public. In its report, the CEG will highlight areas of agreement and disagreement between the CEG and the Company, including how the Company has responded to challenges that have been raised by the CEG throughout the process. The report will highlight where there is or has been disagreement amongst members of the CEG. The report will provide a view on the degree to which the Company has explored different options, considered different viewpoints, and properly reflected these in its final plan. It will provide Ofgem with independent evidence for Ofgem to consider alongside other relevant matters in its assessment of the Company's business plan.

The CEG will also:

- b. be represented at any "open hearings" proposed by Ofgem once Ofgem has received the Company's business plan. Attendance will be by the chair on behalf of the CEG and should be in person if this is required by Ofgem.
- c. meet regularly (at a frequency to be decided by the chair), and produce outputs from its meetings including:
 - i. minutes and actions for each meeting;
 - ii. challenge and issue logs, updated after each meeting, capturing challenges by the CEG to the Company's business plan.
- d. meet with Ofgem and the RIIO-2 ED Challenge Group (CG) periodically to provide feedback on the progress made by the Company in respect of the Company's business plan, and on the process of producing the business plan itself.

5. Chair:

- a. The CEG has an independent chair, whose role will include leading discussions and chairing meetings of the CEG. The chair must act independently and not as a representative of a particular organisation or group of customers.
- b. The chair will be the principal representative of the group in contacts with other parties (including the Company, Ofgem, and the CG)
- c. The chair is responsible for ensuring that members of the CEG have a good understanding of the main obligations, issues and priorities required to carry out their role as members of the CEG.
- d. The chair should seek to facilitate open, informed discussion and consideration of issues set out in paragraph 3 by the CEG.

6. Membership:

- a. The CEG will be constituted in such a way that members between them have the range of knowledge, skills, and expertise necessary to scrutinise and challenge the Company's plan in all the areas set out in Section 3 of these Terms of Reference.
- b. Individual members will provide expertise relating to their discipline to the CEG, contributing their views as individuals and not seeking to represent any group, organisation or constituency other than the interests of current and future consumers.
- c. Members must ensure their contributions enable the CEG to function in a collaborative and cohesive manner.
- d. Members may be asked by the Chair to represent the CEG in meetings, including public open hearings in support of the Chair.
- e. Members must inform the Chair and Secretariat in advance if they are unable to attend any meeting.
- f. The chair shall work with the Company to recruit members of the CEG and be prepared to justify their selection to the Company and to Ofgem (if required). The chair is responsible for notifying the Company if any member(s) of the CEG wishes to leave the CEG and for managing any such leavers whilst ensuring that the overall role of the CEG is not affected.
- g. A Member may be removed from the Group by the Chair, in consultation with the Company, if they have committed a serious breach of the standards of conduct laid down in the Terms of Reference.

7. Conduct of the CEG

- a. The independence of the CEG Chair and Members from the Company and Ofgem is essential. The CEG must scrutinise and challenge the Company's business plan as it is developed and, in doing so, seek to achieve the best possible outcomes for present and future consumers.
- b. The work of the CEG will be conducted in as transparent a manner as possible, without compromising either individual rights or the Company's commercially confidential information. The CEG will maintain webpages with an up to date record of its membership, Terms of Reference, and the progress of its work.
- c. The Chair and Members will observe the highest standards of integrity and independence and comply with the principles established by the committee on standards in public life (Nolan Principles – see attachment).
- d. All members must declare any conflicts of interest that may be relevant to their role as a member of the CEG. A conflicts of interest register will be maintained by

- the CEG, and kept available for public scrutiny. Members must also declare any conflicts of interest at the start of any meeting of the CEG.
- e. The CEG's work will be programmed, so far as is possible, to interface smoothly with the needs of Ofgem and the CG and the Northern Powergrid business plan development timetable.
 - f. The CEG should challenge the Company's internal assumptions (including raising expectations about what 'good'; looks like) and ensure that the company is keeping pace with the latest thinking both nationally and internationally.
 - g. All members are expected to work collaboratively and proactively with the other members of the CEG, sharing relevant learning and information with each other to assist with their role as members of the CEG.
 - h. The CEG will try, where possible, to reach a consensus position on all matters that it discusses. However, where this is not possible, then the view of the majority of the members of the CEG will prevail. Where a consensus has not been reached, CEG members may request that specific individual views are recorded in the minutes, even though the majority view will prevail. In the case of a "tie" between members of the CEG the Chair will have the casting vote.
 - i. Members of the CEG may receive commercially sensitive data or personal data relating to named individuals in connection with their role as CEG members. Members of the CEG must agree to keep all such information confidential and to abide by all laws, regulations and legislation in respect of such information (including the processing of any such information).
 - j. Members of the CEG must agree to enter into any separate agreements with the Company in respect of confidentiality, intellectual property and/or data protection as the Company may reasonably require.
8. **Resources and information:** The Company will provide the CEG with the following information and resources to assist the CEG in carrying out its role: secretariat support, meeting facilities, etc. All relevant information regarding the business plan, and its background (e.g. relevant government policies, regulatory requirements; planning scenarios).
9. **Meetings with the Company.** The CEG will meet formally with the Company at least once every three months.
10. **Quorum:** Four members of the CEG including one member from each of the subgroups and a designated Chair.
11. **Variations to terms of reference:** Any changes to these terms of reference must be agreed in writing by the chair of the CEG and the Company. The terms of reference will be reviewed once a year.
12. **Transparency:** The CEG will have a webpage which will include:
- a. the membership of the CEG;
 - b. a register of conflict of interests;
 - c. the Terms of Reference; and
 - d. an overview of the main issues discussed at the CEG meetings.
 - e. a record of areas of active challenge.

13. Definitions

For the purposes of these Terms of Reference, the following terms have the following meanings:-

“Company” means Northern Powergrid (Northeast) plc (company number: 02906593) and Northern Powergrid (Yorkshire) plc (company number: 04112320)
“Ofgem” means the Office of Gas and Electricity Markets.

The Nolan Principles

The 7 principles of public life apply to anyone who works as a public office-holder. The principles also apply to all those in other sectors that deliver public services, so it is appropriate that CEG members, who are appointed to represent the interests of customers and communities, should adhere to them. They are:

1. Selflessness

Holders of public office should act solely in terms of the public interest.

2. Integrity

Holders of public office must avoid placing themselves under any obligation to people or organisations that might try inappropriately to influence them in their work. They should not act or take decisions in order to gain financial or other material benefits for themselves, their family, or their friends. They must declare and resolve any interests and relationships.

3. Objectivity

Holders of public office must act and take decisions impartially, fairly and on merit, using the best evidence and without discrimination or bias.

4. Accountability

Holders of public office are accountable to the public for their decisions and actions and must submit themselves to the scrutiny necessary to ensure this.

5. Openness

Holders of public office should act and take decisions in an open and transparent manner. Information should not be withheld from the public unless there are clear and lawful reasons for so doing.

6. Honesty

Holders of public office should be truthful.

7. Leadership

Holders of public office should exhibit these principles in their own behaviour. They should actively promote and robustly support the principles and be willing to challenge poor behaviour wherever it occurs.

Annex 3: Stakeholder Engagement events observed by CEG

Wave 2 engagement: 77 events observed by CEG members.

Wave 3 engagement: 28 events observed by CEG members. 1 still to attend.

Topics covered:

Vulnerable customers	1
Decarb/Climate Change/Environmental Impact	17
Consumer Panel	16
Network Reliability	4
Innovation	2
Delivering a social legacy	1
Skills	1
Working with you to shape our plans	2
Willingness to Pay (WTP) – vulnerable customers	2
WTP – domestic customers	2
WTP – SME	2
WTP – Future	2
Connections	7
SME Panel	5
Innovation festival	3
Regional Conference	6
Trade Union engagement	3
Resilience	1
University engagement	3
Distributed Generator (DG) Owner Forum	1
Independent Distribution Network Operator (IDNO) Forum	1
Intergenerational research	2
Asset Resilience	2
Reliability & Availability	2
Business Plan Acceptability Testing (BPAT) – domestic customers	1
BPAT – SME	1
BPAT testing with energy champions	6
Customer service and giving consumers a stronger voice	2
Communities and environment	2
Bill impact, acceptability and affordability	2

Annex 4: Challenge Log

Ref	Date raised	Challenge raised	Brief Description	Response by Northern Powergrid (NPG)	CEG view of NPG response	Open/ Closed
C1	11/11/2020	Local Area Energy Planning	<p>The CEG recognises the description of the Local Area Energy Plans by the Energy Systems Catapult (2018) as enabling "stakeholders, led by local government, to interrogate different energy futures for an area and to develop the most promising, cost-effective options for decarbonisation. For network operators, it provides a foundation for justifying and planning network upgrades. Local Area Energy Planning develops a shared vision as a basis for targeting investment, encouraging innovation, securing value for money and gaining public understanding and support".</p> <p>Such an approach is likely to be an essential element of developing the type of robust evidence that would be required to engage and convince Ofgem to fund investment proposals for decarbonising the energy system based on locally assessed need and priorities rather than on a central set of forecast outputs (which Ofgem itself recognises could lead to higher costs or an underestimation of investment needed in different regions).</p> <p>The CEG also recognises that the policy framework for LAEPs is not yet firmly settled but encourages NPG to take a proactive approach to developing local partnerships, particularly with local and combined authorities across the region that it serves. This may be particularly productive with those authorities that are progressive in this area, for example in support of pathways to decarbonisation and hitting net zero by 2050 or before. Capacity, and detailed plans, exist within the West Yorkshire Combined Authority (and its constituent local authorities) as well as at and within the North of Tyne Combined Authority (and its constituent local authorities including Newcastle) and the North Yorkshire and York Local Enterprise Partnership (which includes North Yorkshire authorities and the unitary City of York).</p> <p>The CEG also actively encourages NPG to consider using its expertise and influence to support capacity building and stimulate engagement by those authorities that are under resourced or otherwise less able to make effective progress.</p> <p>The potential for building wider networks of influence and stimulating greater collaboration among key players (including other network operators) is also encouraged as part of this challenge. The CEG has made reference to certain examples that may be worthy of consideration (notably Greater Manchester).</p>	<p>Response by Northern Powergrid (NPG)</p> <ul style="list-style-type: none"> In principle we accept the Challenge. This aligns almost exactly to the role we set out in "Emerging Thinking" on the ED2 plan last summer, to play a key facilitating role in decarbonisation and providing regional coordination and appropriate leadership. This will be given effect by a range of propositions in the plan, but a key proposition is to allocate dedicated headcount to support LAs in developing LAEPs. This will be explored in the decarbonisation propositions paper ahead of draft plan. We are doing a lighter touch version of this in the remaining years of ED1, working in partnership with NGN (and we hope also Cadent from later this year), but we are not currently fully resourced to do this and building the extra capacity to do it will take considerable time given the expertise needed. <p>UPDATE – 7th May 2021</p> <ul style="list-style-type: none"> <i>Building on joint engagement on this subject, we have created and published a Joint Charter with Northern Gas Networks, outlining four principles and actions we will be applying over the next year to support the evolution of LAEPs in our region. Our joint commitments include supporting a single conversation, in which Local Government does not need to navigate between the networks; providing expert advice to local projects that seek to explore and plan for a range of pathways; developing a joint plan for how to most effectively share data that will support LAEPs; and working closely with Ofgem and central government, to identify funding for LAEPs.</i> <i>Specific engagement on this subject is continuing with City of York Council, Newcastle City Council, York and North Yorkshire Local Enterprise Partnership, Durham County Council, West Yorkshire Combined Authority, among others.</i> <i>BEIS is generally supportive of our approach</i> <i>We are continuing to engage on our proposal for regional LAEP advisors (part of our DSO Strategy).</i> 	<p>7/05/2021</p> <p>The importance of Local Area Energy Planning is significant for all parts of the country, but is particularly critical in the North East and Yorkshire because of the specific opportunities for hydrogen, which may lead to different trajectories for decarbonisation than much of the rest of the UK.</p> <p>In the gap between final business plan submissions there are those at the leading edge who may be closer to the levels of evidence needed to justify a degree of differentiation compared to other DNOs and within licence areas around paths to Net Zero that isn't present today. Leaving the door open to developing plans by other actors would acknowledge the need for the final plan in these areas to be as up to date as possible, recognising that unlike ED1 the gap between draft and final submission may have a more important function than just allowing for changes driven largely from within the regulatory process. Stakeholders in all cases need more time than is available to provide all the evidence that may be needed, but the deadline of the final business plan being submitted may allow for the plan to better align with local decarbonisation plans (more important due to national government's own net zero work lacking specifics but with huge policy ambition, requiring local leadership to play a greater role than would otherwise be necessary in order to meet Paris and forthcoming Glasgow commitments).</p>	Closed

Ref	Date raised	Challenge raised	Brief Description	Response by Northern Powergrid (NPG)	CEG view of NPG response	Open/ Closed
C2	11/11/2020	Northern Powergrid's role, as an Anchor Institution, in Building Back Better	<p>The CEG is aware that the actions necessary to control the COVID-19 pandemic are having a substantial impact on the economy of the region served by Northern Powergrid. The CEG challenges the company to seek opportunities to take advantage of the current market to bring forward investment activities, thereby helping to restart the economy but also to benefit future bill payers by keeping costs low.</p> <p>The CEG notes the importance of Anchor Institutions for the region and so also challenges the company to consider opportunities to fulfil this role in collaboration with other regional Anchors such as Yorkshire Water, various Local Authorities and Academic Institutions.</p> <p>Context: Anchor Institutions can be defined in several different ways. In essence, they are organisations that can have a significant positive impact if they consciously and strategically apply their long-term, place-based economic power. This is particularly the case if that is combined with their human and intellectual resources, to better the welfare of the community or region within which they operate. In the first instance Anchors tended to be associated with local authorities, health care settings and places of higher education. Latterly, however, a more inclusive definition has evolved and our list of Anchors includes social housing providers, utility companies and established regional employers.</p> <p>It is recognised that Anchors create most value when they are fully engaged with their locality and work in partnership with each other, so that they can learn together and build sustainable strategies over time. The impacts created by Anchors can result from the services they provide, the amount of money they spend and the number of local people they employ. For example, the purchasing power of one or more Anchors can be very significant. A study carried out by the Joseph Rowntree Foundation and Leeds City Region Enterprise Partnership, identified that were the 10 participating Anchors to shift 10% of their total spending to suppliers in the city region this could be worth somewhere between £168-£196m/pa, an increase of more than 20% of local spend.</p>	<p>Challenge accepted.</p> <ul style="list-style-type: none"> Through the Green Recovery Scheme, we have already identified £30m investment to bring forward in ED1. In early February we will also launch a call for evidence to identify a number of proactive investment schemes for accelerated development in the next 2-3 years. More generally we have decided to develop and adopt a Sustainability Strategy to support business plan building on this theme, aligned with the UN SDG. This approach will help us frame our role in a holistic, strategic way, informed with a broad view of what environmental, social and economic sustainability looks like. <p>NPG response plan:</p> <ol style="list-style-type: none"> Individual actions, working with Leads across all business plan areas, in particular environment, vulnerability, O&T, decarbonisation and communities. CEG review of sustainability strategy once drafted. <p>UPDATE – 7th May 2021 & 19th May 2021</p> <ul style="list-style-type: none"> Our sustainability strategy is a core part of our ED2 business plan and that frames the importance of our role as an infrastructure provider and anchor organisation in our region. We have a key role in delivering a sustainable, low carbon future and we take a long term view on everything we do. Our strategy has three core pillars: <ul style="list-style-type: none"> o Social – being a force for good for our colleagues and communities; developing, supporting, and protecting them. o Environmental – protecting our environment for the benefit of future generations, driving and facilitating decarbonisation and adapting to climate change. o Economic – creating long-term value through sustainable growth and keeping bills affordable for our customers. This strategy will be tabled at the Operational subgroup in early June and comments address before final submission. Clear links to our sustainability strategy will be made in all relevant elements of the business plan including LAEPs and Community Energy Advisors. Also fed into giving customers a stronger voice with additional capacity for engagement across delivery of all the plan, particularly decarbonisation. In addition to the Green Recovery investment initiative previously referred to we continue to expand our social impact programme, where we align social initiatives with major investment works to meet specific local needs. Through extensive community outreach, in partnership with local stakeholders, we design an engagement and social programme in a way to maximise a project's lasting social impact, using our position as an Anchor organisation to benefit the local community. We will 	<p>7/05/2021</p> <p>The Green Recovery Scheme is to be welcomed, and sets a clear direction of travel.</p> <p>The anchor institutions agenda includes a focus on procurement value and the specific contribution NPG can make. Drawing together the commitments across the plan, and specifically framing what economic and social impact they will make and the benefits beyond the direct energy system, is of particular importance to the communities in which NPG is based (so where its employment is most heavily concentrated).</p> <p>Specifically committing to engage with being an anchor institution, and collective efforts across the private sector more widely, would support the fuel poverty aspirations in the plan. Addressing the causes of fuel poverty through committed spend in indirect areas where it has a poverty reduction benefit may not be quantifiable now, but could be done retrospectively.</p>	Open

Ref	Date raised	Challenge raised	Brief Description	Response by Northern Powergrid (NPG)	CEG view of NPG response	Open/ Closed
C3	01/12/2020	Workforce Diversity Strategy	<p>The CEG believes that the inclusion and diversity are integral to the issues of workforce and skills development. Northern Powergrid is facing a number of challenges in ensuring that it will have a workforce capable of supporting the achievement of the ambition set out in its Emerging Thinking consultation and attracting talent from as wide a pool as possible will be essential to addressing these challenges. Given the current profile of its workforce, accessing, attracting, and retaining a pool of people that fully reflects the diversity of the communities served by the company represents a huge opportunity as well as a challenge. The CEG is not convinced that the proposals it has so far seen represent an appropriately ambitious approach. We would like to see a workforce strategy that underpins the company's vision, with a set of metrics and milestones that will facilitate regular monitoring of progress towards the vision throughout ED2 and beyond.</p>	<p><i>continue to develop this by defining medium and longer term sustainability targets and continuing to embed the roll out of social impact in the remaining years of ED1.</i></p> <ul style="list-style-type: none"> Fair: Challenge anticipated given Diversity, Equity & Inclusion (DEI) is a step change "big ticket" item for ED2 and beyond both for our company, sector and is a 'hot topic' on the global agenda. Early CEG desire for DEI from the outset, despite making it clear in our first interaction, we were only talking to them Workforce Renewal and Skills agenda. This was ahead of the Ofgem guidance document on Workforce Resilience being published. In line with Ofgem guidance to CEG, DNOs are required to work collaboratively with their respective CEG to establish appropriate key workforce resilience metrics and a consistent approach to reporting, to increase openness and transparency across the sector – so not surprised to see reference to metrics within the CEG challenge. There needs to be recognition that NPG is typical of companies within the energy sector and is reflective of how many students take STEM subjects in education. Changing the balance will take years – this is a multi-price control period, not an ED2 only, agenda item. <p>NPG response plan:</p> <ol style="list-style-type: none"> Further analysis on leading DEI companies within the Energy Sector – with benchmarking/case study referencing to UKPN, National Grid and EON. Access to BHE DEI framework – including individual platform DEI action plans, including content challenge on DEI propositions/initiatives. Intervention plan established for Workforce Resilience with further internal support obtained for specifics of DEI and Skills and external challenge from Non Exec Director identified. Considering options regarding bolstering support into BAU operations within People team to free up capacity to devote more time to Workforce Resilience as well as reviewing how external consultants may be able to support further. Contact made with Utilities HR Leaders Forum to identify key leaders to share best practice and ideas, including sector specific contacts for DNOs to establish interest in co-ordinated approach to workforce resilience metrics. Enhancements to propositions required to strengthen ambition and specificity. Follow up call held with Justin McCracken to discuss CEG feedback and actions agreed regarding sub-group structure for the development of workforce resilience metrics. 	<p>6/5/21</p> <p>We understand that there are has been change with executive responsibility and subject lead within the organisation, which has created an understandable delay.</p> <p>The CEG appreciates and acknowledges the hard work that Andy and Adam have led with short notice.</p> <p>It is good to see NPG working with other DNOs on metrics.</p> <p>The CEG reviewed and discussed a progress paper at the CEG meeting on 30th April.</p> <p>Compared to other parts of the business plan, progress on workforce resilience remains less formulated.</p> <p>It was explained that NPG is engaging an external advisor to support their workstream on DEI, which is welcomed.</p> <p>We also understand there is material is being collated but was not ready to share at the time of the CEG meeting.</p> <p>Overall the CEG remain of the view that progress on DEI for the business plan require significant work. This is an area that has been highlighted as important by the CEG and NPG stakeholders.</p>	Open

Ref	Date raised	Challenge raised	Brief Description	Response by Northern Powergrid (NPG)	CEG view of NPG response	Open/ Closed
				<p>Response by Northern Powergrid (NPG)</p> <p>UPDATE – 7th May 2021</p> <ul style="list-style-type: none"> • The Workforce Resilience strategy in our draft plan submission will lay out our vision for a more diverse workforce, underpinned by an increasingly inclusive culture that promotes equal opportunities for all. • The regulatory requirements for DEI set by Ofgem are not prescriptive, however Ofgem has set out clear ambitions for the industry to make a step-change improvement. • For draft plan submission, in July 2021, we will have formulated our high-level DEI strategy and propositions. Work will be underway to develop the more comprehensive strategy and action plan, which will continue throughout 2021 and we will have published our DEI strategy externally by the time of full plan submission in December 2021. • Our ambition levels for increasing diversity will reflect a long-term, non-discriminative approach to increase diversity, predominantly, at entry-level positions where we have by far the largest intake of new colleagues through our Workforce Renewal programme. This will have, by far, the largest impact on increasing workforce diversity, by volumes. The positive actions we will take will seek to increase the number of applicants from minority groups so that there is a greater probability of more numbers being successful in getting roles. • Our DEI strategy will be tailored to and integral to delivering business needs – increasing skills and capability needs, growing work volumes, higher levels of customer satisfaction and optimising the business to deliver efficiently. A more diverse workforce will enhance our ability to achieve these. • Our priority areas are – gender, economically disadvantaged and ethnicity. • Actions we intend to take include: <ul style="list-style-type: none"> o Increasing our pro-active schools programmes targeted at increasing the uptake of STEM-courses, particularly focussed on females, attraction to the sector and provision of direct entry routes (such as work placements, summer programmes, apprenticeships). o Introducing more flexible and hybrid working arrangements for our colleagues. o Enhancing workforce analytics capabilities to generate insights, diagnose risks and identify ongoing opportunities for meaningful actions that will improve diversity, inclusion and equality in the workplace. o Adapting assessment and eligibility criteria to recognise other valued attributes and open opportunities to people that don't meet standard educational requirements. 	<p>CEG members observed engagement sessions stakeholder strongly fed back that they did not see NPG as representative of the demographic they serve.</p> <p>We are not convinced that the current proposal for DEI is ambitious enough. We would encourage NPG to be bold and look at setting a strong vision for how it will ensure that it represents the communities it serves.</p> <p>DEI should be an integral part of a workforce resilience plan. Viewing DEI through the prism of a 'hot topic' can be unhelpful.</p>	

Ref	Date raised	Challenge raised	Brief Description	Response by Northern Powergrid (NPG)	CEG view of NPG response	Open/ Closed
C4	01/12/2020	Engaging Stakeholders Effectively on the impact on bills of their choices of options	<p>The CEG recognises that it is far from straightforward to explain to stakeholders the impact on bills (both immediately and in the longer term) of changes in Northern Powergrid's expenditure. In order to generate reliable stakeholder insights it is essential that this is presented in a clear and accessible way.</p> <p>In June we asked NPG to look at ways of presenting the whole life impact on bills of investments, not just the in year impact (and consider showing in year changes in % as well as absolute terms) as part of its Wave 2 engagement. Observations of some of this Wave 2 engagement have identified that many stakeholders have only a limited appreciation of the cumulative effect of small changes on their household bills, and the long term impacts have not been made clear. This substantially reduces the reliance that can be placed on the choices they make in the consultation.</p> <p>We are now asking Northern Powergrid to ensure that future stakeholder engagement sets out the impact on bills in ways which will enable stakeholders to understand the choices they are being offered in the broader contexts of both their overall current expenditure and the future commitments.</p>	<p>This is a fair challenge from CEG regarding the importance of ensuring customers and stakeholders fully understand the construction of the current bill and implications and impact of any proposed change to this in order to generate reliable stakeholder insights.</p> <ul style="list-style-type: none"> We agree that the bill (and all relevant financial information) must be presented in a clear and accessible way and customers may have sufficient time given over to understand the information, question it and give a considered view. We agree that some stakeholders have only a limited appreciation of the cumulative effect of small changes on their household bills, and more work is needed to ensure long-term impacts are clear and fully understood. <p>NPG response plan</p> <ol style="list-style-type: none"> This is a key aspect of our Wave 3 preparations and one which is underway. We are currently seeking best practice examples from the water and gas industries to identify key learning. We are also engaging with our agency partners and experts to consider possible approaches. There are two key aspects that we are considering. Firstly the framing around the acceptability questions that we seek in relation to bill impact. For example, below are example question framing from other surveys: <ul style="list-style-type: none"> Your bill will also increase by inflation; Other household bills may go up or down, affecting the amount of money you have to spend in general; Your household income and expenses might change, so please be mindful of your overall financial situation when making your decisions; Any money you pay to improve the service offered by NPG will not be available for you to spend on other things; and Any choices you make to increase or reduce your bill in the period 2023 to 2028 are permanent changes, so they will still apply each year after 2028 In addition, we are exploring means of pictorially representing bill impact information in a way that is understandable. This is also a key focus for our newly recruited Energy Champions to challenge us in our approach and help us to shape something that is clear and accessible. <p>UPDATE – 7th May 2021</p> <ul style="list-style-type: none"> Extensive efforts have been undertaken to ensure that respondents appreciate the long-term impact of business plan decisions and that this is considered in the wider context of their expenditure. In March 2021 we co-created a set of materials with the Energy Champions to communicate bill impact. These materials were first used in the Citizen's Panel Day Zero session on the 10th of March, they have then been used consistently each week across rounds 1 to 5 to remind of the key principles – initially £5 and then £6, but always framing this was across 45 years. 	<p>5/5/21</p> <ul style="list-style-type: none"> NPG fully accepted the Challenge and worked with their engagement agencies to design material for Wave 3 and 4 to improve customers' understanding of the impact of their new business plan proposals. Materials were tested to help ensure survey questions were understood and business leads were available in most online forums to provide further explanation. There has been considerable effort made to help customers understand how an average energy bill is made up and different versions tested out with customers based on Ofgem's own breakdown, National Grid's and other companies' examples. There have been lessons learned from Wave 3 that are to be applied in Wave 4 (BPAT). For example, we were concerned that customers didn't fully understand the long-term implications of investment decisions and NPG's element of the total energy bill. CEG members observed discussions with NPG customer panel members (Energy Champions) to hear their views on how best to explain bill impacts (NPG framed the questions based on the questions they highlighted in their initial response). <p>Despite all this work, observation of the Citizens Panel, who had had extensive input on the issue over a prolonged period, raised concerns about their understanding of the duration of bill impacts. When tested it was found that the understanding was limited with half of the group thinking that the bill impact did not endure beyond ED2. Even after a major further intervention, only 2/3 of the panel correctly answered a multiple choice</p>	Closed

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				<p>Response by Northern Powergrid (NPG)</p> <ul style="list-style-type: none"> Round 6 of the Citizen's panel focussed on bill impact and, in response to CEG feedback, we tested our assumption that respondents did understand the £6 bill impact across 45 years. Of those who responded (35 out of 47) 50% thought this was a charge that only applied to ED2 and the charging thereafter would be reset. Of the remaining, 42% acknowledged 45 years, although a small percentage did think that began from today and 8% selecting one of the 25 year options. This demonstrated that despite the ongoing reinforcement of the 45-year principle, there was some work to be done with the group and our materials. In session 2 of round 6 we grouped panellists together based on their knowledge level. Those who had wrongly answered the question were placed together in two breakout groups with Mike Kay observing one, and Justin McCracken observing the other. Facilitation in the session focussed on assessing understanding and NPG intervention to attempt to ensure the whole group had the best opportunity to understand the principles. Following the session, we repeated the poll to assess understanding of bill impact. There was a significant increase in understanding amongst the audience demonstrating the effectiveness of the technique. At this point only 10% of panellists selected the between 2023 and 2028 option, compared to 50% originally. 67% selected from 2023 for 45 years, an increase from 36%. The remaining 23% selected one of the other options which does still acknowledge the acceptance of the bill impact over a long period of time. It is worth noting, however, that despite extensive discussions there was still a significant proportion who answered incorrectly. Discussions on the night also did say that despite initial misunderstandings by many this did not materially change their view and were supportive of the £6 bill impact to support implementing the plan commitments. A new bill impact infographic has been developed based on these insights and shared on our Emerging Thinking website with all the plan propositions. Our wave 3 communications plan is promoting the content to ensure that as many customers are aware and can comment and vote on our draft plan. Within the acceptance testing process we have revised our narrative to talk about £6 being from 2023 onwards i.e. this is a permanent change to the bill and not just for the ED2 period. 	<p>question on duration of bill impact.</p> <p>*The bill increase levels have changed as the propositions in the drafting of the plan have developed and the range of increase has been tested between around £4.70 and £6. These costs have all been associated with decarbonisation/net zero in some way and customers have heard that costs for other work streams have been held at the same level as in ED1 on a like for like basis. For the majority of customers involved in workshops/panels they recognise the need to develop the energy system to meet Net Zero but want to ensure that costs are kept as low as possible in achieving this goal.</p> <p>*Testing of the BPAT draft survey revealed that the concepts were too difficult to understand, the survey was too long, and sections could be misunderstood. Currently the agency is adapting the survey to simplify it, make it shorter and provide better explanations of proposals. A further testing exercise might prove beneficial before full roll out.</p> <p>*NPG have made great efforts to date to improve stakeholder/customer understanding and the CEG will continue to review engagement plans and review methodologies, engagement materials and the results of surveys.</p> <p>However, the evidence from the Citizens Panel is that this is such a difficult topic to communicate that the work so far has not been fully successful and results of stakeholder feedback need to be treated with considerable caution.</p>	

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C5	04/01/2021	Data and Digitalisation	<p>Ofgem has made it clear that data and digitalisation will be a core concern during ED2. This builds from the Energy Data Taskforce's recommendations on openness of data and mapping of the assets within the energy system, and the ongoing work of the Modernising Energy Data programme. The CEG is convinced that making progress in this area should be a high priority for ED2 because such data is a key enabler of smart flexible operation of the network. Failure to make early progress in this area could have significant opportunity costs later. Our challenge to the company is to set out its vision and strategy for improving data quality and analysis in more detail, to identify the specific data-driven outcomes that will be achieved during ED2 (and beyond if possible), and to identify the enablers required to implement this strategy (e.g. systems and skills) and how they will be built during ED2.</p> <p>Questions around this topic have come up on a number of our sessions recently, for example:</p> <ul style="list-style-type: none"> The scope for finer grained analysis of reliability data to improve targeting of investment in the network. There could be considerable scope for an initial investment in data and analytics to yield large benefits in this area. Similarly, there would appear to be considerable scope for integrating NPG's data with external GIS and other data in order to better characterise factors driving service failures, and so better target investment and operational processes. Ensuring that each MPAN is mapped to its correct electrical location on NPG's network so that the impact of service outages on individual customers can be analysed and managed operationally. As well as supporting NPG to take customer service to the next level, this would again have potential benefits for improving support for the vulnerable, targeting of investment, and managing flexibility services. On workforce resilience and skills, much of the focus has been on recruiting through existing channels (e.g. apprentices, graduates), whereas data and digitalisation may require new points of entry to be developed (e.g. for data engineers and data scientists, who are likely to have post-graduate qualifications and/or have experience gained from other sectors outside of electricity, or energy more widely). <p>Our particular concern is that none of these examples seem to be addressed in the Digitalisation strategy, which still appears to be very generic rather than grounded in the analysis being undertaken in other sections of the plan. We would therefore like to see more emphasis on making data and digitalisation a core</p>	<p>We think this is a fair challenge. The Digitalisation strategy we published in December, in line with Ofgem requirements, sets out the high-level strategic objectives and roadmap that will achieve these ambitions, however the bottom-up work being done with plan propositions has not yet aligned with this strategy.</p> <ul style="list-style-type: none"> We are comfortable that our workplan in this area will address the CEG's challenge and the external support for this workstream will help to enable that. We acknowledge that demonstrating the data and digitalisation enablers in plan sections will help the CEG and others understand the impact these enablers are having in delivering our business objectives. <p>NPG response plan</p> <ol style="list-style-type: none"> We have begun by playing our propositions to each individual plan area, explaining how we have linked back to their plans. This allows us to check that the alignment is correct with their plans and that there are no gaps in our plan at the same time. Centrally, we have reassessed the requirement on plan areas to ensure that the data and digital enablers are clearly stated in the plan sections. We are also looking at bringing forward some planned work products to specifically move us forward on the data aspect of our plan to get up to speed and be able to move the dial on some of the things referenced in the challenge – for example we see the value in accelerating our data products and services roadmap as a route to demonstrate some of the detail that is suggested in the challenge itself. To support this, we have also recruited the plan itself to frame each improvement area and ensure it is fully resourced and the workstreams have input from the areas of the business who will receive the benefits from it. <p>UPDATE – 7th May 2021 & 11th May 2021</p> <ul style="list-style-type: none"> We have developed an open data and analytics roadmap to publish as part of the update to our DSAP in July 2021. This is going through the final stages of ratification within the business and will soon be shared in the next round of engagement with stakeholders but should help set out our vision in more clarity to all who are interested. We have also begun scoping an accelerator programme to support the creation of a 'data & digitalisation transformation office' (DDTO) who will be responsible for the closing of some of our maturity gaps in the data space specifically and begin the creation of open data products and services. This is possible now we have set out our vision and strategy in this space (which again, will be published as part of the next DSAP version and previously shared with the CEG). We believe it will be possible to start small and scale this DDTO, initially relying on strategic technology partners to supplement missing skillsets whilst we learn and grow internally and as part of the wider BHE group. 	<p>4 May 2021</p> <p>NPG's response plan looks fine, and the focus on a data products and services roadmap is appropriate, especially if it can be backed with a clear view of NPG's current-state and future-state data models, systems and data management pipelines.</p> <p>We've not yet seen the data products and services roadmap, but the final Proposition / Outline paper for Data & Digitalisation isn't due to be delivered until later this month. We'll revisit the challenge when we see those papers.</p>	Open

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C6			<p>Whilst we are satisfied that there is ambition to improve the existing standards of performance compared with other DNOs for customer engagement, NPG have not shown sufficient focus and ambition for engagement on the changes that will be needed (or are being planned by stakeholders/customers) to meet the future challenges of the energy transition. NPG's engagement plans for ED2 should reflect the need for greater levels of engagement on areas of the plan that relate to Net Zero/Decarbonisation and which relate to innovation and which may be subject to uncertainty mechanisms.</p>	<p>Response by Northern Powergrid (NPG)</p> <ul style="list-style-type: none"> • Digitalisation and how this underpins the entire business plan, we believe is now clear across all areas and the dependencies linked and tracked. • Changing customer needs and net zero ambitions means a move to an increasingly decarbonised, decentralised and digitalised energy system is required. At the same time, we recognise the value in sharing data openly both within the sector and with wider stakeholders. Both of these factors have shaped our vision for data and digitalisation and so we seek to embrace digital platforms to enable an optimised whole energy system and by doing so will continue to provide a resilient and efficient service for our region <ul style="list-style-type: none"> • Discussions to date have focused on how we benchmark against other DNOs and other companies and there has been minimal engagement specifically on the ED2 approach. We have yet to table our proposed commitments to support the necessary engagement for the energy transition. • We are currently scoping proposed commitments regarding our engagement approach within the ED2 period and will be mindful of this challenge as we engage with customers and wider stakeholders within the wave 3 programme. • We require additional clarification from the CEG as to their expectations reference to 'innovation and uncertainty mechanisms'. <p>NPG response plan</p> <ol style="list-style-type: none"> 1. A draft of our stakeholder engagement commitments to be delivered within the ED2 period are currently in development and will then be internally reviewed with the ED2 Leadership Team. These commitments will then be tested with external stakeholders, exploring if we are demonstrating the right level of ambition to provide a stronger voice for our consumers. A draft outline will be shared with the CEG SE subgroup and discussed in the coming weeks. 2. A critical element and success factor is to ensure the right commitment to make the subsequent business changes once engagement has occurred and the plans identified. Consultation with internal stakeholders, therefore, as to the interdependencies and associated required commitments from these areas of the business are also being sought and defined. 3. In drafting the ED2 engagement approach consideration will be given to the overall costs of the programme, whether the commitments represent the level and value for money as well as consideration to bill impacts, affordability and deliverability as central consideration in development this framework. 	<p>*The CEG received the outline section of the Stakeholder Engagement section of the business plan at the end of April which set out the company's overall approach to engagement in ED2. There is significant element of the future SE plan that will focus on decarbonisation, Net Zero and environmental action. There is an increase in budget over ED1 of around £3.5m for this. However the CEG has not yet seen the detailed propositions to comment more fully.</p> <p>The CEG clarified that NPG should be making efforts during ED2 to continue to engage customers on whether innovation projects and proposed programmes to address decarbonisation/Net Zero but which are still to be defined under uncertainty mechanisms/NIA, and SIF bids, will meet their needs/preferences.</p>	Closed

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				<p>4. ED2 engagement approach will then be tested in our wave 3 engagement programme and adapted accordingly.</p> <p>UPDATE – 7th May 2021</p> <ul style="list-style-type: none"> A propositions paper defining our ED2 approach has been tabled and discussed at the CEG subgroup on 23 April 2021. This paper framed what we have learnt both from ED1 delivery and the engagement process which has supported the development of the ED2 business plan. Included within the ED2 engagement approach is the 35 core pathways already established and the builds on the delivery model to support the path to net zero. This includes dedicated roles within the engagement team to appropriately consult and engage with regional stakeholders and ensure that our plans appropriately respond to their needs. Furthermore, clear commitments and funding to raise awareness of NPG and promote associated services within our role as a DSO (e.g. open data, helping customers and wider stakeholders to decarbonise) was also proposed. A section outline providing further detail on approach has been drafted and shared with the CEG in May. Once feedback has been received, the final write up will be completed and will clearly state the enhanced engagement to support the path to net zero. 		