

The Customer Engagement Group

Report on the Business Plan of
Scottish Power Energy Networks
for the RII0-ED 2 Price Control

Contents

Introduction by the Chair.....	3
Executive Summary.....	5
Chapter 1 (Ofgem Business Plan Guidance) - The Business Plan.....	8
Para 1.1 to 1.4.....	8
Chapter 2 (Ofgem Business Plan Guidance) Stakeholder Engagement	10
Para 2.11 - Future Engagement.....	14
Chapter 3 (Ofgem Business Plan Guidance) - Delivering value for money services for customers	15
Para 3.1 to 3.4 - Outputs and Incentives.....	15
Para 3.5 to 3.8 - Bespoke Outputs	16
Para 3.9 to 3.10 (Business Plan Guidance) - Vulnerability Strategy	20
Para 3.11 to 3.14. - Major Connections Strategy	23
Para 3.15 to 3.17 - Asset Resilience.....	24
Para 3.18 to 3.19 - Workforce Resilience.....	25
Para 3.29 to 3.32 - Climate resilience.....	26
Para 3.33 - An Environmentally Sustainable Network - Environmental Action Plan	27
Chapter 4 (Ofgem Business Plan Guidance) Digitalisation Strategy and Action Plan - Data Best Practice	31
Para 4.19 to 4.28 - Distribution System Operator (DSO) transition	33
Para 4.29 to 4.32 - Enabling whole system solutions	36
Para 4.33 to 4.39 – SPEN Innovation Strategy and Network Innovation Allowance	38
Chapter 5 (Ofgem Business Plan Guidance) - Forecasts and scenarios.....	42
Para 5.21 to 5.29 - Cost Information	42
Para 5.33 to 5.36 - Engineering Justification Papers.....	44
Para 5.37 to 5.42 - Access and Forward-looking charges Significant Code Review	44
Para 5.43 to 5.44 - Managing Uncertainty	44
Para 5.45 - Real Price Effects	44
Para 5.46 to 5.48 - Ongoing efficiency.....	44
Para 5.49 to 5.55 - Late and early competition	45
Chapter 6 (Ofgem Business Plan Guidance) – Financial Information.....	46
Chapter 8 (Ofgem Business Plan Guidance).....	47
Para 8.12 to 8.24 - Consumer Value Propositions	47
Annex 1: The Customer Engagement Group of Scottish Power Energy Networks.....	49
Annex 2: CEG Response to the Updated Stakeholder Engagement Workstream Packs ...	52
Annex 3: General Points on the Workstream Engagement Packs – Phase 2.....	54

Annex 4: Customer Engagement Plan 55

Annex 5: CEG Response to the Stakeholder Workshops..... 59

Annex 6: CEG Response to Phase 4 Customer Workshops: SPEN Business Plan Bespoke Initiatives..... 66

Annex 7: CEG Response to the Spreadsheet copy of Engagement Decision-Making for Phase 3 69

Annex 8: CEG Deep Dive into Stakeholder Mapping 74

Annex 9: CEG meetings with primary SPEN Stakeholders: Overview from CEG Meetings with Stakeholders August to November 2021..... 75

Annex 10: SPEN Finance Research Question 78

Annex 11: The Challenge Log 80

Introduction by the Chair

The Gas and Electricity Regulator, Ofgem, regulates the companies that own, maintain and operate the wires and other equipment that distribute electricity to our homes and businesses and Ofgem decides how much these Distribution Network Operators (DNO) can charge through regular 'Price Controls'. These 'Distribution Network' charges are incorporated into the regular bills we receive from our electricity supplier.

Scottish Power Energy Networks (SPEN) is the DNO for Southern Scotland, North Wales and a large part of North West England around Merseyside and Cheshire and it has now produced its Business Plan for the next ED2 (Electricity Distribution 2) Price Control running from 2023 to 2028.

The purpose of the Customer Engagement Group (CEG) is "to provide independent challenge to SPEN and views to Ofgem on whether SPEN's Business Plan addresses the needs and preferences of its customers and other stakeholders".

I began recruiting members for the CEG in October 2019 using public advertisements and seeking out people with the appropriate expertise in engineering, electrical generation, the environment and consumer matters. SPEN's license areas cover regions in each of Great Britain's three constituent countries and this posed a challenge for local representation and knowledge of the political, social, economic, and environmental issues facing these regions, so selection of CEG members also sought to address this diversity.

The Customer Engagement Group held its first meeting on 30th January 2020 and consists of the following members:

Andy Billcliff	Director of Menter Mon Tidal Energy Project, director British Hydropower Association, member of Grwp Llandrillo Menai Corporation board and, director North Wales Tidal Energy and Coastal Protection.
Chris Clark	Former Chair of Solar Trade Association Scotland, current board member of Solar Energy UK, Managing Director at Emtec Energy.
Matt Cole	Former Head of Commercial Transformation & Governance at nPower. Founder of the Fuel Bank Foundation providing help with energy bills to Food Bank users.
Kankana Dubey (Report Writer)	Research Fellow at the Centre for Energy Policy (CEP) University of Strathclyde.
Sam Ghibaldan	Programme Director for Consumer Scotland. Formerly Director of the Customer Forum at the Water Industry Commission for Scotland, Head of the Consumer Futures Unit and Scottish Government Special Adviser.
Matthew Hannon	Senior Lecturer at the Hunter Centre for Entrepreneurship, at the University of Strathclyde researching low-carbon energy technology and business model innovation.

John Howard (Chair)	Former award-winning consumer journalist with the BBC and subsequently a non-executive director at Ofgem. Previously a member of Ofgem's RIIO-ED1 Price Control Committee.
Teresa Perchard	Northern Ireland Utility Regulator Board Member. Former Director of Policy at Citizens Advice and Chair of the Affinity Water Customer Challenge Group.
Benny Talbot	Innovation Manager for Community Energy Scotland. Cambridge History Graduate with an MSc from the Institute for Energy Studies, University of Edinburgh.
Janette Webb MBE	Edinburgh University - Professor of Sociology, Co-Director of UK Energy Research Centre, and member of UK Research and Innovation (UKRI) Energy Scientific Advisory Committee.
Gill Wood	Deputy Portfolio Holder, Climate Emergency and Renewable Energy, Liverpool City Region Combined Authority.

All CEG members are required to act in an independent manner and not to represent particular points of view.

The expertise required to assess the SPEN Business Plan is extensive and three Special Advisers have been appointed. The special advisers are:

Professor David Flynn	University of Glasgow - Data and Digitalisation.
Jennifer Pride	Head of Energy Policy - Welsh Government.
Andrew Wright	Independent Consultant and Professor in Practice, Durham University - Former Senior Partner at Ofgem.

I would especially like to thank the Members of the Group and our Special Advisers for the time and considerable effort they have given to this project.

To do our job the CEG has needed the full co-operation and assistance of SPEN and the staff there have provided this unwaveringly. I would like to thank them for all their efforts in providing answers to the many detailed questions we posed and responding thoughtfully to all the challenges we made, whilst respecting the independence of our role.

More details of the CEG, it's Terms of Reference, records of our meetings and other matters are on our website at:

https://www.spenergynetworks.co.uk/pages/riio_ed2_customer_engagement_group.asp

Executive Summary

1. Overall, the CEG believes that SPEN has produced a Final Business Plan that reflects the needs and preferences of consumers and other stakeholders as drawn from its research and addresses the expected challenges of net zero and vulnerable consumers. Moreover, SPEN's plan has evolved to take account of both the feedback from engagement and challenges from the CEG and in our opinion meets and in many areas exceeds Ofgem's baseline expectations.

Customer and Stakeholder Engagement

2. Initially, the CEG had concerns that SPEN was not talking to enough of the right stakeholders and that it was not making sufficient use of exploratory methods suited to discovering needs and preferences. However, as engagement progressed there was a significant improvement in quality.
3. There was undoubted ambition with substantial customer and stakeholder research undertaken. However, it remains hard to judge the extent to which the Plan commitments originated from the results of engagement, or whether engagement was predominantly used to provide support for pre-existing propositions. The CEG believes there should have been scope early in the process to obtain unconstrained input about stakeholder needs and preferences.
4. Pressed by the CEG, SPEN substantially improved the demonstrable links between customer and stakeholder evidence and Business Plan commitments through detailed triangulation records providing evidence that the Plan has adapted in response to engagement.
5. SPEN's ED2 engagement strategy aligns with Ofgem baseline expectations. The CEG welcomes notable innovations in annual reporting against Social Return on Investment; development of an on-line tool for ease of access, and commitment to monitoring performance using an independent challenge group.

Outputs and incentives

6. SPEN's performance under customer services measures is already high, and the company has set targets which represent an improvement on current levels. However, stakeholders thought SPEN was not being ambitious enough in respect of its 'Worst Served Customers' and in response increased its proposed improvement factor from 25% to 33%.
7. However, there is potential conflict of interest relating to SPEN's proposed reliance on Community Energy (CE) bodies to review half of the CE ODI performance, considering CE bodies stand to indirectly gain from greater investment if SPEN's performance scores highly. SPEN have verbally agreed to explore a more independent process. Also, It is unclear exactly how and why SPEN ODI commitments will deliver the suggested increased level of growth in CE bodies.
8. The CEG has a positive assessment of SPEN's proposals for vulnerable customers in that they address all Ofgem's requirements and are based on thoughtful analysis of pre-

sent socio-economic data and a consideration of future trends. SPEN's plans are supported by both customer and stakeholder engagement and include some ambitious targets, which represent a stretch against Ofgem's baseline and are likely to be challenging to meet.

9. Stakeholders have said that they wanted faster, more cost-effective quotations and faster and more accurate connections. Overall, the CEG is supportive of SPEN's Major Connections Strategy with proposals meeting or exceeding Ofgem's baseline expectations.
10. With respect to workforce resilience, SPEN recognises that workforce related challenges already exist with increased adoption of new technology, which requires new skills.

The transition to net zero

11. Core to the Business Plan is SPEN's assessment of the distribution future energy scenarios (DFES), used to understand future demands on the electricity distribution system. On the whole SPEN's engagement mainly focused around government policy and local authority regional targets, specifically regarding EV, heat and generation uptake.
12. Due to the uncertainty around future energy scenarios, SPEN have continually relied on their future ability to flex these scenarios via uncertainty mechanisms, which the CEG believes will be fundamental to ensure that the choice of scenarios does not become a barrier to deployment and the route to Net Zero can still be achieved.
13. The CEG has consistently challenged SPEN to meet the expectations of its stakeholders to be more ambitious in its Environment Action Plan. It is our opinion that SPEN have risen to that challenge, not just meeting Ofgem's baseline but the expectations of stakeholders and customers for ambition. The CEG particularly welcomes the bold 2035 Net Zero target, which underpins this strategy.
14. SPENs DSO strategy demonstrates strong technical proposals for the deployment of new technology and practices to increase utilisation of existing assets, rooted in a clear understanding of the forthcoming changes to customer and stakeholder energy needs. Highlights include SPEN's proposals for active fault level management, the Engineering Net Zero platform, and the Constraint Managed Zones rollout, which may both meet and exceed Ofgem baseline requirements.
15. Increased attention to the modelling and utilisation of customer energy efficiency could further strengthen the DSO strategy. The CEG also notes that fully engaging a wide range of stakeholders in this complex and emerging field has sometimes been challenging, so we believe that strong processes for ongoing stakeholder input will be critical throughout and perhaps beyond ED2.
16. SPEN's approach to whole systems in the Final Business Plan has significantly improved following consultation feedback and engagement with a wide spectrum of organisations. Their approach has focused on both SPEN's strategy for advancing its organisational capacity for whole system thinking and understanding stakeholders' needs and preferences , including the potential for partnership. The CEG supports the revised commitments made by SPEN, but notes that these will need to be kept under regular review during ED2.

17. SPEN's innovation strategy is aligned with the Energy Networks Association's innovation framework. SPEN also includes an ambitious commitment to assess the consumer vulnerability impacts of all its innovation stimulus funded projects and BAU funded DRIVE innovation campaigns. The CEG believes there is an appropriate balance of funding between BAU and innovation stimulus. Funding of £35m for innovation over ED2 is almost double that SPEN allocated in ED1.

Cost, efficiency and financing

18. The CEG is disappointed that SPEN did not sufficiently seek out wider customer and stakeholder views about the core financial principles that underpin its ED2 plan.

19. This also applies to the level of efficiency, where SPEN have relied on joint analysis from NERA (National Economic Research Associates) on behalf of the Energy Networks Association that an incremental efficiency target of 0.3% pa is sufficient. SPEN has adopted 0.5% pa. The CEG is of the view that SPEN could be still more ambitious.

20. The CEG notes the overall increase in TotEx to 28% over the plan period and has concerns that this has not been adequately explored with customers, with SPEN choosing to focus on the smaller percentage increase in average domestic bills.

Chapter 1 (Ofgem Business Plan Guidance) - The Business Plan

Para 1.1 to 1.4

21. According to Ofgem's Enhanced Engagement Guidance, the SPEN Customer Engagement Group has two broad functions:
- The first is *"to provide independent challenge"* to SPEN during the process of drawing up its business plan and in so doing help SPEN create a better plan.
 - The second function is to assess the Final Business Plan produced by SPEN and *"to provide views to Ofgem on whether the plan addresses the needs and preferences of consumers and other stakeholders"*.
22. The CEG believes that we have been successful in the first function of challenging SPEN in drawing up the plan. We did this in numerous meetings with SPEN's senior staff. Details of some of the more than 600 matters we raised with them can be found in our Challenge Log on the CEG website, see Annex 11, of this report. We would like to thank the many people we engaged with at SPEN for their openness, time and commitment to the process.
23. SPEN responded to our challenges and engagement by either re-thinking their proposals, stretching their ambitions, or explaining better how they have tried to meet the needs of all their Stakeholders.

So what is our view of the Final Business Plan? The questions in bold below are those set for us by Ofgem.

Does the plan reflect the preferences of consumers and other stakeholders?

24. We have been impressed by the scale and ambition of engagement, and undoubtedly the findings have shaped the final plan. However, customer and stakeholder engagement would have been enhanced with more open-ended evidence gathering of needs and preferences in the early stages. We therefore have some concern that customer engagement research in particular was, broadly, seeking support for preconceived proposals. We are however largely confident that the plan reflects consumer and stakeholder views as determined through the engagement process.

Is the plan efficient and does it reflect value for money?

25. We can confirm that SPEN's expenditure plans have been produced using an extensive and rigorous process with external assurance that it enhances value for consumers. It is also clear that the plan benefits from the efficiency improvements realised during ED1 as well as the efficiencies resulting from innovation. We are less convinced that the rate of ongoing efficiency of 0.5% is as challenging as it could be, particularly given recent Competition and Markets Authority decisions.
26. Value for money was tested through consumer engagement and "willingness to pay" exercises which showed broad overall support for the package. However, we believe the counterfactual of a possible reduction in bills, for less ambitious outputs, could have been more directly tested. Although the Plan proposes a 28% increase in the rate of totex compared to ED1, the impact on bills is moderated by other exogenous factors, such as the

assumed asset lives. We have some concerns that SPEN focused more on the bill impact than the totex increase when testing the overall acceptability of the Plan.

27. We welcome SPEN's move in this Business Plan to incorporating strategies to achieve targets and outcomes beyond the ED2 regulatory period. The CEG believes that will deliver greater value for customers in the long-term.

Does the plan properly address the challenges of the transition to net zero?

28. The need to respond to the net zero challenge is evident throughout the SPEN business plan, as it has been throughout the ED2 engagement process. SPEN is proposing significant investment in network capacity, data and digitalisation and DSO capability, which are the main drivers of the 28% increase in totex. We consider SPEN has balanced well the different expectations of statute and stakeholders – including three different governments - in relation to the issue of the timetable and path to Net Zero.
29. We are comfortable that the scenarios on which the plan is based reflect realistic and reasonably ambitious progress towards net zero goals. In particular, we support the increased ambition of SPEN's environmental action plan, addressing its own climate impact, driven by the 2035 Net Zero target, which was accelerated in response to stakeholder feedback.

Does the plan meet the needs of all consumers, including the most vulnerable?

30. Both the vulnerability and customer service strategies include some very ambitious proposals for example extending the reach of SPEN's PSR services, first by developing a new independently led partnership to oversee delivery of its vulnerability strategy, and second by ensuring that its significant investment in digital capability will support personalised customer communication.
31. More generally, the CEG is concerned that the large increases in Total Expenditure in ED2, which will be paid for by all consumers, will mostly benefit those with the resources to invest in EVs and low carbon heat sources. Although we recognise this is a consequence of factors outside SPEN's control, we consider it vital that there should be a just transition to Net Zero, where the costs and benefits are shared fairly across society. We look forward to seeing SPEN's Just Transition plan when that is published.

Is this a good business plan?

32. Overall, the CEG believes that SPEN has produced a Final Business Plan that reflects the needs and preferences of consumers and other stakeholders as gathered by its engagement and addresses the expected challenges of net zero and vulnerable consumers. Moreover, SPEN's plan has evolved to take account of both the feedback from engagement and challenges from the CEG and in our opinion meets, and in many areas exceeds, Ofgem's baseline expectations.

Chapter 2 (Ofgem Business Plan Guidance) Stakeholder Engagement

What is your view of the quality of stakeholder engagement the company has undertaken to inform its proposals?

33. There is no doubt about the ambition which SPEN demonstrated in identifying and engaging a wide range of stakeholders, in both business as usual, and ED2 planning.
34. The company carried out a detailed and intensive programme of work across customers and wider stakeholders (Company objective 'each output, deliverable, and incentive fully evidenced and justified' SPEN Business Plan Annex 3.1, p.2).
35. SPEN gained very positive endorsement on stakeholder engagement from many organisations, with more qualified endorsement from some (SPEN Business Plan Annex 8).
36. SPEN responded to CEG challenges to make the causal chain, or 'golden thread', between evidence and proposed ED2 commitments explicit, resulting in very detailed triangulation records published with the Plan. The aim is a 'credible, robust and balanced view from... customers and stakeholders' to inform steps from initial to final proposed commitments. (SPEN Business Plan p.24). The Triangulation Records are in turn linked to the Business Plan's detailed Annexes.

Has the company adopted and executed robust processes of customer research and stakeholder engagement and have the results of these processes been reflected in the Business Plan?

37. SPEN planned and completed four phases of substantial, systematic customer research and stakeholder engagement. Successive phases enabled testing for relative consistency of responses over time, checking for errors in recording or interpretation of findings and responding to CEG challenges. As requested by us, the Plan now consistently refers to results of research and engagement to justify commitments using a summary statement at the beginning of each main Section (also see overall summary table SPEN Plan p.25).
38. SPEN paid significant attention to CEG feedback and challenges. For example, the CEG commented on the lack of clarity around engagement informing SPEN's selection of bespoke ODIs and CVPs (in our response to the July draft Plan). Phase 4 engagement introduced additional testing to develop the evidence base to justify these proposals. Customer research asked specific questions about 'willingness to pay' for the proposed additional services over and above the proposed ED2 tariff.

CEG Challenges

39. The CEG was concerned about what seemed a relatively late start to the engagement programme. This is likely to have restricted time for more strategic thinking about the engagement best suited to meeting the Ofgem objective of 'giving consumers a stronger voice'. The first SPEN CEG meeting was for example at the end of January 2020; in contrast the WPD CEG met first in March 2019. The CEG was first informed about planned engagement and first phase market segmentation at its 6 March 2020 meeting. Preparatory market research was due for completion by May 2020; both Phase One research on customer priorities (1353 customers), and Phase Two detailed testing of proposals (5708 customers) then had to be designed, implemented and analysed by end of

2020. The risk is that this resulted in a reactive approach to managing the programme, with limited time to review progress between phases, and to synthesise and assess the significance of findings for the design of each subsequent phase (See CEG Annex 4 to this report).

40. In relation to findings from customer research and stakeholder engagement, the CEG finds it hard to judge the extent to which all Business Plan commitments stemmed initially from data, or whether data were predominantly used to assess support for a pre-existing proposition. Any data can be interpreted in different ways. In this case, for example, customer and stakeholder views were translated into decisions about the balance between investing in network reinforcements, versus investing in flexibility or other efficiencies. Different interpretations of the data would have resulted in different investment proposals, and different network costs.
41. This is understandable in the GB market and regulatory context, where Ofgem ED2 baseline requirements constrain DNO priorities.
42. Nevertheless, we believe there was scope for a more reflective and strategic commentary on the significant tensions/trade-offs to be faced in ED2 especially the key trade-off between delivering a step-change in investment to prepare the distribution network for net-zero, favouring affluent households more likely to benefit from electrification and digitalisation, at the expense of vulnerable and fuel poor households.
43. Trade-offs are now referenced in the Plan (SPEN Business Plan summary p.24) and in relation to Managing Uncertainty and the balance between baseline expenditure vs expenditure through uncertainty mechanisms, to avoid customers funding assets which may not be required (see SPEN Business Plan p.149).

Has the company correctly identified the key concerns of stakeholders and reflected these concerns in its proposals?

This is more specifically addressed in each section.

44. Of the two different types of engagement undertaken (customer and stakeholder), the CEG generally found the results about stakeholder concerns the most difficult to correlate with the company's proposed commitments. Triangulation records have now provided a very detailed breakdown of numbers and types of stakeholders engaged in relation to each proposed commitment, as well as the phases in which the engagements occurred.

Has the company spoken to an appropriate and representative range of stakeholders?

45. SPEN has sought to engage with a wide range of stakeholders through its 4 phases of engagement (see SPEN Business Plan Annex 3.1). Standard tools for managing stakeholder engagement are used, and there is an extensive programme of business as usual engagement, supported by a tool called Tractivity, which enables the company to record interactions and map stakeholders against their interests and influence. Target stakeholder lists were devised for each phase of engagement and were reviewed and refined internally and shared with the CEG. The CEG provided review and challenge to SPEN on design of the engagement programme, the proposed questions and methods, and the proposed mailing lists. We also directly observed stakeholder engagement events and spoke directly with a selection of key stakeholders in Autumn 2021 to seek their views on how well SPEN had engaged with them (full details in SPEN Business Plan Annex 3.1 Co-creating our Plan).

46. SPEN reports a total of 1587 stakeholders engaged, using a variety of activities including online survey/feedback forms, online consultations and workshops and other meetings, including as part of business as usual engagement with key and senior stakeholders. Most (1,231) of those stakeholders were engaged at Phases 3 and 4, when SPEN had developed specific propositions and a draft Business Plan. Given the challenges for SPEN of working remotely, throughout the pandemic, to maintain relationships with stakeholders, and appreciating the demands the pandemic placed on SPEN's stakeholders in their own jobs, the overall volume of stakeholders engaged, particularly in phases 3 and 4, seems appropriate.
47. There are however several areas where the CEG conclude that key stakeholders were under-represented. We signpost two here, the Vulnerability Strategy (para 3.9 p.21 below) and the financial principles upon which the plan is based. This limitation is discussed further in Chapter 6.
48. SPEN worked to ensure engagement with a wide range of stakeholders, revising lists in response to CEG suggestions about omissions of key sectors such as the NHS, or outdated contact details/errors.
49. SPEN also adopted the AccountAbility standard to assure itself of the quality and robustness of its practice. SPEN is ranked very highly in this independently audited standard which facilitates comparison with other companies and sets out steps to continuous improvement. The CEG recognises the value of this, but have commented that we are also interested in substance: we have asked SPEN to specify the consequential impacts on business priorities and practices.

For full details see CEG Annexes 2, 3, 5, 8 and 9.

Has it used a sound methodology and presented a range of options in an open and unbiased way?

Customers

50. SPEN commissioned a market research company, to design and implement four phases of qualitative and quantitative (domestic and non-domestic) customer research, and a preceding market segmentation exercise.
51. The customer research used statistically representative samples of SPEN's domestic and non-domestic customer base, generally using a quota sampling framework. (details in SPEN Business Plan Annexes 3.2a and b).
52. Care was taken to provide information on SPEN's business and the DNO role in the electricity sector. Surveys were designed to prevent respondents proceeding without reviewing short videos about the company, and respondents were then asked to answer one or two questions to test their understanding of SPEN's role/purpose.
53. The CEG nevertheless raised questions about robustness of some *customer* research findings. Answers to survey questions always depend on numerous factors including how the question is worded, what order it comes in the survey, whether a socially-desirable answer is implied, and whether respondents have sufficient contextual knowledge for the question to be meaningful. (This is not unique to SPEN, but is a common factor in market research). An example of a leading question, where the implied or socially desirable answer is to agree with the expressed position is below:

Q. How much do you agree or disagree with the following: If I switched to an electric car, I would be happy with a restriction that meant my car would sometimes charge more slowly, meaning that it might not always be sufficiently charged up for my journeys.

54. It is not surprising that customers expressed a preference for charging an EV battery on demand, but their preference may change if the wider context of time-of-use tariffs etc. is introduced. In brief, customers had limited knowledge about DNO business and standing charges on tariffs. It was thus hard for survey respondents to reach an informed judgement on reasonableness of cost and service proposals, including potential to reduce bills through flexibility and energy efficiency. (See this report Annex 4 and Annex 6 for details).

Stakeholders

55. In general, *practices* of stakeholder engagement were structured by a sound methodology. The CEG however had questions about whether the engagement always presented a range of options in an open and unbiased way (See this report Annexes 2, 5, 7 and 9, alongside commentary in each Chapter of this Report).

Has the company demonstrated it has used different methods, tools and techniques to understand the interests of a wide range of consumers and stakeholders, including future consumers, and the likely changes in customers' interests?

56. SPEN used a wide range of methods, tools and techniques to explore the interests of a representative sample of their customers and a broad range of stakeholders (See this report Annexes 3-10).

57. In customer research, SPEN contractors have used qualitative (including one to one interviews and focus groups) and quantitative methods (structured surveys). They also varied the survey strategy and structure to improve reliability and replicability of results, when cross-tested using different types of survey instrument. In Phase 3 customer research for example, the 'acceptability' and affordability of, and Willingness to Pay (WtP) for, the proposals were tested systematically by comparing results from three different methods: discrete choice, contingent valuation and a fixed task format. Survey items were piloted through qualitative research; work was done to test participants' understanding of proposed service levels and pricing structures. A high percentage of agreement/willingness generally resulted (See WtP Report, Phase 3 Customer Engagement, June 2021, Annex 3.2b Business Plan).

58. Research with Future Customers proved challenging, providing some background information. Additional stakeholder organisations were consulted in Phase 4, prompted by the CEG, and were found to be very informative.

Has the DNO demonstrated it has presented customers and stakeholders with meaningful choices in determining priorities for expenditure?

59. Customers participating in research were presented with contextual information about SPEN, and with question options intended to enable an informed view. It is not possible to judge whether this was always meaningful, and sufficient. For example, in Phase 4 qualitative customer research, on acceptability of Bespoke ODIs and CVPs, focus group participants were provided with information intended to put these in context. CEG members observed different groups. Proposals were generally supported, but there was considerable scepticism about the balance of costs and benefits. In general, customers wanted to know more facts about the company, its finances, who pays for what and why,

and whether customers were paying twice or three times for the 'same' services, presented as slightly different things (See this report, Annex 6 for details).

60. The CEG expressed concerns about customers and stakeholder understanding of the interactions between their responses to specific proposals and the resulting 'whole plan' investments and costs.

Para 2.11 - Future Engagement

Has the DNO demonstrated an approach in line with Ofgem's baseline expectations?

61. The final Strategy includes an itemised statement of actions and commitments, demonstrating alignment with Ofgem baseline expectations (SPEN Business Plan Annex 8.1, p.6-7). Welcome innovations include: annual reporting against Social Return on Investment (SROI); development of an on-line tool for ease of access, with the aim of increasing participation rates and easing issues of geographical remoteness; monitoring of performance against specific, tangible targets using an independent external challenge group.

Are the plans justified by reference to the results of customer research and stakeholder engagement?

62. SPEN has incorporated results from research and engagement into ED2 engagement plans (details in SPEN Business Plan Annex 8.1). In Phase 4 research and engagement, for example, the company aimed to respond to stakeholder and CEG challenges and close gaps, as follows:
- a. SPEN acknowledge that relevant stakeholders may change constantly in the context of (potentially radical) systemic changes over the decade. They have planned flexible and adaptive review and revision of stakeholder lists, and adoption of responsive forms of engagement.
 - b. In order to assess the expectations of Future Customers, and to improve ED2 engagement strategy, SPEN held Phase 4 bi-lateral meetings with British Youth Council and the 'Good Things' foundation; they are reviewing practices for engaging future customers and considering young people as a component of 'hard to reach' groups.
63. SPEN has made a commitment to integrate Social Return on Investment (SROI) measures into business decision-making at all levels, to ensure 'every decision we make is based on extensive engagement and by the value we deliver back to society' (SPEN Business Plan, p.191). The CEG wish to see this followed up through demonstrations of its impact on core business priorities and regulatory obligations.

Chapter 3 (Ofgem Business Plan Guidance) - Delivering value for money services for customers

Customer Service

64. For most customers how, and how well, problems, including supply interruptions, are dealt with are a high priority, and the most common reason for customer contact. SPEN's core proposals for customer services, and performance include a number of ambitious and innovative proposals. Most significant is more personalisation and proactivity in customer communication; in effect personalising communication by method or language.
65. SPEN also takes a long-term view towards ED3 as it wants to see 90% of customers proactively served and receiving services tailored to their preferences and needs by 2033 and 95% of 'high risk' customers receiving face to face visits ahead of planned power cuts. SPEN also plans to undertake a power cut risk assessment for all commercial customers. We consider these proposals go beyond BAU for a DNO and beyond where SPEN will be at the end of ED1 and there is strong customer support, particularly from commercial customers, for the proposals.

Para 3.1 to 3.4 - Outputs and Incentives

66. Ofgem has outlined the output and incentive arrangements it will implement to ensure DNOs respond to the needs of their customers in RII0-ED2. As Ofgem has yet to produce target values for outputs and incentives we are unable to comment on these but have expressed a view on those below based upon our own judgements and the views of stakeholders and consumers.

Customer Satisfaction Survey - Output Delivery Incentive - Finance

67. SPEN's current ED1 Broad Measure of Customer Service is 9.23/10 for the SPD licence area and 9.24/10 for SPM and it has committed to increasing this to 9.4/10 by the end of ED2. At these levels, the law of diminishing returns starts to take effect and so this seems to the CEG to be a reasonable target to set when taking into account the likely increase in demands on DNO services on the journey to net zero. The proposals also have support amongst stakeholders and customers (Annex 4B.2 of SPEN's Business Plan).

Complaints Metric - Output Delivery Incentive – Finance

68. SPD has seen a gradually improving complaints performance during ED1 with 88.28% of complaints resolved in one working day in SPD and 88.87% in SPM. And at least 99.1% of complaints resolved in 31 days in SPD and 98.97% in SPM.
69. SPEN has committed to improving this slightly during ED2 with 90% of complaints resolved in one working day in both licence areas and holding steady with at least 99% of complaints resolved in 31 days, in both licence areas. They are also helpfully targeting zero repeat complaints in 12 months.
70. Although not a significant increase in standards for ED2, SPEN already have a comparatively good record and they are likely to face significant challenges in the transition to net zero. The CEG, in line with stakeholder and customer engagement, supports these commitments.

Worst Served Customer - Price Control Deliverable

71. Ofgem has widened the definition of Worst Served Customer (WSC) for ED2 to a “customer experiencing on average at least four higher voltage interruptions per year, over a three year period (i.e. 12 or more over three years, with a minimum of two interruptions per year)”.
72. Ofgem has also said it believes that DNOs, through their engagement with stakeholders and consumer groups, are best placed to establish the appropriate level of performance improvement that should be delivered through the dedicated schemes.
73. SPEN has done this originally proposing a 25% improvement factor. Feedback on these plans was positive but supported more ambitious improvements for a greater share of customers. In response, SPEN’s final plans anticipate greater numbers of WSC due to Ofgem’s wider definition and has proposed an enhanced improvement factor of 33% (SPEN BP page 11 Annex 4 A.5).

Para 3.5 to 3.8 - Bespoke Outputs

74. SPEN is proposing three Bespoke Output Delivery Incentives.

ODI 1. LV Connections Offer Accelerator

75. Incentivises improvement in the speed of issuing quotes for low voltage customers that are not in scope for TTC/TTQ incentive. This is explained in more detail in Chapter 4A of SPEN’s Business Plan.
76. Stakeholders have continually fed back that they felt the regulatory timescales were too long and consider that the OFGEM major connections classification is too broad and ranges from very straightforward LV LCT connections to larger whole systems EHV type. As such, SPEN have sought to rectify this with the above ODI, which stakeholders overwhelmingly endorsed and which the CEG supports.

ODI 2. Community energy (CE) ODI

Has the company made appropriate and well-justified use of bespoke outputs and CVPs?

77. SPEN presents a clear and logical argument about the value of Community Energy to our future electricity networks. They demonstrate a clear ‘whole systems’ approach to the critical role CE groups will play in unlocking and coordinating citizen adoption of low-carbon solutions, as well as how community ownership can help to support a just transition.
78. The ODI targets a recognised gap in providing in-kind support to communities, to help them develop and deliver their own energy projects. This is complemented by an acute need for additional capital funding, to aid delivery of CE projects; a need supported by SPEN’s separate Net-Zero Fund.
79. SPEN’s three CE ODI commitments represent an obvious and logical solution to some of these barriers. We believe these would fill a critical support gap across SPEN’s licence areas, in turn supporting additional community energy projects to be delivered. In addition to its £3.05m of baseline costs, the ODI’s highest ambition funding (~£21m) would enable SPEN to channel significant additional resource towards its baseline CE activities, “supporting more community anchor organisations to deliver more community energy projects and collate more data to meet a growth rate up to 27% per annum”.

Has the company proposed appropriate outputs well founded in evidence and consumer engagement? Are these well supported by the outcome of consumer engagement?

80. The CEG is happy that SPEN have engaged extensively with their customers and stakeholders on the issues of its CE commitments. It is also supported by testament from representatives of the UK's three community energy associations, which shared a very positive view of how the engagement process had enabled them to influence SPEN's Business Plan design, explaining how SPEN had gone "above and beyond" other DNOs in terms of CE engagement. In particular, these stakeholders emphasised the key primary importance of frequent bi-lateral meetings between SPEN and the CE associations.
81. Even so, these stakeholders flagged two criticisms of the engagement process. Doubts that SPEN responded to later stages of engagement and that some CE workshop invitees were not considered expert on CE issues questioning the selection process. The CEG was divided on the general quality of SPEN's CE workshops. One CEG member felt the stakeholders had relatively little time to discuss key issues in fine detail SPEN spending too much time transmitting information, rather than receiving it. Another CEG member considered the CE workshops to be of a superior quality to the other SPEN workshops they had attended.
82. SPEN's CE commitments have been usefully complemented by a range of other important inputs, including: a) bespoke commissioned sectoral research (E.g. WPI), b) hiring of former community energy sector staff (e.g. SPEN's CE lead); c) reference to learning from ED1 CE commitments (E.g. Zero Carbon Communities Hub) and d) utilisation of existing research/analysis (e.g. House of Commons Environmental Audit Committee report on CE).

Has the company demonstrated that the proposed outputs and service quality improvements are stretching?

83. SPEN's proposed maximum reward rate of 0.5% of base revenue, to support a 27% year-on-year growth of the community energy sector in the two licence areas is ambitious and potentially transformative for the sector. According to the CE stakeholders the CEG engaged with, SPEN's commitments are also "stretching" when compared to other DNOs' draft commitments.
84. Whilst welcomed and ambitious, the CEG questions whether a total maximum ODI spend of £23.9m is sufficient to deliver more than a tripling of the number of CE organisations by 2028 versus 2022-23 across its two licence areas. It is unclear what assumptions underpin SPEN's confidence in meeting this target and how these connect to its proposed ODI commitments. Furthermore, as acknowledged by SPEN itself (p.19 Annex 4B.3 Business Plan), a DNO cannot address all barriers to CE. By extension, its targeted 27% annual growth will likely rely on an equivalent level of ambition to be mirrored by other actors (e.g. Ofgem, government, investors).
85. Overall, the design of the ODI seems sensible and appropriate. Examples include the welcome inclusion of ongoing stakeholder assessment of its ODI performance, including a stakeholder satisfaction survey and an independent annual review of CE strategy delivery by CE stakeholders. However, the CEG flag a few possible concerns.
86. The first is the potential conflict of interest relating to SPEN's proposed reliance on CE bodies to review half of the weighted CE ODI performance, when CE bodies stand to

indirectly gain from greater investment if SPEN's performance scores highly. The CEG challenged this and SPEN has orally assured us that a fully independent assessment will be undertaken, not limited to the three national CE bodies.

87. The second concern is how widely available SPEN will make its commitment to produce CE case studies, a stakeholder satisfaction survey and wider Regularly Reported Evidence (RRE) (e.g. CO2 savings, bill reductions, number of CE organisations).
88. The third concern is SPEN's selection criteria for its CE case studies. Depending on which CE case studies are selected, they will offer very different perspectives on the plight of CE organisations in SPEN's licence areas and the extent to which SPEN's commitments have influenced this. There is also a broader question about whether four case studies, spread across the two licence areas and a five-year period, can offer a balanced and representative view of SPEN's influence on CE.

ODI 3. Advice Services

89. This ODI incentivises SPEN to provide a range of advice services that help customers reduce household or business costs, drive efficiency and help them access the benefits of the low carbon transition. This is explained in more detail in SPEN Annex 5C.5.
90. SPEN say, by way of justification for this ODI, that stakeholder feedback has shown a desire for wider support services and not just those in vulnerable situations. SPEN are especially keen to target commercial customers, who could benefit greatly from support in how to be more energy efficient, as well as how to ready themselves for the challenges that the road to Net Zero will bring. The CEG believes that there is a gap in advice services for this group and non-vulnerable customers generally and the ODI could provide a valuable cost saving to the commercial sector.
91. ODI maximum reward level set at 0.25% of base revenue received for delivering between 10,000 and 40,000 services. A Penalty is applied for less than 10,000 services up to the maximum of -£5.48m (which is requested as ex-ante funding).
92. Evaluation will be by number of services provided and customer satisfaction score.
93. SPEN has evaluated its scheme as good against Ofgem's criteria.
94. 95.3% of all customers, both domestic and commercial, supported the proposed commitment to offer advice services to customers, although the question is still open as to whether a DNO is the most appropriate organisation to provide these services considering the other sources of advice in this area.

Response to Proposed Net-Zero Fund output (NZF) Use it or Lose It Incentive

Has the company demonstrated that the proposed outputs and service quality improvements are stretching? Has the company made appropriate and well-justified use of bespoke outputs and CVPs?

95. From the CEG's perspective, the Net Zero Fund targets important overall priorities, which offer a necessary balance between delivering net-zero (e.g. whole systems, innovation) and a Just Transition (JT) (e.g. vulnerability, community energy). The priorities of the NZF are also clear (Section 6 Annex 4B.4 Business Plan) and when viewed 'in the round', are well aligned with one another. The types of projects the NZF targets would support activities outside BAU and would likely deliver additional value. The CEG are also happy with the inclusion of checks and balances to ensure projects conducive of a JT are prioritised

for funding, such as the requirement for social return and the inclusion of a JT expert on the assessment panel.

96. The CEG is of the view that SPEN's targeted impacts for the NZF - such as jobs, carbon emissions etc. - are realistic (p.106 Business Plan). The basis of this assumption is that the ambition is roughly in line with what was delivered by the Green Economy Fund (GEF), albeit more ambitious given the NZF is 50% larger. However, as highlighted earlier, stakeholders have questioned whether the scale of the fund (£30m) is sufficiently large to make a meaningful impact on the scheme's wider priorities, as outlined on p.21 of Annex 4B.4 SPEN Business Plan. A logical response to these concerns would be to increase the amount of funding or to prioritise funding for specific types of projects, which are most in need of funding.
97. With regards to the latter, the CEG is encouraged by SPEN's commitment to ring-fence 25% (£7.5m) of the NZF for community energy; an area in great need of additional capital funding. This is strongly grounded in the stakeholder and customer engagement it undertook. Whether the remaining £22.5m will make a meaningful impact across such a broad selection of priorities depends very much on the match funding SPEN's investment will attract.
98. SPEN make clear the NZF would not overlap with its other commitments. Whilst there is the potential for the Network Innovation Allowance (NIA) to potentially fund some of the same projects as the NZF, SPEN indicate that precautions would be taken to avoid double funding via cross-term governance (potentially the CEG). There is also no overlap with other customer service and community energy commitments, as the NZF would provide capital project funding instead.

Has the company proposed appropriate outputs well founded in evidence and consumer engagement? Are these well supported by the outcome of consumer engagement?

99. The need for the fund is clearly grounded in stakeholders' views on the shortfall of grant funding for small, innovative projects, which support both net-zero and just transition objectives. SPEN usefully summarises its stakeholders' views on funding related barriers to development and delivering of low-carbon projects.
100. SPEN also highlights how the need for a fund received strong support amongst both its customers and stakeholders. It found that 70.2% of customers were willing to pay for the cost of this proposal in addition to the ED2 bill versus 7.4% who were unwilling to pay for the cost of this proposal. Furthermore, 97% of stakeholders surveyed supported the idea of a fund akin to the NZF. It is through its engagement that SPEN was able to identify stakeholders' design priorities, such as the fund a) being simple to apply for, b) flexible in its focus, c) allocating funds across a broad range of priority themes and d) supporting a Just Transition (Annex 4B.4).
101. SPEN complements this stakeholder and customer engagement with evidence from its own assessment of other potential sources of funding. It makes reference to its own assessment of 18 similar energy funds across the UK, to understand if indeed there is a gap. Whilst it is not clear specifically which funding programmes were assessed, and their comparative characteristics, SPEN concludes that the NZF fills a funding gap. The CEG is satisfied that SPEN has considered whether or not there is a funding gap for low-carbon projects and how its NZF might at least fill that gap. SPEN also clearly leverages its own

experience of delivering the similar Green Economy Fund during T1, to inform the design of the proposed Net Zero Fund.

102. Despite the generally positive views about the need for a fund, there appeared to be less agreement between stakeholders about whether funding should be split across all priority themes. Even so, the majority still support such a distribution. There were also concerns that the size of the fund was not large enough to deliver on the fund's ambitions, with 16% disagreeing it was sufficient in size. And concerns about the level of funding also related to the extent to which this capital spending sat alongside other "in-kind" support that SPEN was offering that supports project development and delivery. The CEG are therefore unclear what SPEN's rationale was for setting a cap of £30m for the NZF and the underlying assumptions about how it will be sufficiently large to meet the scheme's objectives.
103. Overall, the CEG is happy that SPEN's Net Zero Fund is well-designed and largely accounts for stakeholders' views. Even so, the CEG flag a few potential issues that SPEN ought to consider during its design.
104. The first is that whilst the priorities of the fund are made apparent, explicit funding criteria are not outlined in detail beyond eligibility criteria (Section 5.3 Business Plan Annex). These quantitative metrics and qualitative assessment criteria could be usefully coupled with the priorities outlined in Section 6 (p.21 Business Plan Annex), with their relative weighting made clear to make proposal ranking transparent. Furthermore, these assessment criteria would also usefully map onto the projected benefits of the NZF (p.107 of BP). Importantly, the projected benefits in the Business Plan do not offer full coverage of the priorities in the annex, such as "empowering of communities" and "whole systems" priorities.
105. The second is that the NZF aims to support both community energy and a JT. SPEN regularly infers that these are synergistic objectives throughout its Business Plan. Whilst community energy should certainly play a leading role in delivering a JT, if done wrongly, it could undermine a JT. For example, if SPEN prioritises funding of projects in wealthier areas, then its poorest customers will effectively be subsidising these projects. Furthermore, if SPEN's funding supports projects that do not ensure a substantive degree of community ownership and control, then this will do little to raise levels of energy justice. Whilst SPEN have included some important checks and balances to ensure project funding supports a JT (see earlier), the CEG notes the absence of a broader discussion of which types of community energy projects are most conducive to a JT and how the NZF will target funding towards these.

Para 3.9 to 3.10 (Business Plan Guidance) - Vulnerability Strategy

Key points

106. The CEG strongly holds the view that SPEN has been ambitious in its thinking and its commitments around supporting vulnerable customers on its network. It has recognised the challenges that customers face and the barriers that need to be overcome to deliver better outcomes and to remove detriment. We commend SPEN for making a clear long-term commitment to provide support to all customers in fuel poverty by 2045, stretching beyond the end of its ED2 plan.
107. Significant customer and stakeholder insight has informed the plan and made it stronger, and more impactful for customers, including creating a new partnership delivery model with other organisations. The CEG also notes the SPEN customer vulnerability

team's positivity in proactively engaging with and responding to challenge and alternative suggestions from the Customer Engagement Group.

108. We recognise that there is strong support for SPEN's proposals. Domestic customers rank this area 4th in terms of priority and over 83% of them rate SPEN's proposals as acceptable. At least 66% of domestic customers are willing to pay for SPEN's proposed programme of additional services.
109. Notwithstanding SPEN's ambition and vision, the CEG recognises the potential complexity faced by SPEN in delivering its programme. This risk can be mitigated by 15 months of detailed pre-implementation planning and optioneering with a range of stakeholders and partners prior to the launch of the ED2 plan in April 2023, and there is a commitment from the CEG vulnerability team to support this activity. SPEN's proposals are also set in the context of a challenging and evolving market environment with forecast bill values scheduled to increase significantly prior to the start of ED2. It is essential that pre-implementation planning also takes account of the current environment with targets being revised as appropriate as incidences of vulnerability increase or evolve.
110. However, it is evident from the Triangulation report (SPEN Plan Annex 5) that only 50 stakeholders out of the 1587 stakeholders SPEN engaged with are categorised by SPEN as representing vulnerable customers. Also most of these stakeholders, 30, were engaged in Phase 1 and 2 before SPEN's plans were fully formed so their engagement was not particularly deep. Organisations working with and capable of representing vulnerable consumers were therefore under-represented amongst the stakeholders SPEN engaged with. There could be a number of reasons for this, not least that those organisations that are not embedded in the energy system and who work in communities with vulnerable consumers will have had significant demands on their time and stretched resources during the pandemic and had higher priorities. As SPEN approach creating the proposed 'partnership delivery model' described in the Business Plan (p94) and Annex 4B.1 - Vulnerability Strategy, there may be lessons to draw from this about the best approach to engaging such organisations.

Engagement

111. SPEN's extensive customer and stakeholder engagement has informed its plan, including the message that the plan should deliver meaningful benefits, and at pace. In the latter phases of engagement activity specific commitments and outputs have been tested and gain high levels of support. 83.1% of household customers and 78.6% of commercial customers believed that SPEN's full vulnerability package was acceptable with 81.7% of customers willing to pay for the level of service outlined in the commitments.
112. Acceptability testing of SPEN's bespoke incentive proposals supporting vulnerable customers - low carbon transition support and energy services expansion proposals – gained strong support. The former gained the highest support of all eight incentive proposals, with 67.8% of domestic and commercial survey respondents supporting it and the CEG are pleased to endorse it as a Just Transition commitment. Our only observation is that it would be preferable if the scale of the programme could be increased, although we understand regulatory limitations on the cost of CVPs render that impractical.

Improving standards: principles and baseline expectations (Ofgem Business Plan Guidance Appendix 1)

113. SPEN's Business Plan appears to adequately address the deliverables and, where relevant, metrics for each of Ofgem's baseline standards for a vulnerability strategy although we leave Ofgem to make a definitive assessment. We make some specific comments on the 'Principles' below. The CEG challenged SPEN to take a long-term approach to supporting customers in vulnerable situations and therefore welcomes the commitment to assist all 620,000 customers in fuel poverty in its supply areas by 2045.

Principle 1: Effectively support consumers in vulnerable situations, particularly those most vulnerable during a loss of supply, through a sophisticated approach to the management, promotion and maintenance of a PSR

114. The CEG welcomes SPEN's decision to adopt a broader definition of vulnerability than required and supports their proposal to engage with other organisations to simplify the process of customer registration and updating. This builds upon successful collaborative working with Scottish Water in ED1.

115. SPEN's ED2 commitment to achieve 80% registration on its PSR, in each need code category, and by 2028, is an ambitious target, but one that will be transformative for customers, and is supported by the CEG. The CEG notes the significant gaps that exist between current and target registration levels that have been identified by SPEN, including the need to change customer behaviours given at present over 80% of PSR registrations and updates are made through a supplier, and not through a DNO.

116. The CEG also recognises and supports the importance of setting stretching targets if critical change is to be delivered. Ultimately customer experience improvements in fault situations will be derived from the mix of improvements to customer contact strategies and the increased population of identified vulnerable customers to which these strategies would apply.

Principle 2: Maximise the opportunities to identify and deliver support to consumers in vulnerable situations through the smart use of data

117. SPEN's gap analysis using demographic data relating to the characteristics of vulnerable customers enabled the company to size and scale their PSR proposal. This included forward looking analysis of future vulnerability and socio-economic trends that will be built upon as SPEN enhances its data capabilities during the ED2 period.

Principle 3: Understanding new forms of vulnerability, in particular by identifying blockers to participating in a smart flexible energy system

118. Principle 3 identifies a baseline expectation that DNOs should have an extensive network of partnerships with a range of organisations. SPEN proposes to upgrade its partnership model into a wider coalition that includes an independently chaired governance model detailed in Business Plan Annex 4B1.

Principle 4: Embed the approach to protecting the interests of customers in vulnerable situations throughout the company's operations to maximise the opportunities to give support

119. SPEN's bespoke outputs will provide advice services to 20k customers in ED2 through an enhanced partner network, and will deliver low carbon transition support to 40k vulnerable customers through installing technological solutions intended to result in at least £100 annual bill savings. In addition, stretching PSR targets will deliver and drive an increased focus on vulnerability throughout the company that will be enhanced by SPEN's proposals to personalise service and to make more proactive contact in the event of disruption. This multi-streamed approach is supported by the CEG since services to vulnerable customers, and the outcomes delivered from these interventions, are not concentrated in one area allowing more customers to ultimately benefit.

CVP regarding services for vulnerable customers

Please see the section on CVPs in Chapter 8.12 to 8.14 of this report.

Just Transition

120. The CEG challenged SPEN to incorporate a Just Transition approach within its Business Plan and we are very pleased that they have done this. Although not an Ofgem requirement this issue has a high profile amongst SPEN's stakeholders and notably the Scottish Government who instigated a Just Transition Commission, which reported earlier in 2020. As SPEN will be publishing its detailed Just Transition strategy at the start of ED2 in 2023 the CEG cannot comment on it at this stage but we do welcome the overarching principles SPEN has adopted in Annex 4.1 of its Business Plan.

Para 3.11 to 3.14. - Major Connections Strategy

121. SPEN has not only provided a Major Connections Strategy as required by Ofgem but also a Minor Connections Strategy (SPEN Business Plan Chapter 4A Pp 81/82).

Has the DNO demonstrated it has met Ofgem's baseline expectations under each of the principles for Major Connections?

122. SPEN claims to meet baseline expectations under 9 of the principles and exceed baseline expectations under 11 of them. (3.2.1 of Annex 4A.28 of the Business Plan) We list two areas to check below. This will largely depend on the successful development of major digitalisation processes which Ofgem may wish to examine further.

123. The CEG cannot confirm at present whether baseline expectation No 13 is met. OFGEM have asked DNOs to provide clarity around conditions and circumstances of current and future curtailment associated with a connections offer. Whilst SPEN have advised they will provide flexibility information to inform customers decisions, the CEG would expect Ofgem may wish to decide if the proposed information meets its baseline.

124. Expectation 20. Through SPENs' "Supporting an Evolving & Competitive Market" strategy, they have offered to share open data, network information and services to support a competitive market especially for non-contestable work, as well as indicated they will signpost to ICP and IDNO services via their online platform. Whilst the CEG commends these activities, we are unclear if this is sufficient to comply with baseline expectation 20 and we leave it to Ofgem to decide.

Has the DNO proposed appropriate metrics for how success will be measured - are they relevant and robust?

125. Yes if the questions included in the proposed customer satisfaction surveys are sufficiently robust, along with the quotation and connection statistics.

Are the DNO's plans justified by customer research and stakeholder engagement bearing in mind that the requirements of connections customers may change and may require DNOs to understand how they can support these changes?

126. Major Connections is very much a BAU activity, with SPEN holding workshops and stakeholder panels prior to ED2 research. As a result SPEN were able to assess feedback earlier in the process and then test their commitments during Phase 3 and Phase 4 of the ED2 Research. Essentially stakeholders wanted faster and more cost effective quotations and connections than the regulatory timescales. They also wanted more clarity around connection offers as well as more information available to them pre-application.

127. SPEN have recognised that the number of connections may increase substantially, for example thirty times current numbers for LCT. They are aware that Major Connections can mean straight forward LV connections as well as more complex, whole system type EHV connections. So SPEN is proposing a bespoke ODI (LV offer accelerator) to speed up simpler projects. (please see our Chapter 3, para 3.5 to 3.8) This was welcomed by stakeholders.

128. The CEG believes a number of relevant individuals were missing from the list of stakeholders engaged, however stakeholder fatigue may have been a factor.

129. Based on the increased level of connection offers they expect to produce in ED2, stakeholders felt neutral towards a 2% increase in delivery timescales. Whilst this target may not seem particularly ambitious, the CEG feels that due to the current SCR minded to position of OFGEM, and the introduction of uncertainty mechanisms to facilitate new connections, a 2% increase is sufficiently ambitious.

130. In summary, we view SPEN's connections strategy as both innovative and sufficiently ambitious.

Para 3.15 to 3.17 - Asset Resilience

131. A significant part of network resilience is based around network safety and many of the safety related measures proposed will also aid network resilience such as the commitment to replace rising and lateral mains, improving substation security and fire safety and improving earthing standards. SPEN is also a member of Ofgem's Safety Resilience and Reliability Working Group (SRRWG).

132. Customers and stakeholders clearly and repeatedly identified the importance of reliable supplies, in particular for vulnerable customers. We saw SPEN's engagement identify the increased criticality that is placed on network resilience activity to mitigate risk.

133. The commitment to deliver a 33% improvement on performance for the 100% of the annual average worst-served customers is welcomed noted. In total 7,857 customers will benefit from an investment of £14.6m, and the CEG's sense is that this is proportionate to both customer and stakeholder expectation. The CEG is encouraged that SPEN is using a whole systems approach to address issues at the extremities of its network.

134. SPEN's asset resilience is managed via the Network Asset Risk Metric – or NARM. The company has adopted whole lifecycle asset management and condition based risk management to inform its understanding of likely failure and where resilience may be compromised and poor experience delivered. This is supplemented by a good practice engineering guidance document that was developed in ED1 and has been used as input for pan-industry guidance led by the Energy Networks Association (ENA) Network Output Measures Electricity Distribution Working Group (NEDWG) of which SPEN is a key member.
135. The CEG notes the deeper and wider reporting that will be delivered under SPEN's ED2 plan. In ED1, SPEN reported on 22 NARM reportable asset categories whereas this increases to 50 asset categories under ED2 and the volume of assets reported under NARM will increase by 18% when compared with ED1. We also recognise SPEN's adoption of technology to further assist its resilience activity, for example through using LIDAR in tree cutting decision making as part of BAU activity in ED2, and the commitment to use the MAAV Mobile assessment vehicle (See Chapter 8 Consumer Value Propositions below).
136. The CEG also notes the deployment of technology developed under ED1 into business as usual to deliver a more efficient asset stewardship. SPEN plans to increase deployment of their world leading active fault management in ED2 and build on their NAVI real time network analysis tool and increase LV substation monitoring and cable temperature monitoring, all helping to provide greater network utilisation without significant asset intervention.

Para 3.18 to 3.19 - Workforce Resilience

137. SPEN recognises that a number of 'people' challenges exist, and that their workforce plans and approaches need to evolve to build further resilience into its operations. Net Zero brings about a requirement for different skills and COVID has changed the dynamics and principles of employment. SPEN is actively considering these demands including the forecast early retirement of a material tranche of experienced colleagues within the ED2 period. Notwithstanding the fact that the ED2 plan has not yet been approved, SPEN has commenced the recruitment for apprentices scheduled for appointment in 2023 recognising the value and additional resilience that this will provide in 2022.
138. The workforce strategy for ED2 is informed by their routine day-to-day engagement activity as well as more detailed ED2-related engagement with stakeholders. CEG meetings revealed that SPEN has a number of well-managed relationships with key stakeholders in human resources. Early ED2 engagement, however, although covering workforce as a theme, did not involve a wide range of stakeholders with an absolute focus on workforce. This may explain why workforce was not a particular priority for stakeholders following the Phase 1 and 2 research.
139. SPEN responded to the CEG challenge that ED2 workforce engagement needed to go wider and deeper, and in particular to understand local needs and preferences. SPEN took on board our feedback, and specifically undertook additional engagement with a number of organisations, in both the SPM and SPD regions and we believe the resultant plan benefitted from the nuanced, local feedback that was received. Some feedback was received by the CEG that a key trades union was not necessarily aware of whether the final plan produced will address some of their strategic key requirements. To an extent this was slightly disappointing given the evidence we had seen of engagement having taken place.

140. SPEN's ED2 workforce plan builds upon the previous ED1 plan including a number of particular initiatives and strategies to mitigate existing challenges that the business already faces. Data and digital innovation has already been proven by SPEN to make existing operational processes more efficient – in particular in the field – and this will be expanded further in ED2 to reduce workforce cost and capacity issues, including in areas such as connections. Use of digital tools in the recruitment, training and capability-building areas will be further expanded during ED2. The CEG and some stakeholders challenged SPEN to ensure that the plan was anchored in insight from employees. SPEN undertook additional engagement with Trades Unions and also built upon its existing 2019 action plan by talking with 10% of its employees during production of the ED2 plan.
141. Stakeholders also detailed the importance of having a hybrid approach to future resource plans, upskilling existing colleagues as well as recruiting new, qualified people. SPEN has demonstrated through several complementary programmes how it plans to build the capability within its workforce, and conclusions from ED1 activity provide confidence that it will adjust its plans as required to mitigate future risks as these are identified. For example, SPEN was able to demonstrate how specialist data analysis and cyber security capabilities have been established for new recruits. SPEN's target that 50% of engineering and technical vacancies should be filled from within is therefore reasonable, confirming that external recruitment is as critical as internal upskilling.
142. The CEG had direct feedback from Trade Unions on the difficulties posed by collective bargaining pay spines and the 'attractive employer' challenges posed when having to bring external recruits into the sector/company, in particular in new roles in the data and digitisation space. We received an observation that SPEN salaries in Manweb region in particular are not considered attractive enough and SPEN recognises it needs to pay above market rate in some areas to attract and retain the right staff. If this is true it could drive additional cost, albeit this is a risk that SPEN is actively mitigating.
143. The CEG challenged SPEN to consider how it's needs apply across the subcontractor and partner community following feedback received by the CEG from a number of stakeholders that the small margins in this sector result in very little long-term and strategic planning. SPEN was able to demonstrate how it mitigates this issue by having a number of more strategic long-term partnerships with its supply chain, rather than addressing need on a project-by-project basis. SPEN has actively worked with other industry partners to establish a common set of metrics that allow simple comparison of performance, and SPEN has positively taken CEG challenges to improve certain workforce, diversity and inclusion targets. The CEG wants to note SPEN's positivity and desire to improve Diversity and Inclusion outcomes, and its approach in making its workforce more inclusive and representative of the communities in which it operates. We also saw evidence of the programmes of work that SPEN will use to improve D&I performance.

Para 3.29 to 3.32 - Climate resilience

144. Customers and stakeholders both ranked network reliability – avoiding power cuts – as the second highest priority for SPEN. They expect that SPEN will ensure that its infrastructure is able to withstand the impact of climate change. SPEN have further identified that customers' reliance on their electricity supply will increase as net zero heating systems and electric transport become mainstream.
145. Underpinning SPEN's climate resilience strategy is their commitment to improve reliability by ensuring that on average customers are 19% less likely to experience unplanned interruptions, and that when they do happen their duration will also decrease by

19%, commitments supported by 95.9% of customers. An even higher proportion, 98.6%, supported their commitment to respond to flood risk. Given the increasing impact of extreme weather on SPEN's network, such as the recent Storm Arwen, those commitments will require a step change in its mitigation activity.

146. As part of their whole system approach SPEN have worked with other DNO's and sectors, notably through the Energy Networks Association's Climate Change Task Group, to develop their climate resilience strategy. It also takes account of the climate change adaptation frameworks of the UK, Scottish and Welsh governments.

Long-term planning, network impacts and mitigation

147. Drawing on the work of the Committee on Climate Change and the National Infrastructure Commission, SPEN have considered climate change projections out to the 2030s, 2050s and 2100s, with the UK likely to experience wetter, warmer winters and hotter, drier summers.
148. SPEN have taken a thorough approach to understanding potential global warming impacts on the distribution network, identifying three high risks to aspects of their infrastructure: increased temperature, flooding (from rivers, surface water and seas) and drought. Having assessed risks SPEN's strategy is to identify and implement appropriate mitigations, and then monitor their success. SPEN's mitigation programme during ED2 seeks to address the identified risks through measures including investment to mitigate the impact of flooding on substations, of vegetation on overhead lines (from longer growing seasons and high winds).
149. The CEG has primarily engaged with SPEN on climate resilience through the prism of customers' demand for network reliability. As Storm Arwen demonstrated in December 2020, SPEN must ensure that its network is prepared for the impact of climate change, and, when unplanned interruptions to supply do occur, they have the capacity to repair infrastructure and communicate effectively with their customers. The CEG considers that SPEN's Climate Resilience Strategy has evaluated the long-term risks and identified mitigating actions. We note however that the success of these must be carefully monitored and if an increased pace of mitigation is necessary then this should start within the regulatory period.

Para 3.33 - An Environmentally Sustainable Network - Environmental Action Plan

150. Net zero is driving change throughout the energy system including increased distributed generation, increased use of low carbon technologies and operational emissions reduction. These pose significant challenges to SPEN and the changes they need to make to transition to net zero are addressed in their Environment Action Plan (EAP). It proposes strategies and actions to achieve net zero and addresses problematic issues that will require consistent focus and innovation.
151. The CEG has been pleased by the thorough approach the SPEN team have taken to the development of the EAP and their open approach to engagement and discussion with the CEG and stakeholders.

Stakeholder views

152. SPEN's phased engagement has taken place over two years of rising public awareness and experience of the impact of climate change and that is reflected in the im-

portance that their customers and stakeholders place upon it. Throughout the ED2 process the CEG has encouraged SPEN to ensure those concerns are central to its Business Plan. In customer research for the final BP 82% of household customers and 84.7% of business customers supported SPEN's environment and sustainability commitments. Overall 84.3% of customers were willing to pay for EAP commitments.

153. During a series of stakeholder workshops in summer 2021 stakeholders were able to test both the nature of the commitments and the extent of ambition. The workshops featured a broad range of participants from utilities, business, academia, development and technology, consumer and renewables, environment, and sustainability groups. In every topic considered stakeholders pushed SPEN to be as ambitious as possible in delivering an environmentally sustainable network.

Baseline Expectations - Business Carbon Footprint

154. The CEG has consistently challenged SPEN to meet its stakeholders' expectations to set more ambitious targets, including those in its draft Business Plan. Stakeholder workshops in Summer 2021 concluded "that the Net Zero target should be brought forward [from the draft BP target of 2040] if it was a realistic ambition". The CEG welcomes SPEN's response and supports its bold target to achieve Net Zero by 2035, aligned with its science-based targets.

155. SPEN has also brought forward its carbon neutrality target for scope 1 and 2 emissions (excluding losses) from 2030 to 2023 and committed to aligning its offsetting approach with the Oxford Principles. The CEG supports these commitments, noting they are also ambitious, exceed Ofgem's baseline standards and meet stakeholder expectations.

156. SPEN has taken a pragmatic approach to addressing stakeholder expectations that its fleet electrification should be more ambitious than its previous 2030 proposal, or the 2028 target set out in its draft Business Plan. The CEG understands that it is not practical at this stage for SPEN to commit to 4x4s being electrified before 2028 and therefore this remains their overall target date. However, in response to stakeholder expectations that SPEN should be more ambitious the EAP commits to all its cars, small, medium, and large vans being electric by 2025/26. The CEG welcomes and supports this approach.¹

Sulphur Hexafluoride (SF6)

157. Sulphur Hexafluoride has a global warming potential of 23,500 times that of CO2 yet is the dominant solution available to DNOs for filling switchgear. SPEN expect their overall SF6 bank to increase over the RIIO-ED2 period. Reducing SF6 leakage is therefore essential while the search for alternatives continues. SPEN propose to meet Ofgem's baselines for RIIO-ED2 with a strategy based on reducing SF6 leakage by 10% over the period by using alternatives, where available, and prompt replacement of leaky assets when not. SPEN has committed to collaboratively driving the development and adoption of SF6-free technologies.

¹ August 2021 EQ report on stakeholder workshops for 'Developing our targets and plans for greenhouse gas reduction and removal'

Network losses

158. Network losses pose a problem given that as generation becomes more diversified losses, which currently account for the majority of SPEN's emissions, will increase, putting an upwards pressure on costs. Against this SPEN expect that 'more diversified' generation will be primarily renewable and the losses will not result in as proportionately high emissions as they do at present.
159. Stakeholders made several points when considering losses, including an expectation that SPEN's "drive should be towards a zero figure"². Most supported SPEN's losses strategy which seeks to limit losses where it can through measures such as accelerating the replacement of high-loss assets and using minimum underground cable and pole mounted transformer sizes. The strategy also commits SPEN to leading work to deepen understanding of controllable losses with a view to addressing those and reporting on progress. The CEG considers the SPEN's losses strategy meets Ofgem's baseline and stakeholders' expectations.

Embodied Carbon

160. To achieve its ambitious Net Zero target SPEN will have to address the embodied carbon that currently represents 39% of its total network carbon impact. This will require it to monitor and report on scope 3 emissions as well as its current focus on scope 1 and scope 2. To that end, and in line with baseline and stakeholder expectations, SPEN has committed to baselining and reporting on embodied carbon in new projects, collaborating across the industry to identify and share best practice and reducing scope 3 supply chain emissions. The CEG welcomes SPEN's decision to incorporate the focus on scope 3 within business as usual rather than as a CVP as previously proposed in its draft Business Plan.

Supply chain management

161. Collaborating with their supply chain – particularly supporting small suppliers, who may not be well placed to adapt to new emissions management and reporting standards – is critical to SPEN's ability to achieve their Net Zero target. This point was made repeatedly by stakeholders and is reflected in SPEN's commitments to help train suppliers, engage them early in projects and incorporate sustainability in contracts. We question whether SPEN's intention to require all suppliers to set a Science Based Target (SBT) within five years of being awarded a contract is sufficiently demanding, though we appreciate that it may be necessary to allow smaller companies more time than larger ones. The CEG considers that SPEN's supply chain commitments meet Ofgem's baseline expectations notably that more than 80% of suppliers by value should meet sustainability standards.

Resource use and waste reduction

162. The EAP states that SPEN's vision is that it "will produce zero waste, with the components of all end-of-life assets being reused or recycled into new products."³ This long-term objective gives clarity about intention, the key issues to be considered being how and when it is achieved. Following publication of its draft Business Plan the CEG challenged SPEN on whether its commitment to divert 100% of waste (excluding compliance waste) from landfill by 2030, and zero waste by 2050, were sufficiently ambitious. SPEN

² Engagement Outputs, EAP page 54

³ EAP page 117

have engaged stakeholders and heard that SPEN should align its Zero Waste target with its Net Zero target (2040 at the point of consultation, 2035 in the final BP).

163. SPEN has recognised stakeholders' implied demand for greater ambition by bringing forward its zero-waste target date to 2040, in line with the draft BP Net Zero target (though not the Final BP target of 2035). The CEG understand that this decision relates to practical concerns about achieving zero waste in relation to compliance materials. They have also brought forward to 2030 their commitment to reuse or recycle 100% of waste, excluding compliance waste. To facilitate these targets SPEN intend to embed circular economy principles into their procurement processes.
164. Notably, during private interviews held to assess the quality of engagement, the CEG heard from an expert stakeholder that SPEN had engaged in-depth to develop its approach to resource use and waste. The CEG supports SPEN's resource and waste commitments and considers they exceed baseline expectations and meet those of stakeholders.

Biodiversity and Natural Capital

165. Stakeholders provided SPEN with extensive input on biodiversity and natural capital, perhaps unsurprisingly given many of those engaged are leading the development of best practice. This is summarised in the EAP. The CEG urges SPEN to ensure it continues to draw on this expertise during ED2 and notes the need for an approach that takes account of local and regional variations. The CEG therefore welcomes the commitment to form strategic partnerships with local ecological organisations to support activities to improve biodiversity and habitats.
166. Reflecting stakeholder input and customer views, SPEN have chosen not just to protect biodiversity, but to enhance it. This is set out in its commitments to deliver a 10% biodiversity enhancement on 25 hectares of their network and to deliver 500 biodiversity units across the ED2 period. The CEG considers that SPEN's Biodiversity and Natural Capital Action Plan goal of "increasing environmental value across our network" meets and exceeds Ofgem's baseline standard of assessing and monitoring changes in natural capital.

Other Issues

167. The CEG has previously challenged SPEN to understand its customers' expectations regarding improvement of the visual amenities of its assets (such as substations) in their communities and make commitments to meet those expectations. The CEG is pleased to note that SPEN have looked at this issue and undertaken to include assessment of the visual amenity of such assets, and any appropriate action, as part of its ongoing maintenance and refurbishment programme.

Is the Environment Action Plan Credible?

168. From the evidence available to us, it is our opinion that the EAP meets Ofgem's baseline expectations, including those not addressed elsewhere relating to fluid-filled cables, noise pollution and polychlorinated biphenyls. We note that stakeholders and customers' expectations of the EAP are significantly more ambitious than Ofgem's baseline expectations. The EAP reflects that desire for ambition in this area and the CEG considers that it, driven by the bold 2035 Net Zero target, is a credible strategy and worthy of support.

Chapter 4 (Ofgem Business Plan Guidance) Digitalisation Strategy and Action Plan - Data Best Practice

169. Digitalisation of the energy sector will enable decarbonisation and aid the achievement of Net Zero emissions targets. Digital technologies present both opportunities and challenges by transforming the way energy is generated, transmitted, regulated and traded, consumed and prosumed.

170. The CEG takes the view that SPEN's vision is highly ambitious within the constraints of the regulatory framework and current technical capabilities within the sector. SPEN has considered how to optimise the use of data and digital technologies across its business and has consulted widely. It has used expert evaluation to identify opportunities to embed data and digital innovation to deliver improved outcomes across a number of areas, impacting network operations, monitoring, and connections and customer interactions with the company.

At a strategic level, does the CEG believe that the company understands the range of changes happening within and to the energy system that could impact its activities?

171. The CEG is of the view that SPEN does understand the dynamic nature of data and digitisation changes that may impact its operations and its ED2 plan. This plan is built upon robust foundations and investments developed during ED1, enabling SPEN to go beyond utilising data and digital technology to support heating and transport innovation in ED1 and to consider wider, whole system approaches in ED2, including Network Analysis and View (NAVI). SPEN's approach in this area, to bring in external expertise to support its ambition, is encouraging, as is its desire to recruit and retrain additional colleagues to have the data and digital skills required for ED2 and beyond.

What is the CEG's view of the range of scenarios the company has considered to anticipate future network requirements and the company's approach to managing uncertainty and associated risks? Has this included testing the Business Plans against more extreme scenarios (both significantly lower and higher demand) to ensure the Business Plan remains robust in the face of unforeseen changes?

172. SPEN's thinking has been informed by stakeholder and customer insight and analysis of potential future scenarios around the electrification of heat and transport, as well as new end-use demand. SPEN has also rightly identified the need for a digitalisation uncertainty mechanism that underlines the 'unknown unknowns' that exist in this space.

What is the CEG's view of the quality of stakeholder engagement the company has undertaken to inform their proposals, including whether their Business Plan proposals demonstrate value for money by taking account of any willingness to pay research and the approach and support provided to vulnerable consumers?

173. The CEG hold the opinion that SPEN has undertaken a wide programme of engagement across data and digitisation specialists, utilising qualitative and quantitative approaches to provide quality insight from which SPEN's proposals were informed. We have not seen, however, customer engagement to the same level that explored future energy services and business models, as well as emerging themes including consent, privacy and security and as a result we believe customer insight and WTP analysis in this area could have been more robust.

Has the Company correctly identified the key concerns of stakeholders?

174. Notwithstanding SPEN's engagement in the UK's Energy Data Taskforce, and other industry bodies, there could have been wider engagement outside of the energy sector: this would have allowed an appreciation of experience from early adopters in other sectors, and from major operators (such as Google and Microsoft) and supply chain partners such as telecoms operators and cloud service providers. This would have enabled wider concerns and opinions to have been obtained, reflected upon and embedded into the Plan.

How well have these been accommodated in the company's Business Plan?

175. The plan does capture and address a number of key concerns including strategic national initiatives, connections to customers and stakeholders and resultant ED2 services from SPEN's data and digitisation programme. The CEG is of the opinion that SPEN's recognition of stakeholder concerns is not complete. We would have expected to have seen other items being addressed, including consent analysis from customers in respect to proposed services, and the establishment of an independent advisory board.

Has the company adopted an appropriate approach to sustainability and resilience, including for example consideration of the future of gas and implications for network services associated with the energy system transition?

176. Digitalisation is commonly used for strategic planning and provides support for whole system/multi-vector planning and operational control. This is also reflected in SPEN's stranded asset and asset management planning.

Has the company proposed appropriate outputs and associated total expenditure ("totex") budgets (including level of cost efficiency improvements)?

177. Yes, totex budgets have evolved considerably, with the final Plan detailing increased justified costs with embedded efficiencies where appropriate, and a split between BAU and Data and Digitisation spend.

Has the company demonstrated whether its proposals for expenditure efficiency/service quality improvement are sufficiently stretching?

178. The CEG holds the view that proposals are stretching, yet realistic: this has constrained developing unrealistic stretch targets that would only be delivered with risk.

What evidence has the company provided to allow them to assess how the output targets and expenditure proposals: (i) compare to historical levels of performance? (ii) compare to other network companies? (iii) compare to other industries?

179. Output targets and expenditure proposals are not directly compared to other network operators or industries (although SPEN has embedded some non-energy sector learning points). Where applicable ED2 proposals expenditure and outputs start from what was delivered and embedded within ED1.

What is the CEG's view of the company's approach to innovation, including incorporating innovation into business as usual, and including innovative approaches and initiatives from leading global network companies?

180. The company has detailed how a culture of innovation exists and will be expanded.

Para 4.19 to 4.28 - Distribution System Operator (DSO) transition

Has the DNO identified the changes in customer and stakeholder needs that drive and are driven by the DSO transition?

181. In section 2.1 of the DSO annex to the Business Plan, SPEN sets out its understanding of these drivers, summarised as ‘Decarbonisation, Decentralisation, and Democratisation & Digitalisation’, and shows how, where possible, these have been modelled and quantified as a starting point for its DSO strategy.
182. ‘Democratisation’, the increasing ability and willingness of customers to participate in network services, is quantified to some extent via flexibility tendering exercises. Meanwhile, the increases in customer load needs, arising from ‘Decarbonisation’, have been explored and quantified in detail via layering DFES scenarios onto granular ‘EV-up’ and ‘Heat-up’ forecasts of individual customer Low Carbon Technology take-up (Business Plan Annex 4A.3, sections 3.1 & 3.3.1). SPEN’s Engineering Net Zero (ENZ) model is then able to predict the impact of such changes on SPEN’s network.
183. SPEN appears not to have modelled the decreases in customer need resulting from Decarbonisation via the roll out of energy efficiency measures (e.g. home insulation), to the same granular (property by property) level as apparent in EV-up and Heat-up forecasts. While noting that SPEN’s proposed Strategic Optimiser deliverable has the potential to provide energy efficiency projections for some areas during RII0 ED2, we are concerned that provisions for comprehensive coverage and regular verification of granular energy efficiency data remain absent from the business plan. The CEG believes that projected customer electricity use reductions should be given similar prominence to projected increases, and fears that a lack of granular and regularly updated data could prove a barrier to meeting Ofgem baseline expectation 1.1.3. Assessing the potential for use of energy efficiency to defer network investment (see also paragraph 3.4. below, and paragraph 10 in the CEGs response to whole systems).
184. SPEN’s assessment of customer and stakeholder needs is rooted in quantifiable (often power-flow based) drivers and emerging stakeholder and customer responses. This provides a strong and verifiable technical underpinning for the plan. However, we believe that fully engaging with some of the more qualitative customer and stakeholder needs likely to arise from the DSO transition, such as requirements and attitudes to data sharing, and the attitudes and needs of customers with respect to flexibility provision has been more challenging. We believe that this is due to a number of factors, not all of which are within SPEN’s control, but which will mean that the structures for ongoing consultation and co-creation of DSO strategy with customers and stakeholders will be crucial.
185. The CEG has noted challenges in engaging meaningfully with some customers and stakeholders on DSO. These include stakeholder fatigue, the complexity of the topic, and some parties not yet feeling the effects of DSO transition. Despite efforts from SPEN, the CEG was surprised to see relatively low interest from some important stakeholders, which are likely to be significantly impacted by the coming changes (such as industry associations), impeding SPEN’s ability to identify some stakeholder needs likely to emerge from the DSO transition.
186. Meanwhile, the CEG believe that the ‘high volume’ customer engagement approach taken by SPEN to phase 2 (e.g. Business Plan triangulation record C2.2 & C2.4) may have been unsuited to eliciting considered responses on the changing needs and attitudes of customers in response to DSO; leading to an impression of particularly low ac-

ceptability for flexible measures by comparing flexible dispatch to the inability to use appliances as intended (see CEG response on stakeholder engagement for further discussion of this issue).

187. We are pleased to see that community based measures to engage 'hard to reach customers' on DSO are included in SPEN's plans, which may provide one route for pursuing these in-depth engagements during RIIO ED2 (Business Plan Appendix 4A.3 section 5.5, with further details in Appendix 4B.3).

Has the DNO found out, using customer research and stakeholder engagement, the appropriate information in relation to DSO that should be made available, who requires it, both now and in the future, and made the information user-friendly?

188. SPEN's 'Network of the Future' triangulation report demonstrates how high level stakeholder views on data requirements have been gathered throughout the RIIO ED2 planning process – including via BAU input from SPEN's Smart Cities working group (Business Plan S0.10-0.15), phase 2, 3 and 4 questionnaire responses (Business Plan S2.3-2.7, S3.7, S4.15), and an online ENZ stakeholder workshop in phase 3 (Business Plan S3.7).

189. In addition, bilateral meetings have provided SPEN with in-depth insight into the data needs of particular stakeholders – notably those of local and devolved governments, NG ESO, and some flexibility market participants.

190. It is our opinion that SPENs 'Strategic Optimiser' proposals (Business Plan annex 4A.27) represent a particularly strong knowledge of the needs for data and support of local and devolved governments. The proposals have been tested with the wider stakeholder community, and we have noted high levels of enthusiasm and support among key stakeholders.

191. While the CEG was concerned that previous drafts of SPEN's DSO strategy did not provide sufficient detail on SPEN's wider data sharing deliverables and metrics, the final report contains significantly more detailed proposals. In particular, commitments to share near-time market notifications on flexibility and Active Network management (ANM) dispatch appear to show a good understanding of stakeholder needs in this area (Business Plan Annex 4A.3 section 5.3).

192. However, the late emergence of detail on SPEN's data sharing proposals, with detail on some aspects such as monitoring of the impact of data sharing, and the planned Open Data Triage process yet to be confirmed (Business Plan annex 4.C.2, page 41), may have reduced the opportunity for some stakeholders to fully engage in this area. Meanwhile, we have noted that other stakeholders and customers are still at an early stage of engagement on DSO, so believe that some needs and preferences may only become clear in the course of RIIO ED2.

193. Therefore, we believe that further targeted engagement will be key to ensuring that the Open Data Hub, and associated deliverables, best meet the particular needs of different stakeholder groups, while also respecting the privacy and requirements of other customers and stakeholders.

194. We are pleased to see that SPEN have significantly strengthened their plans for business separation and ongoing stakeholder input (Annex 4A.3 sections 4.1 to 4.4). We believe that an open and effective DSO Expert Stakeholder Panel will be key to providing the

forum for ongoing stakeholder input, alongside the commitment for annual review and publication of SPEN's Decision Making Framework (Business Plan Appendix 4A.3 section 5.3).

What is your view of the DSO Strategy?

195. Overall, SPEN's DSO strategy sets out strong and stretching proposals for the deployment of DSO measures as required to meet the requirements of net zero.
196. In particular, SPEN's proposed Engineering Net Zero (ENZ) platform not only provides an integrated forecasting tool as set out in Ofgem requirement 1.1.1 but, combined with SPEN's network monitoring programme and Constrained Managed Zones (CMZ) rollout, we believe that these proposals represent a major step towards the real time active management of SPEN's distribution network that may exceed Ofgem's baseline requirements.
197. The CEG notes that the Significant Code Review will have a material and as yet hard to quantify impact on some of these proposals, by complicating forecasts of generation connection volumes and uptake of flexible and ANM connections within CMZ zones. This will require close attention. In particular, ongoing stakeholder engagement on the development of Uncertainty Mechanisms, and on the form of flexible connection that customers will continue to find useful, will be crucial to a successful response to this challenge.
198. The CEG notes the significant value of SPEN's CMZ proposals in reducing investment costs and de-risking flexibility dispatch, that there is strong overall stakeholder support for these proposals, and that SPEN's commitment to provide 80% of relevant customers with a flexible connection option, alongside their connection offer, will provide a clear mechanism for measuring success in this area. We are however concerned at a lack of detail, or evidence of consultation, on the specific issue of how customers provided with flexible connection offers will be provided with 'clarity around conditions and circumstances' of the curtailment likely to arise (see CEG response on Major Connections). We believe that this is of particular importance due to the potential for perceived conflicts of interest where there is a constraint within a CMZ zone which could be mitigated by either curtailing a generator with a flexible connection agreement (which the DNO does not need to compensate) or dispatching flexibility (which it does). Almost a third of stakeholders remained neutral/undecided when consulted on these proposals, with a small minority maintaining objections in principle (BusinessPlan S4.19).
199. It is unclear to the CEG whether the remit of the DSO Expert Stakeholder Panel (Annex 4A.3, p. 36) is intended to cover input on CMZ operation. We would urge clarification on this, as we believe that such a mechanism would provide a route to ensure that the concerns expressed in paragraph 3.3 above are attended to, as well as ensuring that SPEN meets Ofgem's DSO baseline requirement 2.2.3.
200. Finally, we note that under Ofgem requirement 1.1.3 SPEN must consider the potential for harnessing energy efficiency measures alongside flexibility and network reinforcement; a topic where we have observed clear support from stakeholders for stronger action. SPEN includes a commitment in its business plan to consider energy efficiency options and to publish their methodology for doing so at the start of RIIO ED2 (annex 4A.3, section 5.1), which may meet the Ofgem baseline requirement. However, the CEG is concerned at the lack of detail on targets, deliverables, or research on appropriate financial mechanisms. These could influence customer energy efficiency installations by recognising and rewarding end users or intermediaries where value is provided to the network. Without these practical details we fear that SPEN will not be able to provide fair consideration of the potential

to harness energy efficiency, to the detriment of customers and stakeholders. We encourage Ofgem and the DNOs to work together to ensure that this does not represent a major missed opportunity during RIIO ED2.

Para 4.29 to 4.32 - Enabling whole system solutions

Has the Company correctly identified the key concerns of stakeholders?

201. Following feedback on its draft Business Plan SPEN has substantially enhanced its whole system focus and it extends throughout the final Business Plan. This shift has been reflected in the level of stakeholder engagement around the whole system agenda.
202. SPEN have engaged with a wide spectrum of organisations and groups, including customer and community organisations, local authorities, house builders, the transport sector, and energy and water utilities. This engagement has focused on both SPEN's strategy for advancing their capacity for whole system thinking and seeking to understand the stakeholders' needs and aspirations, exploring the potential for partnership.
203. Stakeholders have stressed that SPEN needs a broad perspective to achieve a genuine whole system approach, focusing not just on increasing efficiency in their network but on the benefits for customers, communities, and other organisations. SPEN's Whole System mission statement and strategic pillars are in line with that concept and are supported by the CEG. The mission statement received strong agreement or agreement from 85% of stakeholders. Stakeholder suggestions that transport and community groups should feature more prominently have been addressed.

Opportunities to realise whole system benefits

204. Some commitments in the draft Business Plan were previously standalone commitments but are now viewed as part of a whole system approach. These include those focused on supporting local authorities to locate sites for EV charging infrastructure by building on the success of their 'Project Pace' pilot in ED1 and decarbonise heat through a new 'Strategic Optimisers' team. During engagement over the summer of 2021 local authorities have welcomed the offer of this expertise.
205. There are other important aspects of the plan that reflect the start of whole system partnerships with stakeholders outside of what might conventionally be termed 'the energy system' but could now become a significant part of it including water, refuse and telecoms companies. The CEG is pleased to see partnerships with utilities in these sectors, anticipating that these will facilitate more efficient use of energy and generation of renewable electricity and heat. SPEN's plans include proposals for joint working with these sectors.
206. The importance of whole system thinking was underlined for the CEG by one stakeholder who pointed out the implications for energy networks (and their customers) of British Telecom's plan to switch-off the analogue telephone network by 2025. This had not featured in the DNO's draft Business Plans. The CEG have raised this with SPEN and understand that it is working with the telecoms sector on the identification of vulnerable customers and their need for alternative emergency contact methods after the switch-off.

Challenges to the whole energy system

207. Ultimately the drive for Net Zero will mean that the gas network could either become redundant or be switched to hydrogen. At present hydrogen trials are in their infancy and

whether it will become a mainstream replacement for gas is likely to be unclear throughout the RIIO-ED2 period. SPEN's plans commit them to working with the relevant energy companies so their network can adapt to whichever scenario develops and to supporting other companies to facilitate it. The CEG considers that this is what might reasonably be expected of SPEN given the uncertainty.

208. As the power system decarbonises the electricity network will become essential to the operation of net zero heating systems. SPEN have engaged with governments and local authorities to understand the implications of this for network capacity. They have thus developed considerable data and expertise that would support the roll out of heat decarbonisation programmes and, together with SSEN, has worked with the Scottish Government on the RE-HEAT demonstrator project. The CEG view SPEN's proactive support for government and local authorities on the deployment of zero-emissions heating as an essential part of their whole system approach and welcomes the commitment to develop a team of 'Strategic Optimisers' for this purpose.
209. Closely linked to heat decarbonisation will be the need to substantially improve the energy efficiency of homes and other buildings given that heat pumps operate at a lower temperature than fossil fuel systems. Inevitably this will influence electricity demand and therefore the capacity required. The CEG considers that encouraging and supporting a societal step-change in energy efficiency is of direct interest to SPEN and its customers and should be part of its whole system approach. The CEG also notes that district heat networks are a 'no-regrets' option in central and devolved government and Climate Change Committee plans for heat decarbonisation. They provide whole system flexibility through potential to reduce demand on electricity network capacity. They are integral to Local Area Energy Planning and the 'Strategic Optimiser' role proposed by SPEN.

Whole system thinking in the Business Plan

210. The CEG considers that while the whole system proposals in the Business Plan are important, the greatest benefit from whole system thinking will emerge from ever closer partnership working over time. The CEG is pleased to see that, over the time the Business Plan has been developed, SPEN's approach to whole system has become more strategic, seeking to embed it as a 'cultural norm'. This has in part been in response to greater appreciation of the potential of the whole system approach gleaned through the engagement process.
211. SPEN set out six guiding pillars for their whole system approach to bring about that cultural shift across the organisation: The six-pillar strategy was supported by 96% of SPEN's stakeholders.
212. The recognition in the Business Plan that SPEN's expertise can enable others to achieve their Net Zero objectives, and that that should be part of its mission, is considered by the CEG to be a welcome evolution of purpose. While acknowledging that SPEN have already made incremental steps down that path with initiatives such as Project Pace, the Business Plan makes capacity commitments to match its whole system thinking with a new planning function, staffed by those with varied experience. This is key to driving the development of whole system thinking and is a direct response to the level of stakeholder demand.
213. The nature of the whole system concept requires SPEN to be fleet of foot, able to engage widely, plan and respond quickly. The pace of the global Net Zero agenda means the number and sectoral range of stakeholders with an active interest in engaging with

SPEN in a whole system manner can only increase. The CEG supports the planning function proposed by SPEN to implement its whole system approach.

Business Plan Incentive

214. SPEN's analysis is that the entire package of their whole system ED2 initiatives would deliver a net benefit of £18.23 for every £1 spent. The cost benefit analysis of their new whole system planning function indicates it will achieve between £8m and £49.3m of net present value benefit over ED2, and ongoing benefits beyond ED2.
215. Overall SPEN's whole system initiatives were viewed by 77% of stakeholders as leading to the desired outcomes for customers and communities. In the view of the CEG SPEN's whole system approach meets the requirements of the Business Plan incentive, though it will need to be regularly reviewed during the ED2 period to ensure cultural changes are achieved and that the whole system capacity is sufficient.

Innovation projects outwith the power sector

216. SPEN's ED2 Business Plan builds on ED1 innovation pilot projects such as Project Pace and RE-HEAT. In addition, cross sector partnerships in telecoms, water and wastewater, transport, refuse, community energy and house building are proposed. The CEG considers that these partnerships respond appropriately to the outcomes of stakeholder engagement and note that the range of sectors encompassed may need to increase during the ED2 regulatory period.

Para 4.33 to 4.39 – SPEN Innovation Strategy and Network Innovation Allowance

Has the company incorporated an ambitious approach to innovation into its proposals, including innovative approaches and initiatives from leading global network companies?

217. SPEN's innovation strategy is ambitious. The £35m requested for NIA is almost double what SPEN allocated in ED1 (p.146 BP). This is also reflected by a more than doubling of Totex BAU investment in innovation in ED2 (£61.9m) to versus ED1 (£27.7m) (testament from SPEN innovation lead). This doubling of investment reflects how innovation challenges are even more pressing today versus ED1, now that net-zero targets have strengthened and by extension, the impetus to innovate.
218. SPEN outline an ambitious two-track innovation strategy (Business Plan p.37 Annex 2.1): 1. Energy System Transition and 2. Consumer Vulnerability. These align with Ofgem's and ENA's own innovation frameworks. SPEN include an ambitious commitment to assess the consumer vulnerability impacts of all its innovation stimulus funded projects and BAU funded DRIVE innovation campaigns (p.38 Annex 2.1; p.146 of BP; SPEN testament), suggesting that all innovation projects will incorporate a focus on vulnerability.
219. SPEN's priority innovation themes (Business Plan Figure 2 Annex 2.1) and associated projects (Section 7) offers good coverage of the highest priority network innovation areas. This maps closely onto what the CEG would consider the most critical areas for network innovation and that offer significant potential value to customers. In particular, the CEG are strongly encouraged by SPEN's inclusion of vulnerability at the heart of its innovation strategy. This points to an awareness of how innovation is critical to delivering both net-zero and a just transition.
220. Even so, three important questions remain. The first is what threshold will be applied to a project's contribution towards supporting vulnerable customers, in order to determine whether the project is supported or not (via BAU or NIA)? The second is how and why

did SPEN settle on the 88/12 split of innovation stimulus budget between energy system transformation theme and consumer vulnerability? The third is to what extent will a single project be required to evidence its potential to deliver on KPIs across both themes, in order to secure funding?

Has it looked to innovation in an international context?

221. SPEN presents an innovation strategy that is highly sensitive to international perspectives. Examples include: a) partnership working with UK and international partners via its work with the innovation test centre and intermediaries (Business Plan Section 4 Annex 2.1); b) research committee membership (e.g. CIRED, Cigre, ENTSOE, IEEE) (Section 3 Annex 2.1); and c) membership of the Iberdrola group enables sharing of global innovation priorities and best practice.

222. SPEN's triangulation record also suggests that SPEN engaged with multi-national corporations (e.g. Hitachi, General Electric, IBM), who possess an international perspective on innovation. It is not however evident from SPEN's innovation strategy that they have engaged with intergovernmental organisations, such as the International Energy Agency (IEA), to corroborate their priority innovation themes. Relevant works include the IEA's Clean Energy Technology Guide and its associated innovation priorities.

Has the company demonstrated it has embedded plans to innovate within BAU throughout its plan?

223. SPEN's £61.9m of BAU totex innovation funding (p.73 Annex 2.1) will target incremental and transitional innovation, focusing on high 'Technology Ready Level' projects, i.e. those closest to commercialisation. This reflects an important acknowledgement from SPEN about how more mature innovations represent a lower risk investment for third parties and shareholders, and are therefore in less need of targeted innovation funding.

224. The CEG are also encouraged by SPEN's inclusion that "once successful innovation is embedded into BAU, it is possible for the solution go around the cycle again, should the solution need to be updated incrementally in the future." This accounts for the non-linear nature of innovation, whereby products/services may return to an earlier stage of development due to unforeseen performance results identified during a later stage of development. Finally, the CEG are supportive of SPEN's BAU initiative to "pull through" innovations through its 100 innovation champions, via continuation of its DRIVE programme initiated in ED1.

Has the company demonstrated it has incorporated the benefits of past innovation, for instance, by rolling out proven innovations and showing the cost reductions from earlier innovations? Has the company demonstrated it has processes in place to rollout innovation proven during RIIO-2?

225. SPEN references extensive case study examples of how it has taken strides to integrate innovations from former price controls (e.g. ED1) into its BAU. (Business Plan p.23 Annex 2.1).

226. The CEG are broadly satisfied – aside from the concerns listed elsewhere here – that SPEN's strategy to rollout its innovations is logical and comprehensive. In terms of design, we particularly welcome the inclusion of best-practice innovation strategy design, in the form of including stage-gating, multi-disciplinary project steering groups and an innovation board (Business Plan Section 8 Annex 2.1).

227. SPEN also flag ongoing innovation projects that they will carry into ED2, with a focus on driving these applications closer towards commercialisation. (Business Plan p.44 annex 2.1). This highlights a continuity of innovation efforts between price controls and a longer-term commitment to rolling-out these innovations.
228. There is also evidence of rollout of innovations between network companies. There are some specific examples of previous innovations, highlighted in the other DNO plans, which SPEN developed or piloted first. Conversely, SPEN have adopted innovations from other network companies. For example, SPEN benefited from SSE's TOUCAN project, which uses thermal imaging to locate cable faults (p.29 Business Plan). To facilitate this open innovation approach, SPEN undertook a review of 200 innovation projects from across DNOs; identifying 68 with potential to improve performance during ED2.

Has the company demonstrated it has processes and structures in place to involve third parties in its innovation?

229. The CEG are confident that SPEN has a strong track record of involving third parties in its innovation, not least innovation intermediaries like the PNDC, EIC, ENA etc. These intermediaries offer a critical platform for engaging with other third parties – including other network companies - to facilitate cross-industry learning and an opportunity for SPEN to both capture and share knowledge. A good example is the APPEAL project, which aims to identify the best environmentally friendly alternative to creosote to maximise the life of electricity poles. Here SPEN worked with UK Power Networks, Scottish and Southern Energy and Northern Powergrid.
230. This collaboration and knowledge sharing between network companies is also supported by the Fast Follower initiative, which helps SPEN and other network companies to gain a quick overview of the industry activities and ensure they are building upon the “state of the art”, helping to avoid duplication of effort.

Has the company demonstrated that its innovation plans are ambitious and related to the results of its customer research and stakeholder engagement?

231. It is clear from Business Plan Annex 2.1 that SPEN have a strong track record of collaborating with stakeholders - and third-party project partners - to undertake long-term BAU engagement. SPEN's annex and triangulation reports also unpack the scope and depth of their engagement in the lead up to the ED2 price control. The CEG are encouraged to see that SPEN hosted one stand-alone workshop on innovation on 6/11/20 with eight stakeholders during Phase 2, covering a broad range of issues relating to SPEN's innovation strategy. This was followed by more engagement during Phase 3 to gauge the level of acceptability amongst customers and stakeholders for their set level of ambition for BAU innovation. A key focus of the latter was stakeholder and customer willingness to support BAU innovation activities that deliver a specific level of cost savings. Through this engagement, SPEN also increased its targeted level of innovation-induced savings from £50m to £87.2m.
232. This engagement elicited other important feedback. SPEN points to three key themes of feedback, which they have used to build their strategy: 1) no siloed approach to innovation, 2) greater ambition versus ED1; and 3) long-term benefit from innovation. Another important finding was that 72% of respondents believe that environmental/social benefits should always be a targeted outcome of innovation. Broadly, this feedback has filtered through into SPEN's innovation strategy. However, the CEG identify a few potential concerns.

233. The first is the relatively limited, targeted stakeholder engagement on innovation. Whilst the topic of innovation will likely have been touched upon across different workshops (e.g. Phase 2 - Engineering Net Zero workshop), interviews and surveys, the triangulation report points to just one stand-alone workshop on SPEN's innovation strategy that involved just eight stakeholders. This relatively small pool was not expanded upon through additional workshop engagement specifically on innovation, during either Phase 3 or 4. This raises concerns about how representative these stakeholders' views were of SPEN's wider stakeholder network.
234. The second is that there was relatively little stakeholder engagement on which innovation topics SPEN should take forward (Business Plan Section 7 Annex 2.1). At its workshop, SPEN did ask stakeholders whether there were any key areas of innovation missing from its innovation themes, however the responses did not initiate a detailed stakeholder critique of SPEN's innovation themes. It is therefore difficult to clearly understand how targeted stakeholder engagement has shaped SPEN's priority innovation topics.
235. The third is the balance of funding between SPEN's overarching innovation themes of Energy System Transition and Consumer Vulnerability. The CEG note that the innovation stimulus funding is split 12% for CV and 88% for EST. This does not suggest both themes receive equal attention by SPEN.
236. "Direct CEG engagement with SPEN's innovation leads and Business Plan Annex 2.1 section 7.4.3 indicate how all SPEN's ED2 innovation projects must contribute to both the EST and CV themes, indicating that much of the £30.7m committed to EST will also have an important bearing on CV. The same may be true in reverse, i.e. CV projects have an important bearing on EST. SPEN could usefully make clearer what share of their EST NIA funded innovation projects will also positively contribute to CV.
237. Finally, the CEG note a lack of clarity over how SPEN have reacted to stakeholders' wish for SPEN to focus on the environmental and social benefits of their innovation projects. Whilst SPEN presents a thorough and logical "stage gating" process for early-stage project evaluation and selection, the process by which they have judged ex-ante a project's potential to generate social and environmental benefit is not obvious. The CEG note that the inclusion of specific innovation themes such as Consumer Vulnerability and Sustainability (under EST) mean that SPEN's scoring against "alignment to strategy" (see p.75) will implicitly give projects with potential environmental and social benefit an advantage. There is also the opportunity for a more systematic ex-post evaluation of innovation project benefits too, for example via a social return on investment (SROI) analysis of innovation once they are deployed via BAU.

Chapter 5 (Ofgem Business Plan Guidance) - Forecasts and scenarios

238. As part of its commitment within this area, SPEN says it will continue to work with the ESO, UK, Scottish and Welsh governments, and other key stakeholders, to accurately forecast customers' future needs and to facilitate Net Zero pathways. This will include updating DFES forecasts annually. This is very much a BAU activity and along with the stakeholder engagement previously mentioned, they assessed the ESO and CCC 6th budget report to calculate their Net Zero pathway benchmark figure.
239. During their engagement process, SPEN asked 3 main questions:
- Do you agree with the EV forecast?
 - Do you agree with the Heat Pump forecast?
 - Do you agree with the generation forecast?
240. Whilst SPEN have stated they have taken the CCC 6th budget report into account in creating their forecasts, the CEG have been unable to confirm if this is the case. The CCC report does break technology down but only on a national level and allows for no separation between transmission and distribution.
241. Overall, stakeholders have agreed or strongly agreed with the DFES scenarios with one exception during Phase 4. SPEN used an external facilitator (EQ) to produce a detailed report (September 2021) on their engagement with local authorities. The report stated that 50% of Local Authority stakeholders within the SPD area felt that SPEN's SOLAR PV element of generation forecast was too low. Following Phase 4 engagement, SPEN made a marginal change to their generation forecast.
242. Of the generation expectations, battery deployment forms a high percentage of this number, which does tie in to their flexibility and DSO offering.
243. During the Phase 4 engagement process, SPEN held bilateral meetings with various public sector and Government civil servants although we cannot see any evidence of further engagement with the industries associated with the individual LCT detailed within the scenarios. We feel there is a lack of engagement with industry still present and most of the future engagement narrative is around government policy and local authorities. However engagement with private industry can be challenging.
244. During the ED2 period, we expect the energy landscape to change dramatically and quickly and as such, uncertainty mechanisms will play a huge part in the DFES moving forward with SPEN having the ability to move their baseline quickly and easily being a point of concern for the CEG.
245. The current minded to position of the SCR code review could also have a huge impact on these scenarios and again, the CEG are mindful of SPENS ability to adjust their scenarios to suit.

Para 5.21 to 5.29 - Cost Information

246. It is difficult for the CEG to assess whether the costs submitted as part of SPEN's Business Plan are efficient or justified given changes in the scope of activity driven by digitalisation, and the transition to net zero. In addition we were not able to discuss costs and efficiencies with SPEN until very late in the process, so Ofgem may wish to make further enquiries.

247. In its Business Plan (page 11), SPEN has provided information on its proposals for average totex for ED2, compared with its projected annual average expenditure during ED1. Our chart below shows how the proposed ED2 allowances evolve from ED1 in the SPEN expenditure proposals.

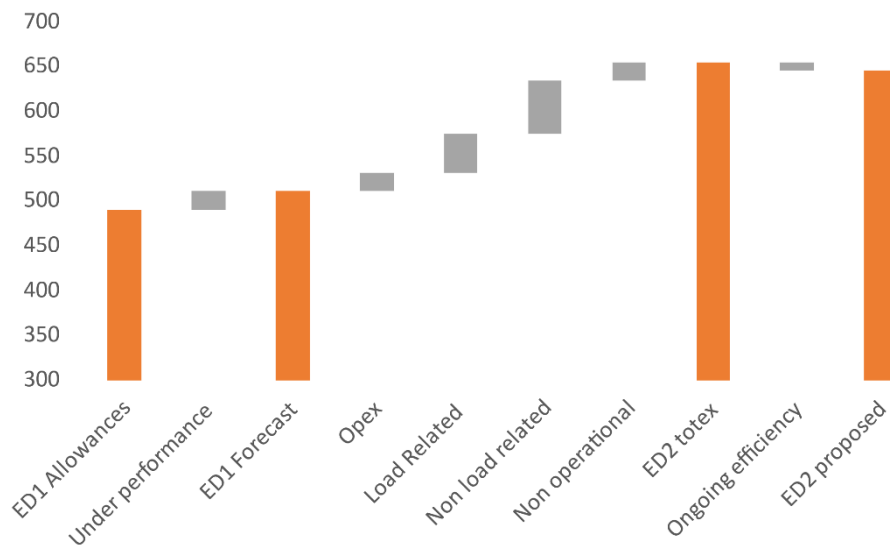


Figure 1: Evolution of proposed totex allowances between ED1 and ED2 (annual £ million)

248. Average annual totex over the five-year period is around 28% higher than the actual expenditure during the ED1 period. However, SPEN is projected to over-spend its ED1 allowances by an average of around 4%. Hence the proposed ED2 allowances are almost a third higher, 32%, than those for ED1, amounting to an annual average increase of about £155m per annum.

249. The bottom-up derived costs presented by SPEN incorporate around £150m of efficiencies, comprising £66m of “embedded efficiencies” and £87m of “innovation efficiencies” over the five-years of ED2. Again, we would expect Ofgem will wish to analyse in more detail but we make the following observations:

250. SPEN says it has analysed the marketplace and found increasing costs due to COVID, Brexit and general supplier increases and has chosen to maintain the current ED1 unit cost levels, whilst meeting the challenge to find efficiencies to offset this.

251. We recognise that SPEN has demonstrated that it has incorporated savings from efficiency improvements during ED1 in its ED2 Business Plan. They have also incorporated benefits from innovation in the ED2 base line prior to considering the benefits from ongoing efficiency.

252. There is evidence in the plan of extensive CBA at the level of individual projects and specific activities, including the consideration of alternative options. SPEN described a robust governance process providing validation and assurance. However, for the reasons above, we are unable to confirm that “a full range of possible solutions have been considered” or that “the chosen solution is economic and efficient and represents the best value for consumers”.

253. We note that SPEN have spent below their allowance on non-load related asset expenditure during ED1 to date and proposed costs in ED2 are significantly higher. Although SPEN expect to meet their asset risk targets by the end of ED1, SPEN’s explanation in

their Plan for increases in asset refurbishment and replacement expenditure could suggest it is driven, at least in part, by “increased risk and asset specific deterioration” (FBP p 66). We expect Ofgem may wish to look at this further.

Para 5.33 to 5.36 - Engineering Justification Papers

254. The CEG have not investigated these but note that SPEN have produced detailed Engineering Justification Papers and a number of Annexes to substantiate proposed spend, with director-level confirmation that all costs can be tracked back to source data.

Para 5.37 to 5.42 - Access and Forward-looking charges Significant Code Review

Not examined.

Para 5.43 to 5.44 - Managing Uncertainty

255. Ofgem has indicated the uncertainty mechanisms it considers necessary in its December 2020 methodology decision document. In addition, Scottish Power has proposed a number of bespoke uncertainty mechanisms.

256. The CEG supports the use of effective uncertainty mechanisms to manage load related uncertainty. Proposals for segmenting the incentives to reflect different elements of the load related programme appears sensible.

257. The CEG recognises that it may not be possible to cover all aspects of uncertainty with a volume driver and it may be necessary to revert to re-openers.

258. The CEG would like to see some scope for approval based on well-supported forward-looking estimates rather than waiting for constraints to arise. To meet stakeholder expectations, the process should not deter or discourage timely investment.

259. SPEN is proposing several bespoke uncertainty mechanisms.

260. The CEG supports the proposal to move the costs related to managing 1-in-20 winter storms into uncertainty mechanisms. Stakeholders raised the point that rewarding for a 1-in-20 storm when it may not happen feels unjust to consumers when serious storms do not occur during a price control period. The CEG also notes that it also exposes SPEN to significant cost risk when such storms do occur.

261. The remaining bespoke mechanisms, some of which relate to policy or regulatory uncertainties and others which relate to normal course-of-business risk, Ofgem may wish to evaluate further.

Para 5.45 - Real Price Effects

Not examined.

Para 5.46 to 5.48 - Ongoing efficiency

262. SPEN has used joint analysis from NERA on behalf of the Energy Networks Association to plan on-going efficiency. The analysis implies a mid point trend of efficiency improvement in the wider economy of 0.3% per annum. SPEN has committed to a “more stretching annual productivity improvement target of 0.5%”, which is at the upper end of the range identified by NERA (SPEN Business Plan, Annex 5D.5).

263. The ongoing efficiencies of 0.5% per annum may be at the top end of the range proposed in the NERA report but we note that the CMA assumed ongoing efficiency of 1.0% per annum in its recent determination of the water price controls and did not overturn

Ofgem's position of 1.0% in the RIIO T2 appeal. Informal feedback from consumer stakeholders regarding the current financial pressure that households are facing, as well as CEG perception is that SPEN could be more ambitious.

Para 5.49 to 5.55 - Late and early competition

Not examined

Chapter 6 (Ofgem Business Plan Guidance) – Financial Information

264. The CEG was specifically told by Ofgem that it was not required to “discuss or review specific financial topics, such as the cost of capital, treatment of debt or the level of gearing in the company.” However the CEG considers that stakeholder and consumer engagement on these matters is within our scope.
265. We are for example disappointed that SPEN did not sufficiently seek out wider customer or stakeholder views about the core financial principles that underpin its ED2 plan. The CEG has concerns that SPEN limited its stakeholder research on financial principles to two representative consumer groups, with the SPEN perception that this was not an area that customers would want to comment upon directly. The CEG believes this is unfortunate and potentially detrimental to the plan, and customers alike.
266. SPEN has also presented an alternative higher rate of return for its investors, justified by a paper from NERA (National Economic Research Associates). The CEG understands this was not tested with consumers until Phase 4 research, immediately prior to plan submission. That research suggested 68% of customers support SPEN’s proposal for the plan to be based on a higher cost of equity. We are of the view that the question used could be seen as leading and have some doubts about the value of the answers. We have reproduced, in italics part of the question posed to customers of SPManweb here:
- *SPEN's preference for (a rate of return) of 6.21% equates to 2p per day or £7.30 out of the £140 SPEN will receive from your bill to deliver their ED2 Business Plan?*
 - *Ofgem's proposed 4.4% which equates to 1.42p per day or £5.17 per year and would reduce the amount SPEN receive from your bill to £137.90. A difference of £2.13p.*
 - *To ensure that the required funding is secured to enable SPEN to support the transition to Net Zero, and deliver all the benefits for customers outlined in the previous information, do you believe that it is worth the additional cost of £2.13p that SPEN are proposing?*
 - a. Yes
 - b. No
 - c. Unsure

The full text is included in Annex 10 to this report.

Chapter 8 (Ofgem Business Plan Guidance)

Para 8.12 to 8.24 - Consumer Value Propositions

267. Although SPEN has, as required, tested customers willingness to pay extra for these services, the CEG has doubts about this form of research especially when bills are likely to be substantially increased in future, the customer appetite to accept the cost of these CVPs may be quite different.
268. The CEG has not corroborated the costs, benefits, Social Return on Investments and value calculations of these CVPs.
269. SPEN are proposing four CVPs in Annex 5C.2 of the SPEN Business Plan:

CVP1: Direct Low Carbon Transition Support to Vulnerable Customers

270. This falls under the 'vulnerable consumers' category and is in two parts:
- The first element of CVP1 is to fund technology that reduces energy demand for at least 40,000 low-income customers during ED2, saving them around £100 pa on average. The CEG views this as a Just Transition commitment, notes it is supported by customers and stakeholders and strongly endorses it. Indeed, the CEG would prefer to see the scale of the programme increased but understands the limitations on the cost of CVPs. However SPEN has assured the CEG that if the unit cost of the technology reduces during ED2 it will be possible to expand the number of low-income customers reached by the programme. The CEG also notes that this approach should be viewed in the context of SPEN's longer-term commitment to provide support to all of its low-income customers by 2045.
 - Increasing the uptake of smart meters across 136,000 (SPEN figure) harder to reach customer groups for which, in the CEG's view, there is a need but also a question mark in the minds of the CEG and some stakeholders about whether a DNO or a customer's supplier is the best placed to carry this out, or whether a DNO should be incentivised in the way proposed. This CVP could however support a Just Transition.

CVP2: EV Optioneering - A strategic role in accelerating the deployment of core EV infrastructure

271. In RIIO-ED1, SPEN provided EV optioneering services to two local authorities in its area, helping them to identify locations where households have limited off street parking or personal charge points and there is no market interest in installing public EV charging infrastructure. SPEN are proposing a whole system approach to help up to 37 Local Authorities achieve their decarbonised transport plans. This will help to ensure that there is universal access to EV charging infrastructure, supporting a just transition, whilst also making these areas more commercially feasible for charge point operators.
272. The CEG recognises that the two ED1 schemes, under SPEN's Project Pace, appear to have been well received by the two Local Authorities involved and sees this as an important and valuable service.

CVP3: Network Loss Reduction and Safety Enhancement. (MAAV)

273. SPEN's CVP regarding Network Loss Reduction and Safety Enhancement proposes a Mobile Asset Assessment Vehicle (MAAV) to detect exposed voltages, reducing losses, and improving community safety. SPEN have calculated a gross customer value benefit for this of £10.8m and a potential reward of £1.2m. The CEG have explored the benefits

case with SPEN and issues such as the geographic area the MAAV could cover and allowing other DNOs to use it. The CEG note that the business case relies upon benefits beyond those gained from rectifying losses, demonstrating whole system thinking.

274. A clear majority (72.6%) of SPEN's customers engaged with were willing to pay for the Network Loss reduction CVP, the joint highest proportion of all the bespoke incentives proposed. A further 7.2% were willing to pay something albeit less than proposed.

275. Opinion on the CEG was divided with some members considering the significant customer support for the MAAV and the whole system benefits should lead to it being supported, while others concluded this was a lot of money for not much benefit.

CVP4: Advanced Fault Level Management

276. This involves the roll out of technology to enable more generation onto the SPEN network without the need for costly investment or deferring the need for it. SPEN forecasts a tripling of generation connection in SPD and double in SPM in the ED2 period. The BAU approach to resolving fault level constraints is traditional reinforcement whereas SPEN claims the advanced fault level management solution is novel. SPEN claims that this proposal exceeds the Major Connections baseline expectations because without it, customers would not see the same extent of increased choice of connection types or have the same insight around potential constraints at the pre-application stage. The CEG's concern is that this could be seen as BAU which ought to be funded by SPEN who will also benefit from the introduction of this technology in meeting its own targets.

ENDS

We have reproduced below as Annexes the reports we submitted to SPEN outlining our views of the engagement they undertook during the course of 2020 and 2021.

Annex 1: The Customer Engagement Group of Scottish Power Energy Networks.

General Points on the Stakeholder Engagement Packs.

Sent to SPEN September 2020

1. Thank you for providing the Customer Engagement Group with the opportunity to respond to the Various Work Stream Engagement Packs. The CEG regards the stakeholder and customer engagement as the bedrock of the Business Plan. If the engagement is not effective it will lead to conclusions in the Business Plan that do not reflect the needs and preferences of stakeholders, so it is vital that it is carried out in the most effective way.
2. Our view is that effective engagement requires that SPEN asks “The Right People, The Right Questions, In the Right Way” and this is the basis upon which the CEG will be judging all SPEN’s stakeholder and customer engagement.

3. This means:

That **the people** SPEN engages with are representative of all stakeholders and are a good cross section of the various categories that stakeholders can be divided into.

- a. Where stakeholders are organisations, it is also important that SPEN engages with the most appropriate person within that organisation. Someone who understands the future needs and preferences of the organisation.
- b. That **the questions** must be the right questions to elicit the ‘needs and preferences’ of the organisation. Ideally they should be open questions which do not close off potential alternative solutions or opportunities but garner the true needs and preferences of the organisation.
- c. That the questions must be asked **in the right way**, meaning that the person understands the surrounding context of the subject before answering. So the person with whom SPEN is engaging must either have sufficient technical knowledge anyway to provide a valid answer OR SPEN must engage with people in a way that educates and informs them so that they understand the implications of the question, for their organisation and wider society.

Success Criteria

4. Challenge: The CEG believes this means that SPEN should set out the success criteria for judging whether its engagement has been effective.

The Full List of Stakeholders

5. The CEG is concerned that the list of stakeholders SPEN intends to contact is not sufficiently accurate or complete.
 - Many names are duplicated
 - Some names appear in relation to more than one organisation
 - There are numerous examples of stakeholders who have since left their position (There are 12 names listed for Citizens Advice Scotland, only 3 of whom are still there; and only one of the 3 deals with energy policy)

- There appear to be relevant organisations who have not been contacted (e.g. The Ground Source Heat Pump Association)
- There appears to be no common approach throughout the seven work streams in relation to how stakeholders are included. Some stakeholder appendices are overweight with people from certain organisations.

6. The CEG Challenges SPEN to validate and cleanse the Stakeholder list before use.

General Challenges for all work streams

The Right People (The Stakeholder Lists)

7. We challenge SPEN to produce target figures for the number of stakeholders who engage in a meaningful way with each work stream and explain what steps it will take if the target is not reached for a particular work stream.
8. We challenge SPEN to provide the CEG with a list of “key witnesses” or “strategic stakeholders” who it is essential to hear from in each work stream.
9. We challenge SPEN to audit its full list of stakeholders to remove duplications and those who have left their job and add their successors. SPEN also add any other relevant stakeholders not already listed.
10. Stakeholder lists are signed off internally, including giving the internal team responsibility for identifying any gaps. We challenge SPEN to obtain external validation of the list (not by the CEG) otherwise SPEN risks becoming too internally focussed.
11. We challenge SPEN to produce a breakdown of stakeholder input in the two licence areas to demonstrate that any regional differences of view are fairly reflected.
12. The CEG Challenges SPEN to outline in what way its research is innovative.

The Right Questions

13. Workshop and survey questions often follow the format ‘Do you agree with our plan, or is there anything we have missed out?’ The first part of this question presents the plan as a pre-decided entity, giving no visibility to the stakeholder of the challenges and trade-offs implicit within the plan. It will thus promote yes/no answers rather than actionable feedback.
14. The second part (‘has anything been omitted?’) is definitely important to ask, but only rarely will result in multiple stakeholders returning the same answer. In addition to this type of question, for example, valuable feedback might be gathered by presenting an issue and asking for opinions on where to prioritise action.
15. There is an over-riding sense of ‘this is what we (SPEN) want to do and what do you think about it?’ rather than starting with a blank sheet of paper to really drill into wants and preferences. Some questions are worded it seems to ensure SPEN gets the answers it wants.
16. We Challenge SPEN to review the list to make questions more open in format.

The Questions Asked In the Right Way

17. We challenge SPEN to explain the steps it is taking to educate and inform stakeholders so that they understand the implications of the questions they are asked, for their organisation and for wider society.

18. The format of this engagement, being broken down by work stream, is very confusing because multiple topics (e.g. DSO, Digitalisation, DFES) have a high degree of overlap. We challenge SPEN to explain what actions it is taking to mitigate this?
19. We challenge SPEN to explain how it is avoiding overburdening stakeholders who should be consulted on more than one workstream?
20. We challenge SPEN to explain how it is helping stakeholders to understand the particular remit of the workstream they are being consulted on?
21. We challenge SPEN to explain how it is capturing and incorporating feedback from stakeholders given at one workshop, which actually falls within the remit of another workstream?
22. A number of workstream packs have suggested a limited number of online workshops. We challenge SPEN to provide attendees with information prior to the event to ensure that they can enter the workshop and add value and contribute.
23. We would ask if SPEN can record workshops and make the recordings available to stakeholders who cannot attend.
24. Some workstreams rely on workshops and an online survey rather than a consultation and/or bi-laterals. This seems to limit the opportunity to harvest high quality feedback and insight.
25. We Challenge SPEN to re-prioritise bi-laterals by combining the requirements of a number of work streams into single meetings with individual key stakeholders, such as Citizens Advice.

Annex 2: CEG Response to the Updated Stakeholder Engagement Workstream Packs

Sent to SPEN January 2021

26. The Customer Engagement Group would like to thank SPEN for the opportunity to respond to the various updated Workstream Engagement Packs. They have been updated with information regarding:

Phase 2

27. This covers activities already undertaken in the Phase 2 engagement:

- success criteria SPEN have set out for the engagement process
- gap analysis of what still needs to be achieved to meet these criteria
- additional engagement questions
- CEG feedback on the first draft Engagement Packs

Phase 3

28. This covers objectives of the Phase 3 engagement:

- engagement methods to be employed
- types of questions to be asked
- structure of the engagement events
- engagement timelines

29. Our view is that effective engagement requires that SPEN asks “The Right People, The Right Questions, and In the Right Way”. This means:

30. The customers and stakeholders with whom SPEN engages are representative of all customers and stakeholders, and are a good cross-section of the various categories of customers and stakeholders.

31. Regarding customers or stakeholders which are organisations, it is also important that SPEN engages with the most appropriate person within that organisation - someone who understands the future needs and preferences of the organisation.

32. The questions must be the right questions to elicit the “needs and preferences” of the individual or organisation. They should ideally be open questions which do not close off potential alternative solutions or opportunities, but identify the true needs and preferences of the individual or organisation.

33. The questions must be asked in the right way, such that the person understands the relevant context before answering. The respondent with whom SPEN is engaging must either have sufficient technical knowledge to provide a valid answer, or SPEN must engage with people in a way that educates and informs them. This will ensure that they understand the implications of the question for their organisation and wider society.

Success Criteria

34. We are pleased that SPEN has set out clear success criteria for the Engagement process. However, we continue to believe that this requires a target figure for the number of stakeholders with whom SPEN should meaningfully engage in each category, to ensure appropriately balanced input. The CEG would like to see a tabulation of completed questionnaires and workshop attendance by category, as previously requested.

35. If the numbers do not meet the required target, we expect SPEN to outline what steps they will take to achieve the target. We would also expect SPEN to have a list of “key stakeholders” from whom, because of their size or influence, meaningful responses must be obtained. We would anticipate that SPEN would balance the input of customers and stakeholders in the two licence areas to fairly reflect any relevant regional differences.

Previous CEG Feedback

36. We acknowledge that SPEN has acted upon many of the comments raised by the CEG in the first draft of the stakeholder engagement workstream packs.

Questions

37. It is our view that there is now a general improvement in the openness of questions as this is appropriate. However, there remain some instances for which the opportunity to collect more innovative answers with open questions have been missed.

The Questions asked the Right Way

38. CEG members have been able to attend several workshops, and have generally been impressed by the manner in which they have been conducted. Valuable insights have been gathered from attendees, even from the workshops in which the diversity of attendees has been limited.

39. Our general view on questions included in surveys is that some of the language used would be inaccessible to some sections of society without explanation. We suspect that the high levels of “Don’t Know” or blank responses in some workstreams are evidence of this. We challenge SPEN to spell out all acronyms in questions and simplify language as far as possible, if other assistance is not provided to respondents.

Engagement Timelines

40. Our view is that the time allowed by SPEN for the engagement process has been, and continues to be, extremely tight. This has meant that resources have been stretched and the time available for CEG input has been significantly curtailed. A significant advantage SPEN now has over other DNOs which started the engagement process earlier is that it has gathered evidence from stakeholders in the middle of the pandemic. With their feedback moulded by the effects of this major event, SPEN should be able to adapt better.

Annex 3: General Points on the Workstream Engagement Packs – Phase 2

Sent to SPEN September 2020

41. The CEG response in this document relates solely to the SPEN Customer Engagement Pack (Overview and 3 appendices) provided to the CEG on 26 August 2020 (by email).
42. The CEG responded with Feedback on 4 September.
43. SPEN response to that feedback was received by the CEG on 22 September. The CEG Customer Research Subgroup have not yet had time to review SPEN's responses, but have decided to submit this Report now, to align with the September CEG Reports responding to the 7 Stakeholder Engagement Packs.
44. As a next step, the Research Sub-Group, and other CEG members, will review SPEN's responses to the 4 Sept CEG Report, and request a meeting with the Customer & Social Delivery team, as appropriate, to discuss any further points.
45. In this Report, we structure our earlier points to address the key points as agreed by the CEG, and as set out in the first part of this document: effective engagement requires that SPEN asks "The Right People, The Right Questions, In the Right Way" to determine the varying needs and preferences of customers.
46. We note that in the ED2 Customer Engagement Overview & Plan, p.3 – SPEN defines customers as:
 - Households or Businesses connected to the network and therefore receiving a service from SPEN.
 - Potential future customers who are not yet bill payers but may be during ED2.
47. Are the customers with whom SPEN engages:
 - representative of all customers?
 - and a good cross section of the various categories that customers can be divided into?

Customer Attitudinal Segmentation

48. Based on market research/segmentation documents received, and subsequent SPEN responses to CEG questions, the market research with a sample of 3000 customers appears broadly representative. It included a cross section of household income groups, geographical areas and commercial customer types.
49. In response to the CEG question about the representativeness of the sample in terms of household incomes, we note that SPEN re-contacted the 25% of participants with household income £20K or less and now gives an average income for this group of £12,700 pa. SPEN also provide a table showing the distribution of attitudes among this group of low-income households across the 7 segments derived from cluster analysis, and indicating that they are spread across the various segments (Appendix A, Market Research and Segmentation – Questions and Responses, 31.08.20).

Annex 4: Customer Engagement Plan

Sent to SPEN September 2020

50. Through this next phase of research, SPEN aim to engage customers on priorities, SPEN's strategic direction, and what customers want SPEN to deliver in ED2 and how they want this to be delivered.
51. This seems to combine Phases 1 and 2 (of the 4 phases outlined in Section 7, p.10, of the Overview), with prioritisation, strategic direction and co-development of outputs all occurring during the brief period Sept-Nov 2020.
52. We cannot make comprehensive assessment of representativeness without further information on the population sampling rationale and methodology (Customer Engagement Plan & Appendix One). We requested further information in our Report of 4th September. In summary, we need to understand the sampling methodology used: how was the sample selected and constructed against what principles or logic?
53. Overall sampling strategy is described as based on long term business experience of service provisions, lessons from ED1, benchmarking against best practice where possible, and expertise of research organisations (Taylor McKenzie; others?) contracted to do the work. (We have asked for further detail on which organisation is responsible for what aspects of the Engagement Research).
54. References to Sample Size (p.11 Section 8 of Overview) suggest 1200 customers on 'priorities' and 3,900 for 'detail'.
55. We have asked for further detail on the breakdown of, and difference between, these two samples (if they are 2 distinct samples, as opposed to the 1,200 being a subset of the 3,900), and the content of the two types of research.
56. Reference is made to geographical spread, though without specific breakdown of sample by area in Appendix One.
57. Reference is also made to layering of attitudinal segments – (Overview p.12).
58. Does this mean that customers who have already responded to the market research survey are now deliberately selected as part (or all?) of the sample to respond to the Customer Engagement Research to represent each attitudinal segment, and allocated to each of the customer sub-groups for the research on customer service priorities and preferences?
59. Or what method is being used to layer attitudinal segments on customer groups?
60. Appendix One provides more detailed info, but is not straightforward to interpret.
61. It appears that the sample is split between:
 - first, those responding to a priorities and ambition survey (comprising an online survey, plus 10 qualitative interviews and 40 doorstep interviews for digitally excluded), and,
 - second, those responding to a Customer Service and Future Service survey.
62. Here it is unclear whether the same sample, e.g. 746 general domestic, are responding to both the current and future services surveys, or whether there are two groups of 746 each.

63. Appendix One lists eight subgroups of domestic customers, including fuel poor, off gas, BAME groups, and low qualifications.
64. This has face validity, although there is cross-over between these groups. i.e. they are not mutually exclusive: low income respondents could also be in the digitally excluded group, the fuel poor group and so on.
65. Further information is therefore needed on sampling methodology to provide evidence of representativeness.

For commercial customers

66. Appendix One lists 5 sub-groups, further sub-divided into types.
67. The plan here seems to be qualitative research and a (computer assisted) telephone survey with small numbers from each sub-group, backed up with a population survey made available online.
68. The rationale for this strategy, and methodology for selecting specific respondents, is not given, and there is no statement on expected response rates, and representativeness, for online population surveys.
69. Where customers are organisations, it is also important that SPEN engages with the most appropriate person within that organisation. Someone who understands the future needs and preferences of the organisation. This requires clarity on who will be responding on behalf of each organisation directly engaged with.
70. We have limited information to assess this. For the detailed engagement referred to for each commercial customer sub-group (Appendix One), even without specific job titles, it would be useful to have insight into sampling strategy to assess robustness of resulting evidence.
71. This needs to include the types of organisations represented.
72. For example, the category 'commercial customers' presumably combines businesses, public sector and civil society or community organisations – for the detailed engagement (qualitative and telephone survey), are each of these sampled according to proportions of customer base in each region?
73. The questions must be the right questions to elicit the needs and preferences of the organisation. Ideally, they should be open questions which do not close off potential alternative solutions or opportunities, but garner the true needs and preferences of the organisation.
74. Categories of question (described in Section 10 of Overview (p.14) & Appendix 2) seem comprehensive, and rationales for selection are summarised (Overview Section 10, p.14).
75. Question topics cover core services, including vulnerability, and also new themes, including EV charging points, digitalisation, flexibility services, and innovation. The topics appear to be derived from a combination of Ofgem requirements, SPEN business experience and social media-derived data from the Chatter Tool (we have requested further info on the latter and its usefulness in this context).
76. While not open-ended, the question formats mostly give a range of options for respondents to choose from.

77. Many questions ask for responses on a scale 1-10, although follow ups may be open-ended e.g. 'give examples of type of thing you would like SPEN to do, to improve your score' on questions such as openness and transparency, or sustainability.

78. Translating the topic categories into meaningful questions for each group, & hence questions which are likely to produce reliable, informative responses, is more difficult.

79. For all customer groups:

- For existing themes, based on core services such as network resilience, questions are generally more 'tried and tested' and hence closed ended.
- E.g., "How many times in 12 months would it be acceptable to experience a very short power cut lasting less than 3 minutes?" (Albeit answers are likely to be largely guesswork for domestic customers and for many commercial).

80. For new themes, such as connections and low carbon tech (EVs) or flexibility services, SPEN is partly exploring new business opportunities, such as advice and management services, and partly asking very open-ended questions about abstract concepts such as

- 'How can SPEN support vulnerable customers in accessing the flexibility market?' which would probably perplex most of us!
- Other questions imply the socially desirable answer or are framed as leading questions:
- e.g. "Do you believe SPEN should ensure that its supply chain have ambitious sustainability targets in place that are in alignment with SPEN's own targets?"
- Or – on Future Proofing the network – which asks about how many times customers would prefer SPEN to dig up the road...once or multiple times.

81. Some new themes do use more specific, structured questions, which are therefore likely to be more effective in getting at wants & preferences e.g. What are your views on transitioning to use an electric heating source? Do you,:

- Already have electric heating
- Plan to move to electric heating in the next 1 year
- Plan to move to electric heating in the next 3 years
- Plan to move to electric heating in the next 5 years
- Plan to move to electric heating in the next 10 years
- Don't know / no plans to move to electric heating at this time

Although the majority are unlikely to have thought about giving up gas boilers.

82. Answers to many other questions seem likely to be dependent on multiple contingencies – e.g. 'Would you participate in flexibility services (managing your appliances and technology to use electricity at the optimum time for all network users)'

Answer – it depends on etc.

83. The questions must be asked in the right way, meaning that the person understands the surrounding context of the subject before answering.

- So the person with whom SPEN is engaging must either have sufficient technical knowledge anyway to provide a valid answer
 - Or SPEN must engage with people in a way that educates and informs them so that they understand the implications of the question, for their household, or their organisation and wider society.
84. Much background knowledge of issues, and of SPEN, seems to be assumed:
- For example, a SPEN domestic customer if asked ‘What is your perception of SPEN openness and transparency as a business?’ – on scale 1-10, most people wouldn’t know how to respond on SPEN performance on these criteria, because they rarely interact directly with DNO services (which of course for domestic customers tends to mean that we have a reliable service). Respondents could however be giving arbitrary answers to this type of question, raising some concern about whether such questions produce valid (or useful) evidence for business planning.
85. Similarly – ‘How can SPEN support vulnerable customers in accessing the flexibility market?’ – do vulnerable customers, or other groups, know what flexibility services are?
86. It was unclear whether these and other terms will be explained beforehand. If so, who by and what forms of explanation will be given?
87. Are these online surveys with limited access to further information? If so, the result may be significant ‘missing data’ in survey responses.
88. Minimally – providing scenarios about future network services for respondents to engage with would be useful, with questions then based on which scenario is preferred and why.
89. OVERALL the CEG believes this means that SPEN should set out the success criteria for judging whether its engagement has been effective.
90. Here we would ask if SPEN have given enough thought to how to do this type of research in an innovative and meaningful way. Or are they hoping to get responses which broadly reinforce their existing conjectures/assumptions, based on the business experience they have, at this point? The doubt is raised by the speed of the work, and the sense of limited opportunity for considered monitoring and review of progress, including the type of triangulation briefly referred to. (NB We appreciate that SPEN do not determine the overall timetable for business planning).
91. To the extent that the success criteria require a target figure for the number of customers with whom SPEN should meaningfully engage in each category, a target is given in Appendix One.
92. The CEG would then wish to see the numbers of completed questionnaires and interviews by category, and attendance figures for any focus groups by category.
93. If the numbers do not meet the required target figure, we expect SPEN to outline what steps they will take to achieve the target.

Annex 5: CEG Response to the Stakeholder Workshops

Sent to SPEN 4 Dec 2020

94. Members of the CEG attended or viewed recordings of some of the workshops held for the seven work streams listed below, conducted between 29 September and 12 November 2020. Comments from CEG members have been consolidated later in this section, with the hope that they will help guide SPEN in improving the organization and management of future workshops. There is one substantive challenge.

95. We understand that in this phase of the engagement there were 19 workshops spread across 7 work streams, held over various days Sept to Nov 2020.

Work Steam	Workshop Dates
Customer Service	23 rd , 27 th , 30 th October 2020
Digitalisation	7 th , 8 th October
DSO	29 th , 30 th September, 1 st October
Sustainability	11 th , 12 th , 13 th , 16 th , 17 th , 18 th November
Finance	28 th , 30 th October
FSS	21 st , 22 nd October
Innovation	6 th November

96. CEG members were able to attend nine of these workshops, at least one for each work stream except for digitalisation for which there was no session recording, and no CEG member was available to attend. In addition, members attended a DSO Strategic Stakeholder Panel Workshop.

General Comments and Challenges

97. Overall, CEG members felt the workshops were conducted well, and that a significant amount of valuable input should have been obtained from the engagement. The following includes challenges and general observations across the work streams.

- Participants spontaneously raised the issue of the social equity of net zero funding for the measures discussed, despite this not being the subject of any of SPEN's questions. This echoes observations from the Customer Engagement session, and also occurred in the FES session (in that case, in relation to EV upgrades). We challenge SPEN to re-assess and then explain the extent to which it has engaged on this issue.

- CEG is of the opinion that more attendees from a wider variety of stakeholders would improve the value of these sessions for SPEN. In one session, it was noted that there was no representation from government or larger industrial / commercial organisations.
- For more technical subject areas it, would be useful to run sessions specifically for consumer groups.
- It is a common agreement amongst CEG members that a more thorough explanation of RIIO and the role of engagement would help attendees.
- CEG suggests that SPEN should make it clear that they are looking for participants who can make informed contributions. Perhaps SPEN should undertake specific targeting of attendees and provide advice on “expected” levels of knowledge / understanding for engagement in the discussion.
- A few points were raised by attendees which were pertinent to other consultations – in particular a Scottish EV commitment which may be relevant to DFES. We would hope to see this noted and passed on internally by SPEN.
- If the questions were sent to attendees beforehand, this may give them time to make a more informed contribution. This could also potentially help identify who was best to attend the workshop.

Detailed Comments from Individual Workshops

98. Customer Service Stakeholder Workshop - Low-Carbon Technology Uptake

Unlike some other sessions, there was not an independent facilitator. However, there was a good, well-informed discussion, and we thought it was a useful workshop overall. The CEG members assessed the workshop on the three criteria.

I. Were the right people in attendance to get a representative cross-section of views?

- There were approximately ten participants including Heat Pumps Association, Caltech, Welsh Government, Citrus, Citizens Advice, and the NEA. There was no representation from the Scottish Government, Citizens Advice Scotland or England/Wales.
- There was a good cross section of participants but - and this was really due to the participants - the technically-inclined attendees tended to dominate the discussion. This may have been because the consumer representatives have a more local perspective, whereas the technically-inclined participants seem more accustomed to these types of events. We’re unsure if this is a characteristic of all the workshops, but if so, it might be useful to run sessions specifically for consumer groups.

II. Were the right questions asked?

Most questions were clear and addressed at the right level, but the following gaps were identified:

- No questions were asked on the strategic challenge of making sure, “no-one is left behind in the energy transition” (and indeed this ended up being raised by one of the attendees, rather than being driven by SPEN).
- There was only a passing reference to the central question of how SPEN engages and interest customers in adopting low-carbon technologies.

- A question on “flexible payments” was asked, but the CEG found it unclear.

III. Did the stakeholders understand the implications of the questions they were being asked, both for their organisations and general society? Were they given a sufficient briefing to enable them to understand the questions?

- The participants had good levels of knowledge, and understood the implications of the questions.
- The CEG suggests that a cross-section of views might be useful. A repeat of this session with another group of stakeholders would be interesting. Perhaps a different set of attendees would lead to a different conversation and output.
- The briefing given in the session was found to be inadequate. Perhaps a detailed briefing would solicit better responses and address the aforementioned gaps. However, it did not seem to hinder discussion.

99. Digitalisation Stakeholder Workshop

Unable to attend.

100. DSO Strategic Stakeholder Workshop - Strategic Stakeholder Panel - 2 October 2020

The CEG team attended the two-hour online workshop on DSO, FES, and ED2. The overall workshop met all three effective engagement criteria.

I. Were the right people in attendance to get a representative cross-section of views?

- The workshop chair was a third party, which ensured questions were appropriate, and gave opportunity to all stakeholders to engage.
- Workshop attendees were mostly from senior level management; however, there was no representation from the construction, transport (electric vehicles), or renewables sectors. There was also no Scottish government representation.

II. Were the right questions asked?

- The questions asked were high-level but clear, precise, understood by informed participants, and stimulated open discussion and questions. SPEN encouraged the stakeholders to highlight the gaps in their plans and received valuable inputs such as the suggestion that SPEN encourage community participation during the transition process.
- There were discussions around consumer bills, with suggestions to keep them at a minimum. COVID-19 and its impact on the change in consumer behaviour for energy consumption (home consumption patterns, electric vehicle charging), remained the most discussed topic. The initial investment and its importance for the DSO model and net-zero transition was discussed and considered critical to the plan.
- However, SPEN did pose some closed-ended questions which otherwise could have potentially been more informative. For example:
 - “Do you agree with SPEN’s objectives?” (rather than, what should their objectives be)
 - “Do you agree that the following are the correct functions for the DSO – Smart / Flexible network / mutual market facilitator / value added service?”

III. Did the stakeholders understand the implications of the questions they were being asked, both for their organisations and general society? Were they given a sufficient briefing to enable them to understand?

- The briefing provided at the workshop was insufficient. For participants to follow the discussion and contribute required an existing understanding of the questions, or for them to have read SPEN's DSO strategy paper. The RIIO process was introduced, but in the slides and recording, only minimal context was provided on the consultation process and equally little explanation given on the issues surrounding each question.

101. Sustainability Stakeholder Workshop - 12 November 2020

I. Were the right people in attendance to get a representative cross-section of views?

- The workshop was attended by five participants, with one participant attending by phone. The participants were from the Natural Resources Wales and Caltech area. The CEG does not consider four active participants sufficient for making informed contributions to SPEN.
- The CEG suggests that SPEN should aim to have participants with a defined level of understanding about the engagement to have a meaningful outcome.

II. Were they asked the right questions?

- Overall, the question led to an engaging discussion and SPEN provided clarity when required. However, more can be done to provide information on sections – such as the section on SF6 in particular - as it was raised as a concern by a participant “that it would be ‘unfair’ to answer the question without full understanding of the impact of change”.

III. Did the stakeholders understand the implications of the questions they were being asked, both for their organisations and general society? Were they given a sufficient briefing to enable them to understand?

- Overall, the workshop was good. The first session was shorter compared with the second session held after the break, which seemed to be longer and more substantial in comparison? There was good engagement, like a two-way process of workshop delivery and feedback.
- With the exception of one participant, who phoned in, there was a good level of understanding about the implications of the questions asked.
- The CEG recommends that SPEN send questions in advance to the participants, giving people time to make a more informed contribution. This would also help to potentially identify who was best to attend the workshop.
- The briefing provided by SPEN was good and attendees seemed to be interested. Most of the participants found the session engaging and showed interest in engaging further.
- As mentioned earlier, the SF6 question generated a lot of discussion, although it took time for participants to understand the concept with SPEN's assistance. At least one participant said they found the section “very interesting”.
- SPEN received feedback from the participants and the workshop was engaging with discussion on asset life and questions raised by participants regarding bill increases, feed-in-tariffs, public sector, decarbonisation of heat, and CAPEX funding.

102. Sustainability Stakeholder Workshop - 11 November 2020

I. Were the right people in attendance to get a representative cross-section of views?

- The voluntary nature of the workshops makes it difficult for SPEN to guarantee attendance. We observed that most sessions have dropouts prior to the session. Perhaps SPEN needs to evaluate the situation and prepare for such eventuality in advance.
- In this session, both attendance and the choice of the participants was an issue. Out of the seven participants, only four engaged in the discussion. Some constructive feedback was shared by the participants. However, the topic regarding SF4 remained a challenge for them.

II. Were they asked the right questions?

- The questions and presentations prepared by SPEN were clear, which facilitated a wider discussion; the session received valuable feedback. However, the small number of attendees limited the session's effectiveness.
- It is to be noted that participants spontaneously raised the issue of the social equity of net-zero funding for the measures discussed, despite this not being addressed by any of SPEN's questions. This echoes observations from the Customer Engagement session, and also occurred in the FES session (in that case, in relation to EV upgrades). This should prompt SPEN to seriously re-assess the extent to which it has engaged with this issue. Also, a few points were raised by attendees which were pertinent to other consultations – in particular a Scottish EV commitment which may be relevant to DFES. We would hope to see this noted and passed on internally by SPEN.

III. Did the stakeholders understand the implications of the questions they were being asked, both for their organisations and general society? Were they given a sufficient briefing to enable them to understand?

- Mostly yes, although a couple of participants appeared less confident, as mentioned above.
- Most participants understood the questions and their background. Technical information provided by SPEN to lead the discussion was found to be sufficient. Care was also taken to ensure participants understood the engagement process: the session began with a good explanation of RIIO ED2 and the consultation process, including explaining the context of this consultation and future opportunities to engage. An example of the impact of previous engagement was also provided.

103. Finance Stakeholder Workshop - 30 October 2020

I. Were the right people in attendance to get a representative cross-section of views?

- The workshop was attended by six stakeholders from National Energy Action, Consumer's Association Scotland, Community Energy Scotland, The Energy Skills Partnership, and Scottish Water. We think representatives from more organizations could have attended – especially from industrial stakeholders and industry association stakeholders, the Scottish Government, and the Welsh Government.

II. Were they asked the right questions?

- The questions were introductory.

III. Did the stakeholders understand the implications of the questions they were being asked, both for their organisations and general society? Were they given a sufficient briefing to enable them to understand?

- The presentations contained clear and informative content.

104. Future System Scenarios Stakeholder Workshop - ENZ Stakeholder Workshop

The session was found to be interesting and attendees were well informed and engaged. The questions asked were much clearer in comparison to those asked in the stakeholder engagement pack. The session was facilitated by SPEN's staff, and they did a good job in sustaining a high level of engagement throughout, although this led to the workshop running significantly behind time (20 minutes over by the coffee break). This meant that some later discussion was slightly rushed. Some improvements could be made in terms of time management, attendee composition, and - most importantly - on the level of information provided on the RIIO consultation process. Overall, however, this seemed to be a very effective session.

I. Were the right people in attendance to get a representative cross-section of views?

- The presentations had good content and were conducted well, stimulating useful interaction. The questions and discussion were relevant, and the engagement appeared to be informed. The session was about the right duration (two hours), and the interest amongst participants was retained throughout the session.

II. Were they asked the right questions?

- The attendees really got across the “looping” of LV supplies between properties and the enormity of this problem with EV adoption.

III. Did the stakeholders understand the implications of the questions they were being asked, both for their organisations and general society? Were they given a sufficient briefing to enable them to understand?

- The level of engagement was intense, and the SPEN team responded to all questions raised by the participants. The CEG team is not aware if there were briefing packs made available before the session.

105. Innovation Stakeholder Workshop – 6th November 2020

This was a well-organized session. There were ten attendees from a reasonable variety of stakeholders.

I. Were the right people in attendance to get a representative cross-section of views?

- There was a good set of participants, but no representation from governments or larger industrial / commercial organisations (Names Redacted for Data Protection).

Attendees	Organization Represented
	Powerline Technology Ltd SME Smart Distribution
	Energy Innovation Centre
	Power Networks Demo Centre University of Strathclyde
	Energy Local (local distribution)
	Fundamentals Ltd Engineering Innovation Co
	Power Networks Demo Centre Univ. Strathclyde
	Cambridge Energy
	(Student?)
	?
	Consumers Association Scotland

- The stakeholders present appeared to have previously worked for SPEN, which is concerning as this could limit the extent to which broader and innovative thinking could be stimulated.
- There is some concern that insufficient background information was provided. If attendees from other organizations attend future workshops, there may be a barrier to them understanding. This is a concern, as SPEN is currently reaching out to Innovation Scotland and other organisations to recruit a broader audience.

II. Were they asked the right questions?

- The questions asked were introductory. Some questions were specific, and others were closed-ended, but had an option for further suggestions. SPEN asked the participants to raise doubts or gap areas in the innovation section.
- Some of the questions were quite technical. SPEN asked for feedback on the questions, and it will be helpful if they can incorporate feedback received, to the extent Ofgem requirements allow them to do so.

III. Did the stakeholders understand the implications of the questions they were being asked, both for their organisations and general society? Were they given a sufficient briefing to enable them to understand?

The presentations contained clear and informative content, but required attendees to have technical understanding of the subject matter. The CEG found the questions difficult to follow, due to the use of several acronyms, etc.

Annex 6: CEG Response to Phase 4 Customer Workshops: SPEN Business Plan Bespoke Initiatives

106. Phase 4 customer research assessed acceptability of SPEN's overall business plan; eight bespoke initiatives and financial elements. As in preceding phases, SPEN contracted Taylor McKenzie Research & Marketing Ltd (TMcK) to conduct the research. This Annex comments on the qualitative focus group research exploring customer responses to proposed bespoke initiatives (four Customer Value Propositions (CVPs), three Output Delivery Incentives (ODIs) and a bespoke allowance. Focus group participants received a summary of each proposal, including total cost, potential reward to SPEN (if relevant) and additional cost on customer bills against a baseline. The one and a half hour discussions explored customer understanding of, and feedback on, the eight bespoke initiatives; and asked participants whether the proposal made them regard SPEN more, or less, favourably. The results fed into the design of a quantitative survey.
107. The eight initiatives concerned were: advice services; low carbon transition support to vulnerable customers; community energy support; LV connections accelerator; mobile asset assessment vehicle (MAAV) for network loss reduction and safety improvements; fault level monitoring; EV charge point optioneering and a Net Zero fund. (Details in SPEN Plan Annex 5.c.2 (CVPs); Annex 5c.5 (ODIs); Annex 5c.7 (bespoke allowances). The consultation process is detailed in SPEN Plan Annex 3.2b).
108. Members of the CEG observed three customer focus groups, with between 5 and 7 participants (two with domestic customers (Manweb and SPD) and one with commercial customers (SPD)). Comments are consolidated below; we hope that this will help inform similar future workshops.

General Comments and Challenges

109. The focus groups were conducted professionally by independent facilitators, and seemed to produce useful feedback. It would have been helpful to have someone from SPEN on hand to answer detailed questions that arose in discussion.
110. Domestic sector participants were drawn from a range of socio-economic groups; commercial participants were from a range of business types. All contributed, sometimes following prompting from facilitator.
111. Knowledge of SPEN was uneven, but generally limited. There was overall a lack of background knowledge about DNOs, regulation and GB energy markets. There were some basic confusions over the difference between network operator and retailer, price caps or profit caps operating, and the source of DNO funding (taxation, customer bills, or a combination). There was a general sense that SPEN's job was to invest in and supply clean/green energy, which was regarded positively.
112. Discussions tended to be slow, particularly when participants struggled to understand the significance of a proposal. The groups observed included participants with a broad range of understanding and, perhaps inevitably, the preparation materials did not always seem to aid understanding. There was a perception that SPEN were the experts and should prioritise what they needed to do.
113. There was no direct opposition to any proposals, but some evidence of doubt about business motives, profitability and value for money. At least one participant had checked

SPEN's profits for the previous two years. There was a dislike of the concept of incentives and some suspicion that this might mean unearned profit or risk of customers paying more than once for the 'same' services, presented as slightly different things. These concerns appeared to the CEG observers to be related to scepticism about the structure of energy networks and regulation in general.

114. Corporate terminology made it hard for participants to engage with proposals in greater depth in order to provide informed opinions. For example, people were clear that paying 22p, or other small amounts, extra pa per customer seemed reasonable. They were however more interested in the context: how SPEN is funded, financed, and regulated; how the business generates revenues, and how profitable it is. They wanted to know how the bespoke proposal costings would work in each case: who pays for what elements; why these particular proposals had been selected; what returns SPEN would receive, as well as who pays for Ofgem.

115. Business customers commented that they would have appreciated materials adapted for their interests, including details of price. They perceived the proposals as lacking direct relevance to them, but were most interested in the proposed information and advice services and improving network performance/resilience to reduce risk of longer power cuts.

116. Sample comments from group discussions about the bespoke initiatives:

- i. Advice services - multiple questions about: use of the phrase 'no one left behind', which was felt to be worrying, because it suggested that some (40,000) people might not have access to electricity in future; concerns that customers were being asked to pay for advice which should be part of business as usual; who was being asked to pay – including whether it was just the 40,000 customers referred to.
- ii. LV Connections Accelerator - confusion about whether SPEN was offering to sell products, or to connect renewables to the network, and then take the electricity, in which case, it was asked, why should customers pay extra for something that SPEN would benefit from. Too little context on the significance of a commitment to increase the speed of quotes by 40% - what does that add up to, over what period? Should SPEN be improving efficiency of response without needing extra income: 'they get paid three times: they want us to pay them to quote, pay to connect and pay to feed our electricity into the grid'. If however it means more jobs in SPEN - that was seen as desirable.
- iii. MAAV for network loss reduction and safety improvements - Comments were that fault detection, repair and safety should be core business. Questions included what energy would the vehicle be using (was it diesel/how did that fit the clean energy agenda); would it cover the whole network; what difference would it make to services overall (improvement was described as 'slight', rather than giving a number/substantive target); how much money will it save SPEN; should it be part of efficiency savings rather than additional cost? Ultimately discussion concluded that SPEN were experts and if they felt it was necessary it was sensible to do it.
- iv. Fault level monitoring - Generally positive view of planned improvements, but again questions about the business model and sense that DNOs 'win all round' – 'you don't charge the customer to save money for yourself'.
- v. Community energy support - Generally supportive, but concern about what scale this was; main positive responses were to suggested reduction in bills.

- vi. EV optioneering - This was perceived favourably overall, especially if it provided charging points for areas with no off-street parking. Concern expressed about what the costs to LAs would be.
- vii. Low carbon transition support to vulnerable customers - Two initiatives – install LCT technology to reduce bills (40,000 customers); install smart meters (136,000 mentioned). They were very positive about the LCT proposal. Their main concern was lack of ambition: if this works “everyone should have this sort of device” and “just fit the devices in every house rather than drip feed it”. They couldn't understand why that wouldn't happen given it saved carbon. On smart meters views were more mixed.
- viii. Distribution net zero fund - To support 50 low carbon projects; benefits for (14,000?) vulnerable customers; 80 direct jobs; 456 indirect; carbon reduction. Views generally positive – good for community and local economy, but comment that 50 projects sounded too few for the £30 million proposed budget; suspicion that SPEN would profit inappropriately: was it ‘ticking boxes’ rather than substantive.
- ix. Conclusion of focus groups - In discussion about the bespoke initiatives there seemed a preference for those that delivered tangible benefits, notably the installation of technology to reduce bills for low-income customers, though they also questioned why this wasn't more ambitious in terms of the number of households benefiting. At the end of the session the general view seemed that overall the total cost of the incentives (£1.87 pa) was low and affordable, and that they were all positive things to do. There was some concern about further impacts on those in fuel poverty. There were remaining queries about substance and business impact of proposals and the consequent difficulty of meaningful assessment of acceptability.

Annex 7: CEG Response to the Spreadsheet copy of Engagement Decision-Making for Phase 3

117. The CEG would like to thank SPEN for sharing the aforementioned document with us. It is not yet complete, especially with regard to the “Digital Requirements“ column, but early delivery has given the CEG a little more time to compile detailed observations.

118. Our overarching aim in this response document is to help SPEN complete its engagement process so that its final Business Plan is fully and convincingly evidenced. We wish to state here that SPEN has carried out a very substantial amount of work to engage stakeholders. However, as outlined below, it is our view that important changes need to be made and omissions corrected for the final Phase 3 part of the work to produce the necessary assurances.

119. The document covers 17 topic areas; we have not responded to two incomplete topic areas. Under each topic area the spreadsheet lists questions asked during the engagement process. The spreadsheet then provides columns for:

- “Key Points” arising from answers to those questions asked domestic customers.
- “Key Points” from commercial customers
- “Stakeholder Support” (for the idea) and / or “Stakeholder Requirements” from the stakeholder engagement workstreams, in those cases where the questions are equivalent.
- “Changes to Strategy / New Services that could be provided by SPEN” following this feedback (The Commitments)
- “Service Levels” that would need to be tested in Phase 3
- “Digital Requirement” to deliver these (none delivered to date)

The Information Provided

The CEG has a number of points to make:

120. SPEN should make it clear which of the proposed services are:

- existing services required by obligations
- existing services SPEN operates without obligation
- proposed new services

121. For existing services, SPEN should include in the spreadsheet the performance levels currently achieved, and make it clear whether the proposed performance level for the future represents an improvement.

122. For proposed new services, SPEN should indicate what the performance levels they expect to achieve.

123. SPEN should indicate how it’s current, and proposed future, performance levels for the services in this spreadsheet compare to other DNOs in the UK, or internationally as appropriate.

124. SPEN should make it clear if any of the proposed services will be premium services paid for by customers who use them, or if costs will be spread across all customers. Likely cost implications should be documented, and this aspect should be tested in Phase 3.

125. SPEN should indicate which, if any, of its proposed services it considers to be innovative.

126. As we have observed in our Response to the Updated Stakeholder Engagement Plan, SPEN secured a very limited numbers of stakeholders to engage in some topic areas in both the self-selected online survey and the online workshops. For example, regarding the engagement for vulnerability, the CEG is uncertain of the extent to which the stakeholder responses reflected in the spreadsheet are drawn from a sufficient evidence base.

Challenge

127. We challenge SPEN to provide the above information.

Our Response to the Spreadsheet

128. The CEG must assume that SPEN has used feedback to all their research questions in this document; we are unable to validate this assumption, as we weren't provided with all the research. For the present, we must also assume that SPEN has correctly identified the “key findings”. However, there is also a break in the evidence chain on this point. Finally, we must also observe that the absence of the information listed in the seven points above makes it difficult to judge the validity of some of SPEN’s proposals. With these important caveats, we have given our views on the following columns in the spreadsheet:

- “Change to Strategy / New Services to be progressed”
- “SLAs”

Our Approach

129. We have concluded that the right approach for the CEG is to ask ourselves the following questions:

- Based on the “Key Findings” that SPEN has identified, do we believe that the “Change to Strategy / New Services to be progressed’ are the right ones?
- Do the Service Levels SPEN is proposing, seem appropriate/sufficiently ambitious?
- In Phase 3, does SPEN need to further investigate any of the results from Phase 2 to provide greater clarity about its customers’ needs and preferences?

General Comments on the Spreadsheet

130. SPEN’s overall research strategy was to ask a large number of detailed questions across 16 themes, and to report findings for each item, theme-by-theme. This resulted in considerable redundancy and repetition. The itemised findings have then been used to translate into proposed service priorities and levels. It is difficult to understand how these will eventually be synthesised or streamlined to avoid duplication of business planning work, and to fit the three proposed priorities of “Trusted Partner”, “Net-Zero Ready Network”, and “Digital & Sustainable Future”.

131. In the Synthesis Report and Spreadsheet, the results of all Phase 2 customer research are presented by item, without an analytic overview of key points. Their significance for Phase 3 engagement, or subsequent business planning is not addressed. This precludes

developing the type of informed view needed for a CEG strategic perspective, which could systematically inform and shape Phase 3 engagement. For example, it is currently not possible to answer a question asked some time ago by the CEG customer research sub-group about systematic response differences between different income groups. Statistical analysis of relevant data would have allowed the CEG to consider the presence and importance of any such pattern. The clearest presentation of data is in the sample slide pack (from TMcK) on the “Resiliency” theme domestic customer research results. This provides visual representations of the data and summary statistics. It tells us, for instance, that the total domestic customer sample responding to these questions was 1902, with 259 of these defined as fuel poor, and 370 stating a gross household income under £15K.

132. From the CEG perspective, the aim appears to be the collection of a large amount of detailed data, specified to fit existing specialist business divisions. This risk leaving insufficient time to analyse, synthesise, and evaluate the robustness of key findings, as necessary to inform ED2 business planning priorities, and to identify core areas for business innovation / restructuring. The risk is that quality is subordinated to quantity, with quantity leading to a mechanical translation of results into Phase 3 engagement, potentially compounding the problem.

133. Given the very constrained timetable available now for business planning, we question whether the (very detailed) Phase 1-2 market research is sufficiently strategic. SPEN may have an overarching strategy informing the design of the research and its analysis, but this is not perceptible to CEG members.

Challenge

134. We challenge SPEN to state the overarching strategy informing the design of the research and its analysis.

General Comments on Customer Service (Customer & Stakeholder) Engagement Findings

135. The only summary of customer research findings was from phase one research on customer priorities (sample sizes - quants 1400 domestic; 100 commercial; qual 50). This was a ranking exercise to rate the importance of 24 pre-defined priority areas (Synthesis Report p.11).

136. The top 3 priorities for both domestic & commercial customers concerned:

- i. network resilience: service continuity / disruption, speed of restoration after power disruption, avoidance of power disruptions, how SPEN communicates with customers in the event of power disruption.
- ii. ambition levels: reflected issues of network resilience, followed by services to vulnerable customers.
- iii. vulnerability support: this was more important to domestic than commercial customers.

137. Network connections were more important to commercial than domestic customers. Unsurprisingly, commercial customers appeared to be more interested than domestic customers in SPEN’s actions regarding net-zero emissions, government policy & regulation, innovation, and environmental performance. In terms of phase 3 engagement, this emphasizes:

- the importance of evaluating customer understanding of the interaction between network resilience, net-zero emission goals, flexibility, affordability / vulnerability, and price and willingness to pay
- care in ensuring that domestic customers (assuming these are directly engaged in Phase 3) understand the implications of questions about net-zero generation, policy and regulation, innovation, and environmental performance

138. The Engagement Decision Making for Phase 3 Spreadsheet (updated 13-01-21) appears to include the findings from all phase 2 customer research, although this is impossible to verify without going back to the detailed slide packs provided to SPEN by their market research contractor TMcK. The findings were first reported to the CEG in the Customer Service Synthesis Report (pg. 84 to pg. 293), which covered all work streams. Unlike results from stakeholder research, there is no overview in this report. The results are given as a detailed decomposition by question; there are no obvious routes into a quick interpretation or means to grasp significance of findings. However, a brief review suggests that there would be no major surprises to inform phase 3 engagement.

139. SPEN provided a summary of customer research findings in January 2021 (“High Level Output Overview”). The summary did not indicate the total number of respondents, and did not address the statistical significance (or lack thereof) of any inter-group differences.

140. Summary statistics showing the total number of customers by category and type of engagement were also provided by SPEN in Jan 2021 in separate slides (“Customer Engagement Volumes”). The sampling methodology and achieved samples appear robust. To maintain credibility in the results, the CEG believes that it is vital to add the total number of respondents to each question. This will be helpful to translate percentages to counts in assessing statements such as “42% think this is very useful”.

141. In the detailed customer research findings, the following general issues recur:

- sensitivity to price & price increases relative to service levels
- Customer awareness of SPEN – in a sense, this research has provided avenues for SPEN to increase awareness of their services, and to test new business opportunities beyond the current DNO regulatory remit. Hence it is acting as a form of marketing for the business, and as a means of testing out new potential business models & revenue streams. Whether this is strictly appropriate to the ED2 price control business planning is open to question.
- For domestic customers, there is a general lack of awareness of likely network changes associated with LCTs, how they might or might not use LCTs, and a very limited grasp of the concept of flexibility services. Phase 3 customer engagement therefore needs to ensure that the implications are communicated by SPEN and understood by anyone responding to questions about proposed SLAs.

142. SPEN gives the purpose of phase 3 customer engagement as assessing whether they have understood customer priorities and needs, SLA proposals, and willingness and ability to pay. For phase 3 engagement, there are therefore 4 major topics SPEN should consider:

143. Limited awareness among domestic customers responding to questions about flexibility (or variability) in services, assuming future increased use of electricity for heat and

transport, suggests that this issue requires careful evaluation in phase 3. There was a common wariness that flexibility services and DSR markets may represent a form of reduced service quality / responsiveness for potentially increased cost. This was not an attractive proposition to many respondents.

144. The issues around flexibility must be posed in a variety of ways; care must be taken to test respondents' understanding of the implications of the questions, and to ensure that SPEN has tested for any systematic differences among customer groups.

145. Leading or closed-ended questions, which generally invite agreement with a preferred business proposition, need to be avoided. They may not provide a valid test of customer understanding of the implications of their responses.

146. Uncertainties and lack of clarity about likely costs of SPEN's proposed role in new advisory or intermediary services – across both domestic & commercial customers – need to be addressed through careful follow-up research, including inviting customers to disagree with a SPEN-preferred option, and to suggest alternatives.

Challenges

147. We challenge SPEN to add the total numbers of respondents to each question. In addition, we challenge SPEN to generate more summary descriptive statistics and perform statistical analyses to identify patterns in data to effectively inform phase 3 customer engagement. Considering domestic and commercial customers separately, SPEN is challenged to:

- domestic: show interactions between demographics such as income level, geographical region, and market segment and attitudes to SPEN service provisions, including vulnerability services, flexibility services, etc.
- commercial: show differences in attitudes to SPEN services between customer groups in relation to sector, scale, and area

Further Information Requests

148. In strategic terms, what has the business learned from customer research for critical aspects of phase 3 engagement?

149. What, if any, new insights did SPEN obtain?

150. Was this research designed to fit SPEN's pre-existing preferences and to seek customer agreement?

151. Did it provide sufficiently robust tests to ensure that opposing views or preferences were revealed?

152. Where are the critical areas of difference between customer groups? These are likely to be key to effective phase 3 follow up and cross-validation of SPEN's understanding of customer needs and preferences.

153. What is the "essential" data to be collected & analysed in phase 3 (proportionality)?

154. What are the questions SPEN is intending to ask in phase 3?

155. How is SPEN planning to incorporate the rest of the stakeholder engagement results into phase 3?

Annex 8: CEG Deep Dive into Stakeholder Mapping

27 Nov 2020

Review of stakeholder mapping by region – Matthew Cole, November 2020

Objective: to ensure that stakeholders were appropriately categorised to provide reassurance that there was a rich and diverse community of stakeholders in both the Manweb and SPD distribution network regions.

		SPEN VIEW			MC VIEW		
		Manweb	SPD	UK-wide	Manweb	SPD	UK-wide
CUSTOMER SERVICE	Unique stakeholders	83	95	17	54	93	51
	Stakeholder contacts	145	171	19	83	186	79
DFES	Unique stakeholders	133	65	0	82	64	53
	Stakeholder contacts	165	80	0	103	79	63
SUSTAINABILITY	Unique stakeholders	54	33	0	43	30	14
	Stakeholder contacts	162	74	0	147	70	19
DSO	Unique stakeholders	169	90	8	84	86	97
	Stakeholder contacts	216	104	8	99	103	125
TOTALS	Unique stakeholders	439	283	25	263	273	215
	Stakeholder contacts	688	429	27	432	438	286

Headline Conclusions:

National organisations should be treated as national. A significant number of organisations based were allocated to Manweb, despite them having a pan-UK remit. Note the significant increase in UK stakeholders, from 25 to 215 post review. As examples, BEIS, Bulb Energy, Energy UK, British Red Cross, Sustainability First, and others, should be treated as a UK-wide stakeholder.

There is a significant risk of over-confidence resulting from the way stakeholders are counted given that SPEN count on an individual and not organisation basis. Counting each contact can distort the level of stakeholder engagement given that the aim from the process is to capture organisations' and not individuals' perceptions and views. As an example SPEN identify 23 representatives from Citizens Advice/CAS, 6 from British Gas, 10 from British Red Cross, all of which you assume would hold similar organisational positions. Note approximately 750 organisations, and 1150 individuals

There appears to be a lack of central coordination and governance. Some data is out-of-date: some organisations have rebranded or have ceased trading. As an example Warm Zones went into administration two years ago and the perception is created that these are potential contacts and not stakeholders. Inconsistent approaches are also taken between workstreams: CBI seen as UK-wide stakeholder for Customer Services, but as a Manweb (and not SPD) stakeholder for DSO.

Overall, however, stakeholders at an organisation level are largely balanced with a third in each category, ie Manweb, SPD or UK. SPEN have many more contacts however in the local Manweb and SPD regions and it is important that this does not lead to premature over-confidence in the process. The quality of the insight will ultimately determine if the stakeholder population is robust, representative and balanced.

Annex 9: CEG meetings with primary SPEN Stakeholders: Overview from CEG Meetings with Stakeholders August to November 2021

Sent to SPEN in alternative form in December 2021

156. The CEG engaged independently with some of SPEN's key stakeholders to discuss the draft Business Plan published on the 1st July 2021. The CEG considered this an important aspect of assessing the quality of engagement undertaken by SPEN and whether SPEN had adopted and executed a robust process of customer research and stakeholder engagement from the perspective of stakeholders. In addition, the CEG wanted to understand whether the stakeholders thought that their needs and preferences "have been reflected in the Business Plan".

157. The CEG engaged with stakeholders from various organisations from the different nations and regions in the two SPEN licence areas, which took place between August and November 2021:

- a. Scottish Renewables
- b. Welsh Government
- c. Energy and Utility Skills UK
- d. National Energy Action
- e. Prospect Trade Union
- f. Scottish Government
- g. Citizens Advice
- h. Community Energy
- i. National Grid ESO
- j. Liverpool City Region Combined Authority

158. The CEG asked stakeholders the following questions to assess their opinions on their engagements with SPEN. Below are the combined summarised responses from them.

What engagement has taken place?

159. All stakeholders had several engagements with SPEN, including bi-weekly and monthly meetings involving senior members of the team. There were a fair number of engagements in which SPEN had arranged for meetings on different topics; these meetings were conducted with individuals. SPEN had also organised workshops, with a few one-on-one targeted engagements to discuss ED2; these were particularly focused on the DSO, vulnerability, and DFES proposals. One more common item of feedback from stakeholders was that SPEN engagements were driven more by presentations and more closely akin to monologues, rather than dialogues. SPEN also tended to send drafts of their Business Plan on short notice, which did not give sufficient time for some stakeholders to prepare feedback in advance. Although SPEN shared information quite openly, they missed opportunities to receive feedback.

Who represented SPEN (job titles/functions/seniority)?

160. The bi-weekly and monthly meetings involved senior members of SPEN's stakeholder teams up to and including the Chief Executive.

Were you able to specify your needs and preferences and if so what were these?

161. In general stakeholders felt they had been able to specify their needs and preferences to SPEN. Specially mentioned were the "energy transition", "decarbonisation", "customer services" and "vulnerable customers" topic areas. SPEN were said by one stakeholder to have been pro-actively engaged and supportive.

Were these subsequently represented in SPEN's draft Business Plan (why/why not)?

162. Generally stakeholders were of the opinion that SPEN had listened to their views and that they had seen their feedback incorporated in the draft version of the Business Plan. The Business Plan reflected inputs from such meetings, and the stakeholders were glad that SPEN had taken their feedback and incorporated it.

How could the engagement have been done better?

163. The majority of stakeholders felt strongly that SPEN could have engaged earlier in the process of developing their ED2 Business Plan and could have shared insights into the draft plan and annexes to engage more effectively. Involving stakeholders with expertise and skills in specific sections of the Business Plan from an earlier stage could have also helped SPEN deliver a robust plan and incorporate new initiatives.

164. It would be most helpful if Ofgem could engage with DNO's to provide more clarity on certain topics, such as uncertainty mechanisms.

165. A common theme was a desire for more streamlined & more coordinated forms of engagement.

166. There were common views that workshops tended to engage with topics in isolation from the 'bigger picture' and purpose of the whole Plan; high level options were perceived as limiting participants' opportunity for meaningful discussion; preferences were expressed instead for integrated presentation of substantive options with numbers/costs for challenge in order to enable more probing questions and discussion.

167. There was some feedback from organisations, and from CEG observations of Workshops, that SPEN presenters tended to use a proportion of the event in talking to participants and enquiring about very specific points of interest to the business, rather than devoting more time to listening to stakeholder wants needs and preferences, in an unconstrained way.

What do you think of the proposals in the plan?

168. Some concerns raised by the stakeholders are listed below:

- The draft Business Plan mentions scaling up of heat pump installations to 1.4 million homes to achieve the government's net-zero initiative, but one stakeholder pointed out the lack of critical implementation details. For example, what will be the power source (presumably mixed, but if so, how are they planning to implement it)?
- The potential skills shortage is a major challenge for the entire UK, and more than one stakeholder expressed concern about SPEN's draft plan to recruit and train the requisite

workforce and contrasted SPEN's draft plan with National Grid's which specifies skills requirements. They felt that the need for more skilled workers should be viewed as both a significant challenge and an opportunity.

- Considering that developing a Whole Systems approach can be difficult and detailed, there are many trade-offs that clearly must be made. One stakeholder felt that these were neither explicitly documented, nor implicitly apparent, in SPEN's draft Business Plan.
- One comment was that some parts of the plan are not sufficiently supported by evidence, such as workforce surveys. There is also a lack of supportive literature on SPEN plans to collaborate with councils. It is unclear from the draft Business Plan whether heating systems can be decarbonised by 2025. Likewise, the transition to smart delivery systems to combat fuel poverty could be expanded further.
- Overlap from ED1 – Some of the content in the "Vulnerability" section was found by one stakeholder to be similar to SPEN's ED1 proposal. While it appeared that some plans were new, they were actually spun off from ED1. Some parts of the plans did not seem to be justified – advice services, for example.

Are you supportive of the plan?

169. The majority of these key stakeholders were supportive of SPEN's plan, overall.

Annex 10: SPEN Finance Research Question

The following is the text from SPEN's Finance Question for Customers and Stakeholders:

170. "As described in the previous video, SP Energy Networks' Distribution businesses are funded through shareholders and external lenders who provide the money to invest in the networks.

171. To attract sufficient funds, the rate of return to shareholders and debtholders needs to be competitive in comparison to the returns offered by other companies. If too low an interest rate on borrowings or return to shareholders, at a rate of return lower than other options available to investors is offered, SPEN will not be able to secure the funding required to sustain their required investment programme. This will have a direct impact on the ability to ensure the electricity distribution network is equipped to cope with the challenges that the transition to Net Zero will bring. Attracting long term investors with the right credentials will be key to the success of a Net Zero future.

172. Ultimately this return is set by Ofgem (4.4% is being proposed), but SPEN, working with all the other DNO's have commissioned an independent review to determine what an acceptable range of return would be. This independent study, undertaken by Oxera, shows a range from 5.81% to 6.87% as being the optimum for encouraging the levels of investment required to deliver Net Zero.

173. Based on this study SPEN have proposed a value of 6.21% as being the optimum value keeping costs low for consumers, but attracting the sufficient level of support from stakeholders to make it an attractive investment.

SPD ONLY

174. SPEN's preference of 6.21% equates to 1.2p per day or £4.38 out of the £96 SPEN will receive from your bill to deliver their ED2 Business Plan.

175. Ofgem's proposed 4.4% equates to 0.85p per day or £3.10 per year and would reduce the amount SPEN receive from your bill to £94.72.

176. A difference of £1.28p.

177. To ensure that the required funding is secured to enable SPEN to support the transition to Net Zero, and deliver all the benefits for customers outlined in the previous information, do you believe that it is worth the additional cost of £1.28p that SPEN are proposing?

- Yes
- No
- Unsure

178. You have stated that you don't think it is worth paying an additional £1.28. How much, if anything, would be an acceptable amount to add to the bill?

Using the slider below please select from £0 to £1.28.

SPM ONLY

179. SPEN's preference of 6.21% equates to 2p per day or £7.30 out of the £140 SPEN will receive from your bill to deliver their ED2 Business Plan.

180. Ofgem's proposed 4.4% equates to 1.42p per day or £5.17 per year and would reduce the amount SPEN receive from your bill to £137.90.

181. A difference of £2.13p.

182. To ensure that the required funding is secured to enable SPEN to support the transition to Net Zero, and deliver all the benefits for customers outlined in the previous information, do you believe that it is worth the additional cost of £2.13p that SPEN are proposing?

- Yes
- No
- Unsure

183. You have stated that you don't think it is worth paying an additional £2.13p. How much, if anything, would be an acceptable amount to add to the bill?

Using the slider below please select from £0 to £2.13.

Annex 11: The Challenge Log

Because the Challenge Log would have been difficult to read in A4 format, we have not reproduced it here. It can be viewed in detail on the Customer Engagement Group section of the SP Energy Networks website, at the following address:

https://www.spenergynetworks.co.uk/pages/riio_ed2_customer_engagement_group.aspx