

Consultation

Regional Energy Strategic Plan policy framework consultation			
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We are consulting on the detailed policy design of the Regional Energy Strategic Plan (RESP). We confirmed the introduction of RESPs in our decision on the future of local energy institutions and governance, published on 15 November 2023.

This document outlines the purpose and scope of the RESPs and details a series of questions for consideration. It also sets out how you can get involved in the consultation. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at ofgem.gov.uk/consultations.

If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

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Foreword

Sometimes a perfect solution may not be implemented, because the timing may not be perfect. There are rare occasions, however, where perfect timing is in sync with the perfect solution.

Today, July 30, 2024, we publish our consultation detailing what a **Regional Energy Strategic Plan (RESP)** will contain, the regional governance of its production and the number of regions for RESPs across Great Britain. This fits perfectly with government's recent publication, 'Make Britain A Clean Energy Superpower'. In particular, priority three of government's manifesto, which says, "as part of Labour's Local Power Plan, GB Energy will partner with energy companies, local authorities and communities to build cheaper, cleaner power in villages, towns and cities across the country, boosting national energy security." Indeed, in order to enable GB Energy to fulfil government's mission to build locally, we must first plan locally.

Our intent is for the RESP to be fully "whole system", leading to coordinated development of the system across multiple vectors (electricity and gas – but also potentially heat, hydrogen, and so on) shaped by place-based understanding. The key objective of the RESP will be to support coordinated development of the distribution system and enable long-term investment to be made with confidence and ahead of need. This should ensure investment is made when and where it is needed, making the most of local potential to meet system needs and driving forward decarbonisation at pace toward 2030.

Today's publication is critical for enabling the coordinated decision making needed to deliver accelerated investment. To achieve coordination at the national and local levels, working with Government, Ofgem has set out a three-part planning process. At a national level, the Strategic Spatial Energy Plan (SSEP) and the Centralised Strategic Network Plan (CSNP) and at a distribution level, the RESP. All three are to be delivered by the system operator and must coherently interact with one another. This three-part planning process allows investment to be made at the right place and the right time in order to get to 2030 cost effectively and timely.

In this publication Ofgem is detailing the function, governance and boundaries for RESPs which will improve local energy planning and speed up the transition to net zero by enabling planners to create a clear roadmap for how local energy systems need to develop to reach net zero. The RESPs will work in tandem with organisations at a local level, such as local government, gas and electricity networks and heat network developers, to ensure there is a common objective for each region, improving

understanding of what infrastructure is needed to achieve net zero prospects and send a strong signal to investors.

We are headed in the right direction: starting with better planning which will result in effective investments enabling government's intent to make Britain a clean energy superpower. Onwards to 2030!

Eleanor Warburton, Director, Energy Systems Management and Security

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Executive Summary

To achieve the UK's net zero ambitions, radical transformation is underway in how we heat our homes, power our vehicles, and generate electricity. There is still much to do and the Government's recent ambition to achieve a decarbonised and secure power system by 2030 emphasises the need to continue progress at pace.

A key enabler of a clean power system is significant reform of energy system planning and its governance. Reform must ensure the coordinated development of the system across multiple vectors, provide confidence in system requirements and enable infrastructure investment ahead of need. Ultimately, it should support the transition to a net zero energy system in a cost effective manner.

In November 2023 we published our decision on the future of local energy institutions and governance arrangements, where we confirmed our intention to introduce a new regional planning role delivered by the National Energy System Operator (NESO). The introduction of the Regional Energy Strategic Plan (RESP) is required to provide accountability for strategic energy planning and a focal point for whole system coordination.

This consultation follows on from our decision and sets out our proposed policy framework for the RESP. The framework should enable the timely and effective implementation of the RESPs by NESO. Our policy framework is centred around three primary areas: key building blocks of the RESP, regional governance arrangements and boundaries of each region.

Key building blocks of the RESP

We propose NESO produce a RESP for each region that is comprised of three building blocks - modelling supply and demand, identifying system need, and technical coordination. The modelling of supply and demand should include a long-term regional vision which sets the thematic priorities for the region and a series of directive strategic net zero pathways. These should be developed based on data inputs from network companies, local government and other sources. The RESP should identify system need by producing consistent assumptions for use in network planning; setting out the spatial context for capacity needs; and identifying areas for strategic network investment. Lastly, technical coordination should ensure a coherent set of plans (RESPs and network plans) which resolve gaps and inconsistencies and identify whole system opportunities.

Key to the development of the RESP will be collaboration with the several different actors relevant to energy system planning in a region, including local government. We propose a framework of support to enable local government to participate in strategic planning,

including technical advice and training; coordinating working groups; setting up a bank of example projects; and providing access to common digital tools and data.

Regional governance

We propose each region should have a Strategic Board to facilitate transparency, heighten visibility of regional priorities and provide oversight of the RESP development. The Strategic Board will be made up of local and devolved government and network company representatives, as well as any wider cross-sector actors highly relevant to energy system and spatial planning in a region. The Strategic Board should provide a forum for collaboration, navigating trade-offs and supporting whole system planning. Alongside the Strategic Board, forums such as working groups will be vital for gathering place-based views and data, undertaking analyses and weighing-up technical feasibility and cross-vector optimisation.

Regional boundaries

Our proposal is to have eleven RESPs representing different regions across GB. We propose one region covering Wales, one region covering Scotland and a further nine regions covering England. For England, we propose an adapted model from that presented in our November decision which blends Sub-national Transport Body (STB) and (International Territorial Levels (ITL) 1 regional boundaries. The proposed adaptations are to: split the Transport for the North STB area into two regions (the North West and another covering the North East, Yorkshire & Humber); split the Midlands Connect STB area into two regions (West Midlands and East Midlands); and amalgamate the Western Gateway STB and Peninsula STB areas into a single South West region.

Next steps

The consultation will be open for 10 weeks, closing on 8 October 2024. We are seeking input and views from stakeholders on the proposed policy framework for the RESP. Responses will be gathered and analysed to support the further refinement of our positions. We aim to publish a decision on the RESP policy framework in Winter 2024.

1. Introduction

Section summary

This chapter provides background on the case for strategic planning, situates the RESP in the wider landscape and summarises our work to reform local governance arrangements. It also provides an overview of the structure of this consultation and related publications.

Background

- 1.1. The transition to a decarbonised energy system is well underway: the way we heat our homes, the way vehicles and industry are powered, and the way electricity is generated is changing. This transition will require significantly increasing the amount of low carbon electricity produced while also building the necessary network infrastructure to ensure it can get where it needs to be.
- 1.2. In August 2023, the Electricity Networks Commissioner (ENC), recommended a Strategic Spatial Energy Plan (SSEP) set out the foundation for future network planning.¹ The purpose of the SSEP is to define the optimal mix and locations of generation technologies needed to deliver net zero by 2050 to give greater confidence on what needs to be built when and where. The SSEP outputs are intended to act as the first stage of the Centralised Strategic Network Plan (CSNP) a plan for transmission network infrastructure.²
- 1.3. At the distribution level, the introduction of Regional Energy Strategic Plan (RESP) will cement this shift to strategic spatial energy planning. This move is especially critical at the distribution level where the transition will happen on a street-by-street, town-by-town basis, with the uptake of electric vehicles (EVs) and heat pumps and decarbonisation of industry driving the growth in demand. The changes needed to the energy system must take better account of place-based thinking and the ambitions of a region.
- 1.4. The RESP will fulfil a role at the distribution level which is somewhat a hybrid of that carried out by the SSEP and CSNP at transmission level. The RESP will be based on a holistic understanding of relevant national and local plans and

¹ DESNZ Transmission Acceleration Action Plan:

 $[\]underline{\text{https://assets.publishing.service.gov.uk/media/65646bd31fd90c0013ac3bd8/transmission-acceleration-action-plan.pdf}$

Ofgem Decision on the framework for the Future System Operator's Centralised Strategic Network Plan: https://www.ofgem.gov.uk/decision/decision-framework-future-system-operators-centralised-strategic-network-plan

priorities and will set out, spatially, how energy needs will change in a region. The RESP will form the basis for detailed network forecasting and planning by the network companies and the resulting investment plans.

- 1.5. The move to strategic whole system planning of the energy system, at both the national and regional levels, will be enabled by the creation of a new independent system operator, the National Energy System Operator (NESO). NESO will be responsible for the delivery of the SSEP, CSNP and RESP.
- 1.6. This coordinated approach to planning will allow for a more complete understanding of the long-term changes required across the whole energy system. This planning must take account of the increasingly complex trade-offs between different energy vectors, ensure investment is made when and where it is needed, and unlock a faster and better planned energy transition at the lowest cost to consumers.

Local Governance Journey

At the sub-national level, there are three energy system functions that are critical to how distribution systems operate: energy system planning, market facilitation of flexible resources and real time operations.

We began our review into local governance and institutional arrangements in April 2022 through a Call for Input. We identified specific institutional gaps and issues with ineffective coordination and a lack of accountability.

This validated our case for change, and in March 2023 we consulted on a proposed reform package for local governance arrangements - including to energy system planning. We set out that effective governance arrangements can enable the efficient delivery of these functions and can unlock significant benefits for consumers by facilitating a low cost transition to a smart, flexible energy system.

In November 2023 (the "November decision"), we published our decision, confirming the introduction of the RESP to ensure there is appropriate accountability and effective coordination for whole system strategic planning at a regional level.

A note on terminology

 We previously used the RESP to refer to the role to be delivered by NESO: the Regional Energy Strategic <u>Planner</u>.

- In this document, we use the RESP to refer to the output: the Regional Energy Strategic <u>Plan</u>. Each of the eleven proposed regions (delivered by NESO as spokes) will produce a RESP.
- The RESPs refer to the proposed eleven regional outputs as a collective.

What are we consulting on?

1.7. This publication is our follow up to the November decision. We are consulting on the detailed policy framework for the RESP and are seeking input from stakeholders on our proposals for the function, the regional governance arrangements and boundaries. We intend to follow up with an impact assessment in Autumn 2024 and a decision in Winter 2024.

Structure of the consultation

- Chapter 2 sets out the design process to develop the policy framework, principles to guide the RESP methodology, and interactions with the wider planning landscape.
- Chapter 3 sets out the proposed building blocks of the RESP modelling supply and demand, identifying system need and technical coordination, alongside data inputs to the RESP and a framework of support to local actors.
- Chapter 4 sets out the governance arrangements, including the proposed purpose, representation and composition of the Strategic Board.
- Chapter 5 sets out the proposed boundaries for each region one region covering Wales, one covering Scotland, and nine in England.
- Chapter 6 sets out the next steps, including timelines, policy interactions and implementation arrangements.

Related publications

- Call for Input Future of local energy institutions and governance (April 2022): https://www.ofgem.gov.uk/call-for-input/call-input-future-local-energy-institutions-and-governance
- Consultation Future of local energy institutions and governance (March 2023): https://www.ofgem.gov.uk/consultation/consultation-future-local-energy-institutions-and-governance

- Decision Future of local energy institutions and governance (November 2023): https://www.ofgem.gov.uk/decision/decision-future-local-energy-institutions-and-governance
- Decision on the framework for the Future System Operator's Centralised Strategic Network Plan (December 2023): https://www.ofgem.gov.uk/decision/decision-framework-future-system-operators-centralised-strategic-network-plan
- Becoming the National Energy System Operator (NESO) (January 2024):
 https://www.nationalgrideso.com/what-we-do/becoming-national-energy-system-operator-neso
- Review of GB energy system operation (January 2021):
 https://www.ofgem.gov.uk/publications/review-gb-energy-system-operation
- The Climate Change Act 2008 (2050 Target Amendment) Order 2019 (June 2019): https://www.legislation.gov.uk/ukdsi/2019/9780111187654
- The Energy Act (October 2023):
 https://www.legislation.gov.uk/ukpga/2023/52

Consultation stages

1.8. The consultation will be open for 10 weeks, closing on 8 October 2024. We are seeking input and views from stakeholders on the proposed policy framework for the RESP. Responses will be gathered and analysed to support the further refinement of our positions. We aim to publish a decision on the RESP policy framework in Winter 2024.

How to respond

- 1.9. We want to hear from anyone interested in this consultation. Please send your response to resp@ofgem.gov.uk.
- 1.10. We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.
- 1.11. We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, data and confidentiality

- 1.12. You can ask us to keep your response, or parts of your response, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.
- 1.13. If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you do wish to be kept confidential and those that you do not wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we'll get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.
- 1.14. If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the UK's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 6.
- 1.15. If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

General feedback

- 1.16. We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We would also like to get your answers to these questions:
 - Do you have any comments about the overall process of this consultation?
 - Do you have any comments about its tone and content?
 - Was it easy to read and understand? Or could it have been better written?
 - Were its conclusions balanced?

- Did it make reasoned recommendations for improvement?
- Any further comments?
- Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

1.17. You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website. <u>Ofgem.gov.uk/consultations</u>



Would you like to be kept up to date with *Consultation* name will appear here? subscribe to notifications:



1.18. Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:

Upcoming > **Open** > **Closed** (awaiting decision) > **Closed** (with decision)

2. Laying the RESP foundations

Section summary

This chapter describes the design process to develop our proposed policy framework, including the significant stakeholder engagement programme. We set out our vision for the RESPs and proposed principles to guide the RESP methodology. We outline that we expect NESO will deliver the RESPs using a hub and spoke model. This chapter also considers the RESPs interactions with the wider planning landscape, including price control arrangements, local planning and national transmission level planning.

Policy design process

- 2.1 Since our November decision, we have undertaken more detailed design to develop the policy framework that will enable the timely and effective implementation of the RESPs by NESO. To develop the proposals, we have undertaken analysis and option development alongside a significant programme of stakeholder engagement. Engagement has included nine in-depth workshops which focused on three key themes the function, governance arrangements and regional boundaries (see Appendix 4 for further details). Alongside the workshops, we have attended and presented at external stakeholder events and hosted targeted bilateral meetings.
- 2.2 Our engagement has helped to expand and refine our understanding of the topics, inform our analysis and develop our detailed design choices. We have built the design proposals presented in this consultation around the key themes covered at the workshops.
- 2.3 Ofgem's role in relation to the RESPs is to:
 - Develop the policy framework, objectives, and scope.
 - Set the regulatory framework for NESO to deliver the RESPs.
 - Approve NESO's methodologies for producing the RESPs in line with its licence obligations.
 - Provide enduring governance and oversight of NESO's delivery.
- 2.4 Whist we are designing a policy framework for the implementation of the RESPs across GB, we expect NESO to work closely with stakeholders to understand the specific characteristics of their respective regions and ensure the framework is implemented in a way which reflects different local circumstances.

Vision and guiding principles for the RESP

Background

- 2.5 Our vision is for regional energy strategic planning to be whole system focused, to reflect its regional context (ie local net zero ambitions and demographics) whilst being coherent with national energy system planning. This should result in the coordinated development of the system across multiple vectors, provide confidence in system requirements and enable infrastructure investment ahead of need (ie strategic investment). Ultimately, this should support the transition to a net zero energy system in a cost effective manner.
- 2.6 However, within current governance and institutional arrangements there is a gap in accountability for a whole system regional planning approach and insufficient coordination, both between the different local actors involved in energy system planning at a regional level and with national planning.
- 2.7 Therefore, the introduction of the RESP is necessary to realise our vision by introducing accountability for strategic energy planning and a focal point for whole system coordination. As the RESP is a new output within the current landscape, we believe clear guiding principles are a critical foundation for transitioning to a more coordinated and dynamic approach.

Proposal

- 2.8 We propose that NESO's approach to developing the RESP methodology should embody the following principles:
 - Be place-based ensure a place-based approach is integrated into energy system planning.
 - Be whole system adopt a whole system perspective (ie gas and electricity, but also heat, transport and industry).
 - Be vision-led provide a clear long-term objective for energy system development that reflects a region's characteristics and sets agreed priorities for the region while ensuring alignment with national priorities.
 - Be proactive enable proactive development of the energy system and investment in network infrastructure to ensure it enables net zero, while remaining agile and taking an adaptive approach to account for uncertainty.

Rationale

- 2.9 The guiding principles should provide clear aims for how a RESP should be developed. This should ensure the RESP methodology delivers our policy intent in an uncertain and evolving landscape. We consider these four principles key to navigating any critical trade-offs in strategic energy planning and support the transition to net zero.
- 2.10 A key principle for strategic planning is providing a long-term vision and embracing both a place-based and whole system perspective. Embedding a place-based context within energy planning is key to empowering regions to realise their decarbonisation ambitions. Further, due to systemic interdependencies, our view is that planning single vectors (eg electricity) in isolation is inefficient.
- 2.11 An adaptive planning approach is embodied in the last two principles. We believe this is a critical tool for applying the methodology, as it enables the development, adoption and implementation of plans despite uncertainties. We believe an adaptive approach is critical given the wide range of uncertainties RESPs will need to consider. For example, uncertainty in the scale and location of low carbon technologies, but also due to future policy decisions (eg heat and industry decarbonisation policy). We believe an adaptive model will better enable a proactive approach which drives short-term delivery that aligns to a long-term vision, while accounting for different futures.
- Q1. What are your views on the principles (in paragraph 2.8) to guide NESO's approach to developing the RESP methodology? Please provide your reasoning.

The RESP methodology and operating model

- 2.12 NESO will be responsible for developing the RESP methodology in line with our vision and policy design framework. The RESP methodology will set out the approach to gathering data, modelling, stakeholder engagement and defining the internal and external processes. We expect NESO to take an iterative approach to the methodology, regularly reviewing and making improvements where required. Ofgem will work with NESO as it develops the RESP methodology and will retain formal sign-off, akin to the process followed for the CSNP.
- 2.13 We expect NESO to adopt a hub and spoke delivery model, with each region operating as a spoke connected to a central hub. This model will coordinate RESPs across GB, whilst allowing for place-based variation in each region.

- 2.14 The hub will be responsible for:
 - Providing cross-regional oversight to identify system optimisation opportunities.
 - Hosting a pan-regional forum so regions can learn from each other.
 - Reviewing and updating the RESP methodology.
 - Ensuring each region follows the methodology.
 - Producing digital tools, data and assumptions.
 - Aligning regional pathways with national targets and with NESO's wider strategic planning functions, including the transmission level SSEP and CSNP.
 - Ensuring each region maintains a representative Strategic Board.
- 2.15 The regional spokes will be responsible for:
 - Developing a RESP with the support and input of the hub.
 - Establishing working groups and a Strategic Board.
 - Ensuring effective stakeholder engagement and involvement.
 - Gathering input data and evidence.
- 2.16 We mention the methodology and operating model here to provide necessary context, although the specifics of the methodology and operating model are out of scope of this consultation. NESO will consult with stakeholders on these later as part of their implementation of RESP.

The RESP and the wider institutional and planning landscape

2.17 The introduction of the RESPs will reform the governance arrangements at a regional level by providing appropriate accountability and coordination to strategic energy system planning. However, interactions with the wider planning landscape, including price control arrangements, local planning and national transmission level planning will be vital to its success.

Interaction with the price control

2.18 The RESP aims to deliver a more coordinated approach and enable a common agreed starting point for detailed network planning at the distribution level of the system. The RESP will primarily be used for guiding how a region can meet its energy needs and informing network investments – while there is a focus on

- enabling long-term investment to be made with confidence, we expect this to also consider system optimisation opportunities.
- 2.19 To reflect this function, the RESP will have a formal interaction with the Distribution Network Operator (DNO) and Gas Distribution Network (GDN) price controls.³ As set out in our November decision, we will require DNOs and GDNs to align their investment plans for network capacity with the strategic direction set by the RESPs covering their respective licence areas. However, it is important to note DNOs and GDNs retain accountability for detailed network planning and real time operations (including safety and resilience). As such, within business plans or uncertainty mechanism proposals, they could propose investments that are not aligned to the RESP strategic direction, but these will require robust justification (eg to meet network engineering standards). Ofgem will remain accountable for sign-off of the network companies' business plans (and determining allowances) as part of the price control process.
- 2.20 We are aiming for NESO's regional strategic planning capability to be established by late 2025, allowing time for the initial RESP outputs to be delivered and input into the setting of the RIIO-ED3 price control. ⁴
- 2.21 In relation to the next GDN price control, RIIO-GD3,⁵ we expect that the role of the RESP is likely to be limited as NESO builds up its capability and while policy uncertainties around the role of natural gas and hydrogen in the net zero transition remain. Although we do not expect the GDNs to incur immediate or frequent costs in RIIO-GD3 as a result of the RESPs, we expect that if these arise, they will relate to large strategic investments. We will therefore enable the GDNs to request additional allowances relating to identified system needs in RESPs through a Net Zero Re-opener during RIIO-GD3.⁶

³ Ofgem set price controls for the gas and electricity network companies of GB. Price controls balance the relationship between investment in the network, company returns and the amount that they charge for operating their respective networks. RIIO-2 is the second set of price controls implemented under our RIIO model. More information can be found here: https://www.ofgem.gov.uk/energy-policy-and-regulation/policy-and-regulatory-programmes/network-price-controls-2021-2028-riio-2

⁴ RIIO-ED2 is the current price control for the electricity distribution network, which runs for five years, from 2023-2028. The next price control, RIIO-ED3, will run from 2028.

⁵ RIIO-GD2 is the price control for the gas distribution network, which runs for five years from 2021-2026. The next price control, RIIO-GD3, will run from 2026-2031.

⁶ Decision – RIIO-3 Sector Specific Methodology Decision – GD Annex https://www.ofgem.gov.uk/decision/riio-3-sector-specific-methodology-decision-gas-distribution-gas-transmission-and-electricity-transmission-sectors

Interaction with local planning

2.22 The RESP will function at the nexus of local spatial planning and energy network planning and provide a crucial source of information in a region, indicating the challenges and opportunities to better enable the transition to net zero. In developing RESPs, NESO will need to engage with local and devolved governments and gather data from local planning bodies. Our expectation is for the RESP to be utilised by those undertaking spatial and local energy planning and by wider actors (eg sub-national transport bodies or housing developers). There will be no requirements on local government to follow the direction of the RESP, but we would expect there to be a strong incentive to, as outcomes will be better aligned across energy system and spatial planning.

Interaction with SSEP and CSNP

- 2.23 The RESPs will join an array of new strategic planning functions delivered by NESO, including the SSEP and the CSNP. There will be interactions between the RESPs, CSNP and SSEP, with feedback loops between each. As the Delivery Body, NESO will create a framework of internal checks to resolve any discrepancies in the data used, or the assumptions made. This will ensure coherent plans at all levels of the system and better management of the distribution-transmission interface and support the needs cases for strategic investment to build a connections-ready network at the distribution level.
- 2.24 We will continue to work with NESO, and the Department for Energy Security and Net Zero, to ensure effective governance arrangements are in place and enable strategic coordination of all these outputs.

3. Key building blocks of the RESP

Section summary

This chapter sets out our proposals for the key building blocks of the RESP - modelling supply and demand, identifying system need and technical coordination. We also propose a framework of support to enable local government to participate in strategic energy planning.

Introduction

- 3.1 In our November decision, we outlined the key functions NESO will deliver in respect of the RESP: strategic planning; technical coordination; place-based engagement; and supporting local actors. We set out that NESO will produce a RESP for each region detailing where current energy demand is located, how it may change over time, and guide when and where additional capacity is needed to form the basis of detailed infrastructure investment planning. The detailed design phase has explored what content each RESP must include to meet these ambitions.
- 3.2 The form of the RESP should align to the guiding principles (see paragraph 2.8). We propose it includes three building blocks (modelling supply and demand, identifying system need and technical coordination), with each producing components which come together to form the RESP. We believe these building blocks will form a RESP which can achieve the vision we set out in Chapter 2. We provide more detail on each of the components in the following sub-sections. We also describe the key inputs to these building blocks.

Table 1: Provides an overview of each building block and the components produced.

Strategic direction setting: modelling supply and demand

Component

- A long-term vision and agreed priorities.
- Short-term pathway and multiple long-term pathways that show energy supply and demand projections.

Strategic direction setting: identifying system need

Component

- Information to guide system needs including consistent assumptions.
- Spatial context of projections.
- A narrative to steer strategic investment.

Technical coordination

Component

 A set of coherent plans (RESPs and network plans) which resolve gaps and inconsistencies and identify whole system opportunities.

Strategic direction setting - modelling supply and demand

Background

- 3.3 Traditionally, forecasting demand growth and assessing where network infrastructure investment is needed has been relatively predictable, but the increasing decentralisation of energy and the electrification of power, heat, transport and industry to reach net zero require significant changes in how infrastructure investment planning is undertaken.
- 3.4 While it is clear that electricity demand will grow at the distribution level due to the electrification of heat, transport and wider industry, there is significant uncertainty around where and when this growth will materialise. Similarly, future planning for the gas networks is complicated by uncertainties around the future energy mix and decisions regarding the decarbonisation of heat.
- 3.5 At present, DNOs and GDNs develop single energy vector plans, with varying approaches to demand forecasting and consideration of local priorities (ie subnational government ambitions and place specific context).⁷ The incorporation of 'bottom-up' inputs from broader sources, particularly local government, remains a relatively nascent practice and not consistently applied.

<u>Proposal</u>

- 3.6 We propose the following approach to modelling supply and demand:
 - A long-term regional vision which sets thematic priorities for the region, developed through the close coordination and engagement of local actors.
 - A series of directive net zero pathways providing a whole system strategic
 assessment of energy needs across the region including energy generation
 and demand growth projections (eg, scale of low carbon technology
 deployment and availability of local flexibility services). These should be
 developed based on data inputs from network companies, local government
 and other sources (see paragraph 3.41).
 - To account for uncertainty, the pathways should include a single short-term pathway and multiple longer-term pathways (see Appendix 2 for visualisation).

⁷ This includes the production of Distribution Future Energy Scenarios (DFES) by all electricity DNOs, which outline a range of credible futures for growth on the network and form the basis of network planning and optioneering.

- 3.7 We propose the single short-term pathway should consider a time horizon in the range of five-to-ten years. The long-term pathways should provide a view over an approximately 25-year time horizon.
- 3.8 All pathways must deliver net zero, alongside a separate counterfactual (narrative and data), showing the potential network development and financial implications of falling short of net zero in each region. We propose the RESP uses digital tools to present the pathway spatially down to Lower layer Super Output Areas (LSOAs).8
- 3.9 We expect the first set of pathways to be produced in 2026 and propose an annual data refresh and full update of the RESP on a three-year cycle.

Rationale

- 3.10 We believe adopting a vision-led approach will support a more coordinated approach to ensuring each region can decarbonise at pace. A long-term vision will provide clarity and direction on what the energy system must deliver in different places and provide a signal for investment. It should also support greater levels of innovation, by highlighting the challenges in a region, as well as providing a timely indication for supply chains to build capacity.
- 3.11 The single short-term pathway will set direction and ensure investment is made with confidence and ahead of need, whilst the longer-term pathways will allow evaluation against a range of futures and provide assurance that short-term actions do not prematurely foreclose opportunities. Triggers and dependencies within these pathways will enable an adaptive approach that can respond to change and accelerate investment as a result. Further, the use of pathways aligns with the approach taken at a national level to model future supply and demand.⁹
- 3.12 Alternatively, a RESP could include scenarios that model a range of plausible futures, but we believe a more directive approach is critical to realise the objectives of strategic planning. We believe the use of multiple pathways strikes the right balance between providing direction to accelerate investment ahead of

⁸ Office for National Statistics – Census 2021 Geographies https://www.ons.gov.uk/methodology/geography/ukgeographies/censusgeographies/census2021geographies# lower-layer-super-output-areas-lsoas-

⁹ The Future Energy Scenarios (FES) are separate but related publications to the CSNP. The FES framework has evolved from 'scenarios' to 'pathways' to model future changes in the demand and supply of energy. https://www.ofgem.gov.uk/decision/decision-framework-future-system-operators-centralised-strategic-network-plan

- need and managing the inherent uncertainties associated with a range of possible futures.
- 3.13 In terms of time horizons, our view is that the single short-term pathway must balance the need for agility with being able to send the right investment signals. A five-year time horizon aligns with the current regulatory framework for price controls; however, it may be beneficial to have a longer view (ie up to ten years) for investment planning. Additionally, we note the Government's ambition to achieve a decarbonised and secure power system by 2030 and, as such, believe the single shorter pathway is important for considering what is needed for this.
- 3.14 For longer-term assessments, a time horizon of 25 years gives an appropriate long-term view aligning to the overall 2050 net zero target. This will help to identify strategic system need and provide an early signal for opportunities in advance of critical milestones.
- 3.15 As pathways will be more directive, our view is that it would be inappropriate to include a pathway that fails to deliver net zero. Ofgem's statutory net zero duty restates our principal objective to protect the interests of existing and future energy consumers. But it also adds a specific mandate to achieve it by supporting the Government to meet its legal obligation to get to net zero by 2050.¹⁰
- 3.16 We believe presenting the pathway to LSOA level will provide sufficient detail without duplicating the much more granular forecasting network companies currently undertake.
- 3.17 In terms of the update cycle, our view is that an annual data refresh with a full RESP update every three years balances the need for it to remain agile while providing sufficient investment signals. A further benefit of a three-year update cycle is that it aligns with the CSNP's whole system assessment.
- Q2. Do you agree that the RESP should include a long-term regional vision, alongside a series of short-term and long-term directive net zero pathways? Please provide your reasoning.
- Q3. Do you agree there should be an annual data refresh with a full RESP update every three years? Please provide your reasoning.

¹⁰ The Net Zero duty requires Ofgem to consider how its decisions may assist the Secretary of State in meeting the government's net zero target, while protecting the interests of existing and future consumers. https://www.ofgem.gov.uk/press-release/ofgem-welcomes-energy-act-getting-royal-assent

Strategic direction setting - identifying system need

Background

- 3.18 In our decision, we outlined that the RESP should guide when and where system capacity is needed by providing key planning assumptions to form the basis for detailed network planning.
- 3.19 Network companies will remain responsible for load forecasting down to street level (eg mapping generation and demand loads to half-hourly profiles and mapping granular network assets), optioneering, and developing load related investment plans. However, we believe there is a role for strategic planning in setting the foundation for identifying capacity needs and ensuring network impact assessments are consistent and reflect the regional context, including potential optimisation opportunities for other vectors.

Proposal

- 3.20 We propose that the second building block of the RESP informs the identification of system needs in three areas, by: providing consistent assumptions, setting out the spatial context for capacity needs and informing strategic network investment.
- 3.21 We propose the central hub (paragraph 2.14) develops a set of common assumptions to be used across all regions, alongside an acceptable range of variation. The assumptions should be used by network companies to translate low carbon technology growth projections into contributions to peak demand on the network. Examples of the type of assumptions the RESP should include:
 - Profiles for low carbon technology use (eg electric vehicle charging and heat pump use) and the interactions between these low carbon technologies.
 - Consumer behaviour profile changes over time and in response to events (eg, weather and climate).
 - Profiles for the growth in flexibility provision, for example Demand Side Response and time-of-use tariffs.
- 3.22 Additionally, we propose the RESP includes a spatial view (using digital geospatial tools) of demand and generation growth projections (see paragraph 3.6) against network conditions. This visualisation should be used to show where additional network capacity is needed and/or where the network has headroom.

3.23 Finally, we propose the RESP take a more directive role in identifying the location for strategic investments¹¹ in line with the long-term vision for the region.

Rationale

- 3.24 We believe our proposed approach strikes an effective balance: ensuring the RESP includes a clear steer on system need to support coherent network planning, while preserving detailed network impact assessment activities for the network companies.
- 3.25 We recognise there is an immediate focus on the electricity vector in considering these three areas, but as the components are sufficiently broad, they can extend to encompass other vectors. As NESO develops the RESP methodology, we expect it to work with network companies, and other relevant local actors, to identify the necessary data flows to deliver these elements within the RESPs.
- 3.26 Additionally, whilst there is a focus on informing network planning to meet system need, this does not imply that additional network capacity is the only solution, and we expect the spatial context and strategic investment identification to take account of this.
- 3.27 At present there are inconsistencies in the assumptions used by network companies, in particular how low carbon technology growth projections are translated into contributions to peak demand on the network. The proposed approach will enable greater consistency in network planning, whilst the range of variation allows regional nuances to be captured. Such consistency is important for having confidence in defining whole system needs and ensuring that different network company plans are reconcilable towards a regional strategic plan, and portable when used to influence the SSEP and CSNP.
- 3.28 We expect the assumptions to be produced in a transparent way, with network companies feeding into their development to ensure they can efficiently and effectively inform network companies' analysis of network impacts, optioneering and investment planning.
- 3.29 The second aspect, providing a spatial view, is critical to ensuring a RESP sets the foundations for analysing system needs by showing where constraints may

¹¹ Investment that goes beyond the needs of immediate system needs, reflecting the future needs in line with the regional pathway.

¹² Assumptions are required, as assets connected to a network do not always operate at maximum load, therefore, to understand the impact of demand and generation growth on the network, it must be translated into an increase in demand at peak times.

- emerge. Whilst the detailed network analysis undertaken by individual network companies will be of far greater granularity, we think a spatial view of overall system need is important in supporting all relevant actors in undertaking coordinated planning.
- 3.30 We understand NESO is considering the necessary enhancements to its digital tools to support its strategic planning responsibilities, including the use of a Data Sharing Infrastructure¹³ to obtain key data inputs when developing these plans. We welcome NESO seeking to take a consistent approach to data across its entire strategic planning remit (SSEP, CSNP and RESPs). We expect NESO to use standardised open-source or industry standard geospatial tools in producing the RESPs and use its best endeavours to act in accordance with Data Best Practice Guidance, ensuring data inputs and outputs are reliable, high quality, and transparent.¹⁴
- 3.31 Lastly, as a key objective of a RESP is supporting accelerated investment to enable decarbonisation at pace, we believe it is appropriate that it identifies where strategic investments (ie larger investment projects or programmes, in anticipation of demand) should be made to achieve the long-term objective of the region. The network companies will remain responsible for the detailed optioneering of the solution.
- Q4. Do you agree the RESP should inform the identification of system need in the three areas proposed? Please provide your reasoning, referring to each area in turn.

Technical coordination

<u>Background</u>

3.32 In our November decision, we set out that NESO will have a technical coordination role in delivering the RESPs. Whilst network companies will remain responsible for optioneering and developing their business plans, this role will ensure there is coordination and cross-vector integration across strategic planning and the network companies' plans. We have termed this "technical coordination".

¹³ Our consultation on Governance of the Data Sharing Infrastructure can be found here: https://www.ofgem.gov.uk/consultation/governance-data-sharing-infrastructure

¹⁴ More information can be found here: https://www.ofgem.gov.uk/decision/decision-updates-data-best-practice-guidance-and-digitalisation-strategy-and-action-plan-guidance

3.33 Through our detailed policy design, we have further defined the technical coordination role, focused on how it informs the RESP and adds value through whole system optioneering.¹⁵

Proposal

- 3.34 We propose, in delivering the RESPs, NESO has a technical coordination role to support resolution of any resulting gaps and inconsistencies of constituent network company plans in a region and identify whole system opportunities.
- 3.35 This should include whole system optioneering, which is likely to vary on a case-by-case basis, but it could be a part of the initial strategic direction setting (eg to reflect a region prioritising demand reduction) as well as part of the technical analysis of network companies' business plans to support specific cross-vector challenges. In fulfilling this role, we expect NESO to consider a range of technological solutions.

Rationale

- 3.36 We believe technical coordination is a necessary building block of a RESP to ensure network company plans are consistent with the strategic direction and ensure plans (RESPs and network plans) are reconcilable with one another.
- 3.37 Current governance arrangements are inconsistent in how coordination is undertaken, and accountability assured. That is not to say that examples of collaboration across different vectors (eg electricity, gas) don't exist, but that the lack of formalised processes for transparently considering whole system benefits and resolving trade-offs across different vectors is a risk to effective strategic whole system planning. We see this as distinct from the optioneering and optimisation carried out by network operators, which are bounded to their specific licence area and, therefore, their single vector.
- 3.38 Through taking a whole system view, NESO has an opportunity to identify optimal solutions across different vectors and increase the efficiency and effectiveness of decarbonisation measures, while reducing costs to consumers. We recognise this aspect of a RESP is novel and we will work closely with NESO and network

¹⁵ Optioneering undertaken by the network companies considers the options to address constraints on their network, including the use of flexibility and network upgrades. Whereas the RESP will consider a broader view to identify opportunities for whole system solutions, for example between vectors.

companies as the methodology is developed to ensure it fulfils its purpose and does not duplicate existing activities.

- Q5. Do you agree technical coordination should support the resolution of inconsistencies between the RESPs and network company plans? Please provide your reasoning.
- Q6. What are your views on the three building blocks which come together to form the RESP in line with our vision? Are there any key components missing?

Inputs to the RESP

Data sources

<u>Background</u>

- 3.39 Currently, there is a lack of a defined process for local actors to inform network forecasts and inconsistent coordination with national frameworks (eg net zero targets and scenarios). Whilst for DNOs, there is the Distribution Future Energy Scenarios (DFES) process, there is limited consistency in how data from local spatial plans are incorporated and there is not a process for collating whole system inputs.
- 3.40 As set out in the November decision, the RESP will include an aggregated regional view using a range of local and national data sources. The data inputs should be cross-vector and should evolve over time, responding to the evolution of policy (eg carbon capture and hydrogen) where this influences energy network infrastructure planning.

Proposal

- 3.41 To develop a RESP, NESO should facilitate input and engagement from all local actors relevant to energy system planning in that region to ensure decisions can be made with the best available evidence.
- 3.42 In developing the pathways (see paragraph 3.7), the RESP methodology should transparently aggregate top-down national inputs, such as national policy targets, with local and regional data sources in a consistent way.
- 3.43 We propose a framework of top-down national inputs in every region, including:
 - UK Government, Scottish and Welsh Government net zero targets and plans.

- Climate Change Committee scenarios.
- Future Energy Scenarios.¹⁶
- CSNP and SSEP outputs.
- 3.44 In addition to national inputs, we propose the following bottom-up inputs (Table2) should be incorporated into supply and demand modelling and identifyingsystem need, to reflect the characteristics of the specific region.

Table 2: Shows the framework of bottom-up inputs that could feed into the RESP.

Network data

- GDN and DNO data including units distributed, network capacity, connections and flexibility assumptions.
- Independent DNO and Independent Gas Transporter data.
- Transmission Operator asset availability data.

Local government data

- Heat network zoning data.
- Housing stock data.
- Investment plans.
- Local and community energy projects.
- Local Area Energy Plans (LAEPs).
- Local Plans.
- Local Heat and Energy Efficiency Strategies (LHEES).
- Local Transport Plans.
- Net zero targets.
- Regional energy and industrial strategies.

Other sources

- Electrical vehicle ownership data.
- Heat Pump ownership data.
- Transport, water and telecommunications. strategies and plans.
- 3.45 To note, the aim of this policy design process is to develop a framework of standard data sources for the RESP. However, there are likely to be further considerations relevant to specific regions and new data sources of relevance over time.

¹⁶ The Future Energy Scenarios: Pathways to Net Zero and subsequent publications.

- 3.46 As part of the development of the RESP methodology (see paragraph 2.12), we expect NESO to establish a feedback process to enable the RESP to inform local plans and drive improved place-based outcomes, such as demonstrating opportunities for local planning to capitalise on.
- 3.47 Where there is limited specific local energy planning (eg no form of local energy plan), the RESP methodology should establish assumptions to generate the demand and generation growth projections and regional pathway.
- 3.48 In aggregating the data to develop the pathway, NESO will need to develop clear criteria for assessing the credibility of the input. Ofgem will work closely with NESO and other local actors to determine the required confidence level.

Rationale

- 3.49 Our view is that single vector energy plans, with inconsistent approaches to developing regional priorities, exacerbate the challenges of managing uncertainty. Therefore, we believe it is vital to establish a common approach to modelling supply and demand, that transparently considers local and cross-sector inputs.
- 3.50 As shown by the framework of inputs, the RESP should reflect a holistic cross-sector view of a broad set of interdependencies which impact energy system planning, such as plans for heat networks, transport and housing. Without this, it is likely the RESP will fail to represent regional characteristics and develop an informed picture of energy demand and generation over time.
- 3.51 Although this holistic view is critical, the principal role of the RESP is to support confident infrastructure investment planning in the energy distribution networks in line with rapid and cost effective decarbonisation. Therefore, for the avoidance of doubt, the RESP will not be an all-utility regional master plan. Accordingly, NESO will not assume a direct role in wider local spatial planning or prescribe the use of specific planning methodologies.
- 3.52 Establishing credibility is vital for building confidence in the pathway, and to ensure the energy system enables net zero, whilst protecting consumers from overbuild and higher costs than necessary. We recognise that there are multiple variables that can impact the credibility of inputs. There are drawbacks associated with either an approach that has a very high bar for credibility or an approach with lower confidence levels. We consider it is reasonable that the level of credibility required could be higher for inputs into the short-term pathway than the long-term pathways. That said, we are cognisant of the relationship between

confidence in network capacity and securing investment for local projects. We will work closely with NESO and wider stakeholders to define the criteria for assessing confidence in inputs.

- Q7. Do you agree with the framework of standard data inputs for the RESP? Please provide your reasoning.
- Q8. Do you have any suggestions for criteria to assess the credibility of the inputs to the RESP?

Place-based engagement and local support

<u>Background</u>

- 3.53 As set out in our November decision, NESO will need to establish transparent processes for local actors to participate in strategic planning, and to act as the accountable owner for collaboration.
- 3.54 Through our detailed design, we have looked at a range of projects which involve local actors in energy planning. While there are many pockets of good practice, approaches and levels of capacity and expertise vary, with some areas having highly developed local energy plans, and others in the initial stages. We have focused, therefore, on where the RESP could add most value and where NESO can offer proportionate support to local authorities in their regions.

Proposal

3.55 We propose the following principles to guide NESO's place-based engagement function: transparent; accountable; representative and coordinated.

Table 3: Descriptions of the place-based engagement principles.

Principle	Description
Transparent	Establish clear processes for local actors to engage in energy planning (eg through working groups), clearly demonstrate how place-based inputs are included within the strategic plan and enable information sharing amongst local actors.
Accountable	Ensure each actor understands their roles and responsibilities in the strategic planning process.
Representative	Ensure broad involvement in the strategic plan from across the region, including from under-represented stakeholders.

Principle	Description
Coordinated	Bring network companies and local actors together to set and collaboratively work towards a common objective, while respecting existing relationships.

- 3.56 We expect the RESP to support local government energy planning (eg, LAEPs and LHEES) and aid the consideration of energy within spatial planning. To ensure actors can engage effectively in the RESP development process, we have developed a framework of support, including:
 - Providing proportionate technical advice on local energy plans.
 - Supporting coordination and coherence between local, regional and national plans.
 - Setting up a 'bank' of energy planning good practice to foster transparency and knowledge sharing between local actors.
 - Providing training on the energy sector to enable meaningful participation and engagement (at Strategic Board and working group levels).
 - Coordinating and facilitating working groups between local authorities, network operators and other key actors.
 - Providing access to common digital tools and improving data consistency.
- 3.57 However, it will not be within the scope of this framework to provide funding or personnel to local projects, and it would not be appropriate for it to directly develop local plans for an area.
- 3.58 In delivering the RESPs, NESO should take an adaptable approach to engagement and support that reflects the specific needs of that region. There may be cases where it provides additional steers on local planning potential, such as identifying opportunities where heat pumps could be installed and opportunities for energy efficiency in buildings.

<u>Rationale</u>

3.59 Each RESP must be fully cognisant of its regional context, grounded in local priorities, and aware of place-based interdependencies (within and outside the RESP area). The quality of the local inputs available to a RESP will enhance its fidelity to ensure it is reflective of place-based considerations.

- 3.60 Our view is that these guiding principles for place-based engagement will allow for the right structures to be put in place for local actor participation and ensure their knowledge contributes to the strategic planning process.
- 3.61 Further, by providing a framework for local support, it should enable actors to develop the relevant skills and knowledge to effectively engage in energy planning, both at working level and as part of the Strategic Board (see paragraph 4.4).
- 3.62 When engaging with local authorities, NESO should build on existing relationships. Alongside this, we expect engagement between network companies and local government to continue.
- 3.63 It is not within Ofgem's powers to determine which duties local authorities should hold regarding local energy planning or to provide funding to local authorities.

 This is a matter for government. We will continue to work with colleagues in government on the wider energy system planning governance landscape and highlight the impacts relevant to local authorities.
- Q9. Do you agree with the framework for local actor support? Please provide your reasoning.

4. Regional governance

Section summary

In this chapter we propose each region should have a Strategic Board to facilitate transparency, heighten visibility of regional priorities and provide oversight of the RESP. The Strategic Board will be made up of local democratic (upper tier authorities) and network company representatives. Alongside the Strategic Board, forums such as working groups will be vital to gathering place-based views and data, weighing-up technical feasibility and cross-vector optimisation.

Purpose of the Strategic Board

Background

- 4.1 In our November decision, we outlined our intention to put in place governance arrangements to ensure democratic legitimacy within the regional strategic planning process. This governance will convene the key actors involved in energy system and place-based planning in each area. It should address current inconsistencies in how input from local democratic institutions is used and ensure there is a purposeful forum for aligning energy system and spatial planning and navigating the associated trade-offs.
- 4.2 We set out that arrangements should adhere to the following good governance principles: be trusted, transparent, adaptable, representative, accessible, efficient, and supportive of innovation.
- 4.3 During our detailed design phase, we have continued to engage with stakeholders and experts in this space, to understand what roles regional governance should perform. In this section we set out proposals for the purpose and form of the governance, and later in the chapter address matters of composition and representation.

Proposal

4.4 We propose that each region has a Strategic Board to facilitate transparency, heighten visibility of regional priorities and provide oversight of the RESP development. The Strategic Board will be made up of key local actors relevant to energy system and spatial planning at a regional level – we share our proposals for composition and representation in paragraph 4.14 below.

- 4.5 The purpose of the Strategic Board will be to provide a forum for collaboration, navigating trade-offs and supporting whole system planning and ensuring the RESP reflects the regional context. The Strategic Board will oversee the development of the RESP and at key stage gates will produce a recommendation and a potential steer on key decisions being made.
- 4.6 For the avoidance of doubt, the final decision maker on the content of the RESPs will be NESO, the accountable RESP Delivery Body. NESO will be required to evidence the Strategic Board's steers in publishing a RESP and should provide reasons for any divergence from the Strategic Board's recommendation.
- 4.7 Alongside the Strategic Board, forums such as working groups will be vital for gathering place-based views and data, undertaking analyses and weighing-up technical feasibility and cross-vector optimisation. We propose NESO develops the appropriate working group structure and processes to support the Strategic Board in each region.

Table 4: Shows the relationship of the central hub to spoke-specific arrangements.

Central Hub

Cross-regional oversight to identify system optimisation opportunities and provide a forum for each region to be represented.

Develop the RESP methodology, standard assumptions, digital tools, and aggregate national level data.

Regional Spokes

Bring together local and regional inputs to develop RESPs. Establish transparent stakeholder engagement processes and provide support to local actors.

Working Groups

- Gather place-based evidence and data.
- Undertake analyses and weigh-up technical feasibility.
- Support cross-vector optimisation.

Strategic Boards

- Provide oversight of RESP development.
- Facilitate transparency and increase visibility of regional priorities.
- Produce a recommendation / steer on key decisions being made.

Rationale

4.8 We believe that regional Strategic Boards are an effective way of facilitating coordination between key local actors and embedding democratic representation into the RESP development process whilst ensuring that there is clear accountability for fulfilling the function of regional energy strategic planning.

- 4.9 We recognise that there could be a case for the Strategic Board to have the final decision-making role in 'signing-off' the RESP. However, we believe this would diminish the overall accountability for regional strategic energy planning and result in an inappropriate transfer of risk outside of the energy system and established regulatory mechanisms. It could result in vastly different outcomes across regions (beyond the spatial variances we expect in how the energy system develops) and, in the event of disagreements, prevent RESPs from being able to support decarbonisation at pace. Additionally, Ofgem will remain accountable for the determination of network company allowances (ie approving business plans) and the RESPs will be a key input to this. Taking these factors into consideration, our view is the entity with decision-making responsibility must be within Ofgem's regulatory jurisdiction.
- 4.10 In developing the governance arrangements, a key role posited has been that of conflict resolution. We do not think there needs to be a distinct conflict resolution mechanism separate from the RESP development process conflict resolution through regional participation and governance will be inherent in the process. The Strategic Board, alongside the working groups, will have a critical role in resolving substantive issues and developing solutions that offer the best overall outcome. Ultimately, where the conflict relates to strategic energy planning, NESO as the RESP Delivery Body is the decision maker. We expect NESO to work collaboratively and transparently, and effective governance will be a critical part of this.
- 4.11 We recognise the significant complexities the Strategic Board will need to navigate to provide meaningful steers. We expect NESO to foster an environment which enables purposeful collaboration and for the Strategic Board to be able to meaningfully challenge and support decision-making.
- Q10. Do you agree with the purpose of the Strategic Board? Please provide your reasoning.

Representation and composition of the Strategic Board

Background

4.12 Our aim is for the Strategic Board to convene local authorities, delivery partners (eg network operators) and other relevant local actors. This will formalise the process for how those with a democratic mandate interact with, and influence, the more technocratic aspects of energy planning and vice versa.

4.13 As there are numerous actors with an interest in energy planning, including varied levels of local government, it becomes challenging to represent all layers, whilst ensuring the Board's membership remains of an appropriate size. We want to ensure there is effective representation whilst keeping the direct membership of the Strategic Board as lean as possible.

Proposal

- 4.14 We propose the Strategic Board should be composed of local democratic and network company representatives, as well as any wider cross-sector actors with significant inputs to the process or interest in the outputs derived from it.
- 4.15 For democratic representation, we propose upper tier local authorities in England, and unitary councils in Scotland and Wales are represented on the Board. In England, upper tier authorities include combined, county and unitary authorities. We would expect any authority (upper or lower tier) that is part of a combined authority to be represented by that combined authority. With regards to lower tier authorities in England not part of a combined authority, we expect NESO to work with local authority stakeholders to develop suitable representative arrangements.
- 4.16 We propose network companies are represented on the Strategic Board to provide technical oversight and review the implications of the RESP, especially in how it will impact network planning.
- 4.17 We expect the board membership to be reviewed periodically by NESO, to ensure members represent both democratic and technocratic needs and reflect the specific characteristics of each region. We expect all Board members to have the necessary expertise and authority to represent their organisation or membership where a broader representative role is performed.

Rationale

- 4.18 A key objective of the Strategic Board is to embed place-based democratic representation in energy system planning and formalise how local inputs are incorporated. In developing this detailed design, we considered how to effectively embed democratic representation while being cognisant of the fact that its influence could be overwhelmed by parties more expert in energy system planning (eg network companies).
- 4.19 As such we explored two potential board compositions:

- <u>Embedded model</u> this integrates technical actors and members with a democratic mandate into a single board.
- <u>Multi-stage model</u> in this model there are distinct governance boards (both technical and place-based).
- 4.20 Our preference is for the governance structure to follow the embedded model, bringing democratic and technical actors together on a single Strategic Board. This model provides an opportunity for enhanced communication and collaboration between stakeholders to collectively identify regional priorities. We expect NESO to develop robust processes to ensure the fair and equitable input of all board members.
- 4.21 Whilst the participation by local government on the Strategic Board will be voluntary, we expect there to be significant appetite due to the benefits of integrating local spatial planning and energy system planning. We understand there are varied levels of local government with an interest in energy planning. As such, it is challenging to represent all layers, whilst ensuring the membership is of an appropriate size to fulfil the Strategic Board's purpose.
- 4.22 We recognise that lower tier local authorities (including district councils) have critical place-making and planning roles and can offer valuable place-based insights to inform regional energy strategic planning. Where lower tier authorities are part of a combined authority or other devolved arrangement, we would expect representation through that vehicle. Alternatively, we expect NESO to work with appropriate local government infrastructure bodies to develop arrangements through which collective representation can be achieved.
- 4.23 Finally, we recognise the representation will need to vary across GB dependent on the specific characteristics of each region such as existing governance mechanisms or the energy challenges faced (eg industrial decarbonisation). For example, in terms of governance, Scotland and Wales have 32 and 22 unitary authorities respectively which would arguably result in a Strategic Board too large to function effectively. We welcome stakeholder views on options for managing these specific representation challenges.
- 4.24 We think it is important that network company representatives are part of the board, to ensure the Strategic Board is a convening point for collaborating on the plan and that their technical expertise is part of the process. Additionally, the network companies will be required to align with the direction of the RESP and must, therefore, have the ability to influence and be part of its governance.

- Alternatively, technical expertise could be incorporated on the Board through independent expertise (eg academics) however our view is this may diminish the coordination value of the Board.
- 4.25 As well as local government and network companies, we think it is important that wider cross-sector actors are represented (including utilities, transport providers, businesses, social and environmental bodies, etc) as they may have significant interactions with the RESP. However, we are interested in how these stakeholders are best involved for example they could be represented directly on the Strategic Board, via their local authorities, or through involvement in working groups or the wider engagement processes.
- Q11. Do you agree that the Strategic Board should include representation from relevant democratic actors, network companies and wider cross-sector actors in each region?
- Q12. How should actors (democratic, network, cross-sector) be best represented on the board? Please provide your reasoning, referring to each in turn.

5. Boundaries

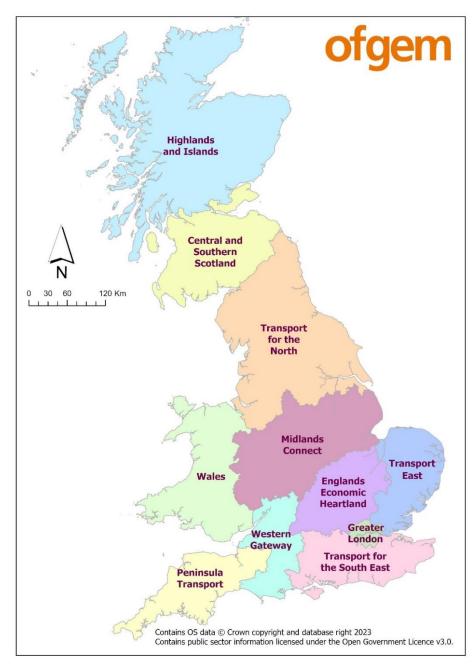
Section summary

This chapter sets out our proposals for regional boundaries: one region covering Wales, one covering Scotland, and nine in England. Two options are provided for England and we explain our preference (Option 1) for adapting our initial proposal which was based on the Sub-national Transport Body (STB) boundaries. Our final proposal for GB is for 11 RESP regions.

Introduction

Background

- 5.1 In our November decision, we set out the principle-led approach we used for identifying and assessing potential regional boundary candidates. As well as respecting national borders and aligning to local democratic boundaries, the principles included consideration of cross-vector planning potential, sufficiency of scale, fullness of GB coverage, and, critically, being deliverable at pace. We also said the number of regions in GB should cumulatively fall within the 8-20 range.
- Our preferred solutions for each of Scotland, Wales and England (as shown in Map 1) were as follows, leading to between ten and 13 regions:
 - <u>Scotland</u>: one or two regions would be optimal.
 - <u>Wales</u>: one region was optimal.
 - England: between eight and ten regions based on the boundaries of the eight Sub-national Transport Bodies (STBs). However, given the populations of the North (15.84m) and Midlands (10.05m) STBs were much bigger than the mean average of 7.10m, we were concerned they may be too large to effectively represent intra-area functional economic and energy differences, with a case, therefore, to split each STB area into two regions (hence the England range being eight to ten).
- 5.3 Our minded to position that one RESP is optimal for Wales has been widely supported, including by the Welsh Government. Therefore, we do not revisit this position in this consultation; this chapter proposes boundary solutions for England and Scotland.



Map 1 – initial proposals (November 2023)

Design process for developing "Regions"

5.4 Following feedback on our November decision, we hosted three workshops to consider the functional economic, strategic, spatial and institutional arrangements¹⁷ in Scotland, and England's Midlands and Northern STB regions.¹⁸

¹⁷ For each workshop we undertook a deep dive analysis of the respective areas' physical geographies, population centres, economies, transport infrastructure and flows, administrative arrangements and energy characteristics (production, consumption and network infrastructure) which we tested with stakeholders.
¹⁸ Information about the Midlands Connect STB is available at https://www.midlandsconnect.uk/, and Transport for the North STB here: https://transportforthenorth.com/.

- In addition, we had numerous bilateral meetings with interested stakeholders and attended third party events to discuss potential solutions.
- 5.5 This stakeholder engagement provided rich region-specific insights, but also raised broader considerations for the overall model. The Local Government Association (LGA) and UK100¹⁹ participated in both English STB workshops and were instrumental in representing the viewpoints and facilitating links with a range of local authorities. While both organisations recognised the basis of our preference for STB boundaries, they advised that the English regions have varied institutional networks and capital sometimes with origins in historical arrangements. Consequently, they advised we consider previous configurations used for administrative and statistical purposes which became the foundations of the Regional Development Agency (RDA) and Regional Assembly (RA) boundaries.²⁰ Additionally the Office for National Statistics employs these boundaries as its highest administrative classification (International Territorial Levels - ITL)21 consistent with OECD (Organisation for Economic Co-operation and Development) conventions, allowing for the international comparability of territories. The nine English regions, ²² Scotland, and Wales are all ITL level 1 regions, the highest level of international comparison.
- In the following sub-sections, we explain how we have reflected the ITL1 regions in our preferred settlement for England, proposing an adaptation to our November model (Option 1) and an alternative model (Option 2) based entirely on the ITL1 regions. For continuity, we have continued to refer to the area names adopted by the STBs and, where appropriate, established ITL1 regions. However, we expect NESO and stakeholders will want to decide on regional identities, which may or may not be the same as set out in this consultation.

¹⁹ The Local Government Association https://www.local.gov.uk/ is the national membership body for local authorities and works on behalf of its members (315 of the 317 councils in England) to support, promote and improve local government. UK100 https://www.uk100.org/ is a network of local government leaders who have pledged to lead the net zero transition in their communities ahead of the UK government's targets.

²⁰ Between them, the RDAs (1998 to 2012) and RAs (1998 to 2008-10) were respectively responsible for the strategic economic and spatial development of their regions. While the focus of devolution policy in England has subsequently shifted from administrative to functional economic geographies (manifesting in the creation of Local Enterprise Partnerships, the foundations of STBs and the basis on which local authorities typically make the case for devolution deals, etc), some government departments still utilise these boundaries for planning purposes.

²¹ The ITL classification evolved from the NUTS (Nomenclature des Unités Territoriales Statistiques) framework following the UK's withdrawal from the EU, and provide continuity with the UK's statistical framework for regional and local data in an international context. More information is available from the ONS: https://www.ons.gov.uk/

²² The 9 English ITL1 Regions are the North East, North West, Yorkshire and Humber, East Midlands, West Midlands, East of England, London, South East and South West.

Option 1 for England - Blended STB and ITL1 regions

Proposal

- 5.7 We propose a model for England adapted from that presented in our November decision which blends STB and ITL1 regions (see Map 2 below). The proposed adaptations are:
 - Split the Transport for the North STB area into two regions divided along the Pennines resulting in a North West region to the west, and combined North East and Yorkshire & Humber region to the east.
 - Split the Midlands Connect STB area into two regions divided between the West Midlands and East Midlands.
 - Amalgamate the Western Gateway STB and Peninsula STB areas into a single South West region.
- 5.8 These adaptations result in nine regions for England, as opposed to the eight presented in the November decision. We refer to this option as the 'Blended STB and ITL1 Regions'. We describe our rationale for each adaptation below.

Rationale: Transport for the North STB area

- 5.9 The Transport for the North STB area covers three of the English ITL1 regions (North West, North East, and Yorkshire & Humber) serving over 15.5m people. As stated in paragraph 5.2, our concern is this is too large for a single RESP region.
- 5.10 Based on the deep dive analysis we undertook and engagement with stakeholders, we consider the most effective solution for the Transport for the North STB is the creation of two regions, and that the split should be made along the Pennines. The result is largely in line with the ITL1 regions: a North West bloc, and a combined North East and Yorkshire & Humber bloc. We believe this is the most pragmatic solution, reflecting the areas' economic and energy challenges, and democratic governance arrangements.
- 5.11 On a population basis the western RESP would cover approximately 7.42m people and its eastern counterpart 8.13m; both closer to the average region size. In addition, this also better aligns with DNO boundaries in the North West (served by ENWL and SPEN Manweb), and the North East and Yorkshire & Humber (each ITL1 region being largely coterminous with Northern Powergrid's two licensed distribution areas). See the maps and data at Appendix 1 for more information.

5.12 The area of the Humber has long straddled functional economic and administrative areas, adjacency considerations that will need to be factored into the RESPs covering the North East and Yorkshire & Humber, and the East Midlands. Governance and operational arrangements will also need to take account of the proposed Greater Lincolnshire Mayoral Combined Authority (covering the areas of Lincolnshire County, North East Lincolnshire and North Lincolnshire councils).

Rationale: Midlands Connect STB area

- 5.13 The Midlands Connect STB covers most of the area comprised of the two ITL1 English regions (the East Midlands but not including Northamptonshire and the West Midlands) serving around 10m people. As stated in paragraph 5.2, our concern is this is too large for a single RESP area.
- 5.14 Based on the deep dive analysis we undertook and engagement with stakeholders, we have concluded that the most effective solution for the Midlands Connect STB is the creation of two regions, and that the split should occur east to west, leading to a solution based largely on the ITL1 regions: West Midlands and East Midlands. The boundary of the West Midlands is the same as that for the ITL1 region, but for the East Midlands²³ Northamptonshire will remain part of England's Economic Heartland (EEH) STB.²⁴
- 5.15 We believe this is the most pragmatic solution, reflecting the areas' functional economic geographies, energy challenges and democratic governance arrangements. See the maps and data at Appendix 1 for more information.
- 5.16 As explained above, parts of Lincolnshire straddle spatial boundaries. Constituting the southern bank of the Humber river estuary, North East Lincolnshire and North Lincolnshire unitary authorities span functional economic and administrative arrangements at the sub-national and local levels. The councils are part of the ITL1 Yorkshire & Humber region and the Transport for the North STB area; they are also part of the ceremonial county of Lincolnshire and, with Lincolnshire County Council, members of the proposed Greater Lincolnshire Mayoral Combined Authority.

²³ The East Midlands ITL1 region includes the county areas of Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire, and Rutland. For STB purposes Northamptonshire is part of England's Economic Heartland STB.

²⁴ Information about EEH is available at: https://www.englandseconomicheartland.com/

5.17 All RESPs will face strategic and operational adjacency considerations, some relating to upstream energy infrastructure matters, others to differing place-making priorities. These are long standing issues familiar to local and subnational institutions and strategic planners in the area and, consequently, we believe North Lincolnshire and North East Lincolnshire should be included in the North East and Yorkshire & Humber RESP, with adjacency alignment provided for in effective relationship management between this and the East Midlands.

Rationale: Western Gateway and Peninsula STB areas

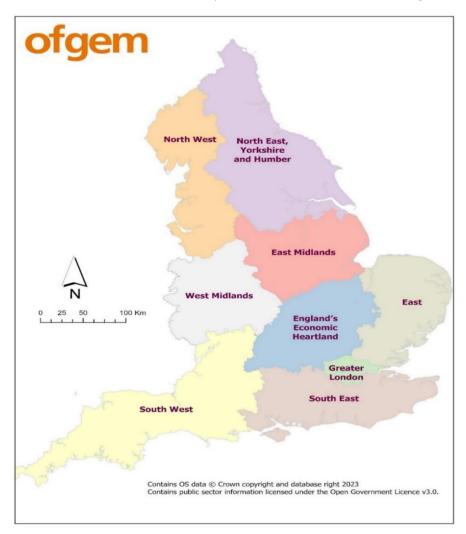
- 5.18 In our deliberations about the suitability of STB boundaries as the lead archetype for England, we identified the question of scale as a material consideration, particularly whether some STBs were too large to effectively represent the functional economic and administrative geographies of their areas. Whilst we held specific workshops focused on the areas of concern highlighted in our November decision, we were open to where other adaptations may be necessary.
- 5.19 Through engagement with LGA and UK100, a case was raised to amalgamate the Western Gateway and Peninsula STB areas reflecting the geographies of the areas and the collaborative working that already exists across the two STBs.²⁵
- 5.20 The areas have similar population and settlement characteristics, employment is geographically dispersed, they have common transport challenges, are mainly rural with small towns and villages, and face similar energy challenges. The South West is the largest English region by land area with the longest coastline, but in population terms the STBs would be the smallest regions in England: 3.11m (Western Gateway) and 2.36m (Peninsula). A combined South West region would serve 5.47m, which is closer to the mean average of regions as set out in both the November publication and the proposals included in this consultation.
- 5.21 We agree with the case made that the optimal solution for the South West is one region covering both STBs. As with the splits for the North and Midlands STBs, an adaptation based on ITL1 regions results in adjacency issues for the South West too. While Swindon is the largest settlement in Wiltshire, it is part of the EEH

²⁵ UK100 facilitated a workshop with representatives of South West Councils and member authorities to consider the optimal solution for the areas covered by the Western Gateway and Peninsula STB areas. Participants explained that a high level of collaborative working already exists between the two South West STBs reflecting the region's unique geography, with Peninsula Transport being the only STB that borders (ie, is gatewayed by) only one other STB, meaning inter-STB planning is more significant. We were advised that the emerging consensus of local authority CEOs in the South West is that a combined approach to RESP activities across the two STBs would be more efficient and effective, better reflecting local government arrangements and shared characteristics of the South West region (settlement, economy, transport and energy issues).

STB. As with the approaches we've adopted for the North and Midlands, we believe Swindon should remain in EEH for RESP purposes.

Rationale: overall model for England

5.22 Of the eight RESP regions we originally proposed for England (based on the STB archetype²⁶) internal boundaries of four regions are affected by the changes proposed in Option 1 (Transport for the North, Midlands Connect, Western Gateway and Peninsula Transport), whereas four remain unchanged (EEH, London, Transport East and Transport for the South East).



Map 2 - blended STB and ITL1 regional configuration

5.23 We are confident the blended model (Map 2 above) is proportionate, efficient and pragmatic, and will enable the development of RESPs at the pace needed to inform local strategic energy infrastructure investment planning and decisions.

²⁶ There are 7 STBs. The Greater London Authority has similar powers; for ease we refer to the 8 STBs.

5.24 Table 5 shows regional populations under the STB-only and blended (STB and ITL1) solutions.

Table 5 – overview of options for England

STB-only model (November 2023 position)	Pop (m)	Blended STB-ITL1 model (preferred solution)	Pop (m)
Peninsula Transport	2.36	East	3.54
Western Gateway	3.11	East Midlands	4.09
Transport East	3.54	England's Economic Heartland	5.38
England's Economic Heartland	5.38	South West	5.47
Transport for the South East	7.71	West Midlands	5.95
Greater London	8.80	North West	7.42
Midlands Connect	10.05	South East	7.71
Transport for the North	15.84	North East, Yorkshire & Humber	8.13
		Greater London	8.80
Total	56.79	Total ²⁷	56.49
Mean average (m)	7.10	Mean average (m)	6.28
Median average (m)	6.54	Median average (m)	5.95

Option 2 – Alternative solution for England (ITL1 only regions)

Proposal

5.25 Option 2 would be a model based wholly on the ITL1 regions (Map 3 below), also involving nine regions in England.

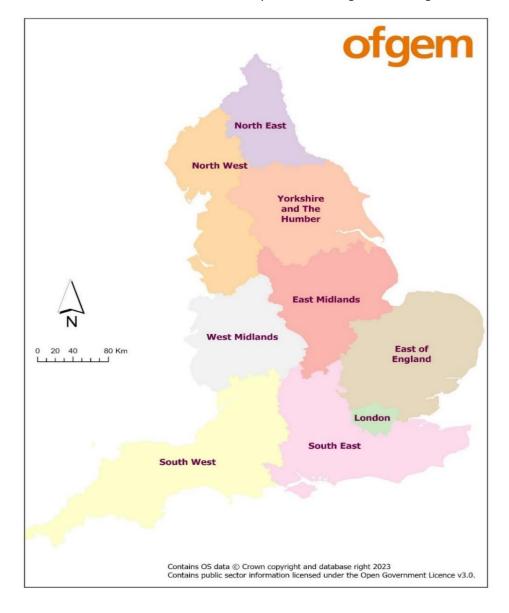
Rationale

- 5.26 While we are satisfied that an ITL1 regional model for England would deliver the strategic planning outcomes we desire, we believe that the blended solution as set out (Map 2 above) more fully reflects current strategic and institutional arrangements and will deliver better outcomes more swiftly.
- 5.27 We recognise the statistical reporting benefits that could be had at a GB level by adopting ITL1 regions for England too,²⁸ but we note that the way in which the

²⁷ There is 300,000 discrepancy between population totals under the STB-only and the blended STB-ITL1 (Option 1) models. In the analysis for the November 2023 decision we mixed different sources (STBs and ONS) for the baseline. For this consultation we've used only data from the 2021 Census, which accounts for the difference.

²⁸ Scotland and Wales are also designated as ITL1 regions.

supporting data is collected and curated means it can readily be configured for different use-cases. In addition, we believe that in many parts of England interactions between functional economic geographies and spatial planning have progressed notably since the days of the RDAs and RAs, amassing significant cross-vector insights and institutional capital.



Map 3 – ITL1 regional configuration in England

- Q13. Do agree with the adaptations proposed for Option 1? Please provide your reasoning.
- Q14. Do you agree with our assessment that Option 1 is a better solution than Option 2? Please provide your reasoning.

RESP arrangements in Scotland

Background

- 5.28 In November we said that one or two regions would be optimal for Scotland. From a population scale perspective, one would arguably be sufficient, but we felt the diversity of Scotland's natural and functional economic geographies might warrant a two-region solution.
- 5.29 This could either be modelled on a north / south split roughly reflecting the border between the two DNOs²⁹ (and the respective areas covered by Scotland's two transmission network operators), or potentially one covering the more urban central region (the triangle of Glasgow, Edinburgh and Aberdeen), and the other combining the northern and southern areas each characterised by rurality and isolated communities.

<u>Proposal</u>

5.30 On balance, we propose a single-region solution for Scotland. If, via this consultation, stakeholders express preference for a two-region approach then we believe (as did attendees at the April workshop) this should be on the basis of the existing DNO border leading to a northern Highlands and Islands region, and a Central and Southern Scotland region to the south.

Rationale

- 5.31 We undertook deeper analysis of the key features of Scotland's physical geographies, population centres, economies, transport infrastructure and flows, administrative arrangements and energy characteristics (production, consumption and network infrastructure) to assess whether a stronger case for one or two regions emerged. We tested this analysis with stakeholders at a workshop in April.
- 5.32 While Scotland's geographies (communities, landscapes, economies and energy ecologies) are notably more varied than other parts of GB, all regions will need to successfully represent diverse communities, meaning having distinct geographies alone is not sufficient reason for two regions.
- 5.33 In addition (and as with Wales), Scotland's devolved governance and established partnership arrangements will likely make a one-region solution the more efficient

²⁹ SSEN (Scottish and Southern Electricity Networks) covers the north, highlands and islands and SPEN (Scottish Power Energy Networks) central and southern Scotland.

and effective model. Workshop participants could see the rationale for a tworegion settlement, but on balance thought a single governance structure might be better suited to Scotland's energy and spatial planning policies.

Q15. Do you agree a single region for Scotland is optimal? If you think a tworegion solution is better, do you agree the split should occur at the SSEN and SPEN DNO boundary? If not, please provide your reasoning and alternative option(s).

Boundary evolution

- 5.34 The devolution and strategic planning landscapes are not fixed and the regional energy strategic planning model must be capable of evolving and responding to external factors. Developments in national policy (eg, climate, energy, and spatial transport, housing, land-use, etc), devolution and local governance arrangements, and stakeholders' experience of developing RESPs could all lead to scenarios where there is a need to revisit the regional boundary settlement. This could involve consideration of all regions, or specific ones.
- 5.35 We expect the outcomes of evolution discussions will most likely involve 1) regions merging, 2) a new region being created from one or more existing regions, or 3) an area within one region moving to an adjacent region. Whichever scenario applies, the rationale for the evolution must be sufficiently significant so as not to undermine confidence (of investors, providers, policy makers and planners), continuity and certainty in spatial planning arrangements. It is critical that regional evolution is an exceptional event, not a common occurrence.
- 5.36 We considered evolution scenarios at the boundary workshops, where the consensus was that boundary evolution should not be treated as a facility for managing conflicts and disputes. In developing a shared strategic energy pathway for a region, there will inevitably be difficult trade-offs to navigate and differing views; however the process for RESP creation and the associated regional governance should enable any disputes to be managed and resolved.
- 5.37 We also sought perspectives on who should be responsible for making decisions about boundary changes. It was a universally held view that affected stakeholders must have a voice in the process of deliberation and recommendation to the decision maker(s). There was not, though, unanimity on which bodies should be responsible for making final decisions.

- 5.38 Some of the views made reflect the potential for changes in national policy which fall outside Ofgem's regulatory jurisdiction. However, where an evolution scenario does arise and falls within Ofgem's regulatory domain, there was an emerging consensus: so long as local and regional stakeholders are actively involved in the process of case-making and assessment, then either (or a combination of) Ofgem or NESO should be the ultimate decision-maker for boundary evolution.
- 5.39 We believe regional boundaries should be able to evolve on an exceptional basis. NESO's pan-RESP oversight and the governance arrangements that will be established in each region will provide vehicles through which evolution requests can be made, local and regional stakeholders involved, assessment undertaken, and recommendations made to a strategic governance forum involving NESO and Ofgem. Ofgem will reserve the right to undertake additional consultation as we deem necessary in reaching a decision.

6. Next steps

Overall timelines

- 6.1 This consultation will be open for ten weeks and will close on 8 October 2024. We encourage responses from all interested stakeholders. We will analyse responses and carry out a programme of stakeholder engagement both during and after the consultation period.
- 6.2 We aim to consult on an Impact Assessment on Local Governance Reform (including RESP) in Autumn 2024.
- 6.3 We aim to publish our decision on both the Impact Assessment and policy design framework in Winter 2024 or early in 2025.
- 6.4 Following publication of the decision document, the work will enter its implementation phase. Detailed next steps will depend on the conclusions we reach and will be outlined in our decision document.

Policy interactions

- 6.5 There are numerous policy interactions within the scope of our review. We are confident our proposed policy framework is in accordance with the direction of current reforms underway.
- As outlined in section 2.18, a key interaction is the network price control. The RESP will inform business planning and support the setting of the next electricity distribution price control in 2028. Whilst this initial output may be smaller in scope, we would expect it to focus on setting consistent assumptions, including a pathway to plan against and establishing regional governance. We will progress this further as part of the RIIO-ED3 development. Publishing the consultation now is a critical stage gate to delivering in time for RIIO-ED3.
- 6.7 Beyond the price control, we would also expect the RESP to be utilised by those undertaking spatial planning or local energy planning and wider users including strategic transport bodies or housing developers. The output should provide a focal source of information in a region.
- 6.8 The RESP should be consistent with the SSEP and CSNP and have clear feedback loops. As all outputs are currently in development, it is difficult to yet define the firm touchpoints however this consultation supports us to better explore the interactions in the next phase of development.

- 6.9 We will continue to actively consider the above interactions as we develop our reforms, alongside interactions with other policy areas, including:
 - NESO implementation.
 - Development of a Data Sharing Infrastructure.
 - Local Area Energy Planning.
 - Local Heat and Energy Efficiency Strategies.
 - Future of Distributed Flexibility.
 - Heat decarbonisation (including hydrogen policy, heat networks and zoning).
 - Industry and Ofgem-led connections reform.
- 6.10 We will also work with government to consider the implications of any new policy areas, including GB Energy,³⁰ that link to the regional energy system planning governance landscape.

Implementation

- 6.11 It is our view that effective institutional arrangements need to be in place and delivering benefits by the end of the decade. To achieve this, we are aiming for the capability to deliver the RESPs to be set up by late 2025 and for the initial output to be produced in 2026 to inform the setting out of the next price control.
- 6.12 Subject to consultation, we will develop licence conditions to implement our decisions, enabling NESO to deliver the RESP. This includes any changes required to the DNO and GDN licences and any associated code modifications. Through the development of RIIO-ED3 we will also put in the place the appropriate price control levers to drive delivery relative to the RESP output.
- 6.13 In parallel, we will work on the associated guidance documents which will set out in more detail how we expect the NESO to carry out its obligations.
- 6.14 We will continue to work with NESO as they build their capabilities and develop their processes and governance arrangements. We will consider how to establish strategic governance groups to inform the RESP process and ensure alignment across the wider strategic planning landscape.

³⁰ https://www.gov.uk/government/publications/introducing-great-british-energy

Appendices

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Appendix 1 - Regional boundary proposals

Introduction

- A1.1 The following maps and tables show the proposed regional boundaries in Scotland, Wales and England and the DNOs and GDNs that will serve each region. These reflect the positions in this consultation document and may change as the options and boundaries are refined in the next stage of the process.
- A1.2 The information for this analysis was provided by DNOs and GDNs, combined with publicly available data about administrative boundaries and demographics.³¹
- A1.3 For Wales and Scotland, single regional solutions are illustrated. For England, the preferred solution (Option 1 blended STB/ITL1 model) is shown, accompanied by more detailed individual regional maps with DNO and GDN networks overlaid.

Proposed GB RESP boundary settlement

A1.4 From a GB perspective, Table A1 shows the average population sizes for regions under the November 2023 proposal, and the preferred regional boundary settlement package we are consulting on. Map A1 shows our preferred regional settlement for GB.

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November 2023 proposals	Pop (m)	Current proposals	Pop (m)
Highlands and Islands of Scotland	1.48	Scotland	5.44
Central and Southern Scotland	3.96	Wales	3.11
Wales	3.11		
Total: Scotland & Wales	8.55	Total: Scotland & Wales	8.55
Total: England	56.79	Total: England ³²	56.49
Total for GB	65.34	Total for GB ³³	65.04
Mean average (m)	5.94	Mean average (m)	5.91
Median average (m)	5.38	Median average (m)	5.47

³¹ All demographic data taken from the 2021 ONS Census tool https://www.ons.gov.uk/visualisations/customprofiles/draw/. For Scotland, the demographic data is from Scotland Census 2022 rounded population estimates (scotlandscensus.gov.uk).

https://www.scotlandscensus.gov.uk/2022-results/scotland-s-census-2022-rounded-population-estimates/

³² The breakdown for each of the English regions is provided at Table 5, chapter 5.

³³ The 300,000 discrepancy is due to the data sources used in November 2023 to calculate STB population sizes. For this consultation we have used only data from the 2021 Census for England, Scotland and Wales.



Map A1 - Ofgem's preferred GB RESP settlement

Scotland: RESP boundary proposal

A1.5 Map A2 provides an overview of the RESP solution for Scotland, Table A2 provides population data and Table A3 lists the DNOs and GDN in Scotland.

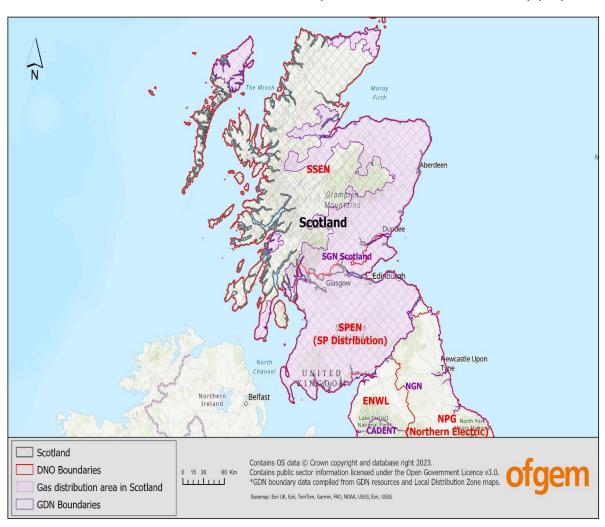
Table A2: Scotland RESP population

RESP	Pop (m)
Scotland	5.44

Table A3: Scotland - DNO/GDN breakdown

Network	DNO or GDN	RESPs served	RESP
SSEN (SHEPD)	DNO	1	Scotland
SPEN	DNO	1	Scotland
SGN Scotland	GDN	1	Scotland

Map A2 - Scotland RESP boundary proposal



Wales: RESP boundary proposal

A1.6 The following map (Map A3) provides an overview of the RESP solution for Wales.

Table A4 provides population data and Table A5 lists the DNOs and GDN in Wales.

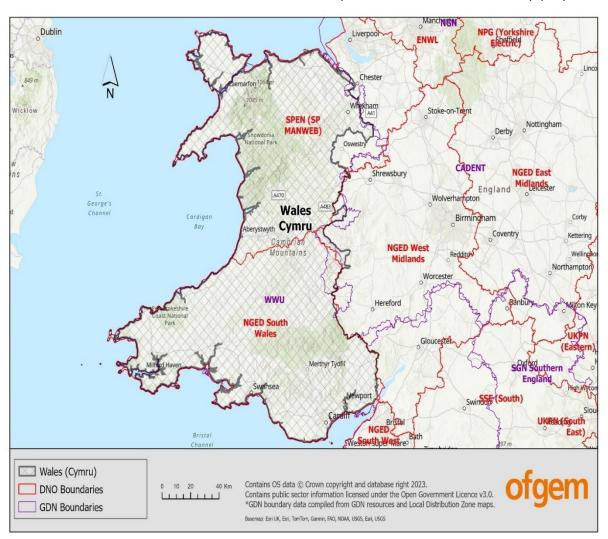
Table A4: Wales RESP population

RESP	Pop (m)
Wales	3.11

Table A5: Wales - DNO/GDN breakdown

Network	DNO or GDN	RESPs served	RESP
NGED South Wales	DNO	1	Wales
SPEN Manweb	DNO	1	Wales
Wales and West Utility (WWU)	GDN	1	Wales

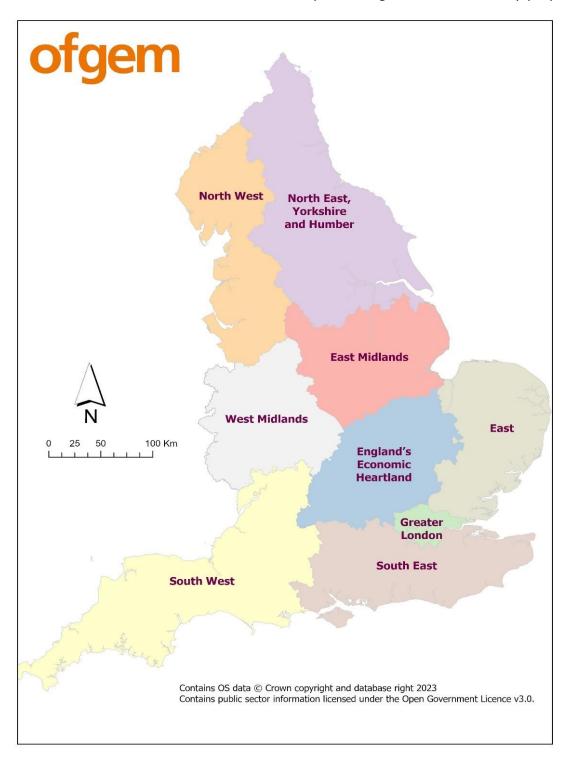
Map A3 - Wales RESP boundary proposal



England: RESP boundary proposal

A1.7 The following map (Map A4) and tables provide an overview of the proposed RESP model for England (Option 1, the blended STB and ITL1 regions solution).

Map A4 - England RESP boundary proposal



A1.8 Table A6 provides population data for each of the proposed regions in England.

Table A6: population data for the English regions

RESP	Pop (m)
East	3.54
East Midlands	4.09
England's Economic Heartland	5.38
Greater London	8.80
North East, Yorkshire & Humber	8.13
North West	7.42
South East	7.71
South West	5.47
West Midlands	5.95
Total	56.49

A1.9 The following tables list each GDN (Table A7) and DNO (Table A8) in England and which of the regions their networks operate in.

Table A7: England - GDN breakdown

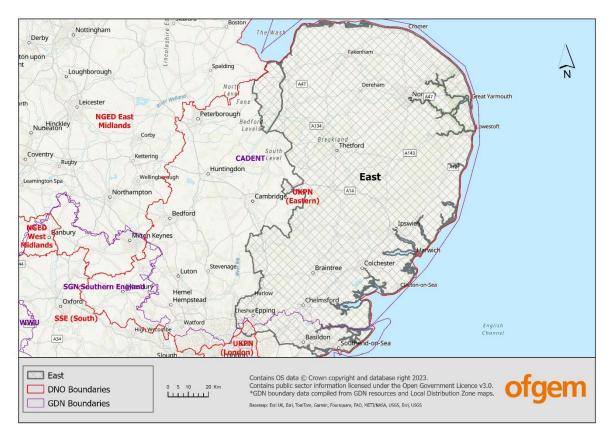
GDN Networks	RESPs	RESP
Cadent	8	 East East Midlands England's Economic Heartland Greater London North East, Yorkshire & Humber North West South West West Midlands
Northern Gas Networks (NGN	2	North East, Yorkshire & HumberNorth West
SGN Scotland	1	North East, Yorkshire & Humber
SGN Southern England	6	 East England's Economic Heartland Greater London South East South West West Midlands
Wales and West Utility (WWU)	4	England's Economic HeartlandSouth EastSouth WestWest Midlands

Table A8: England - DNO breakdown

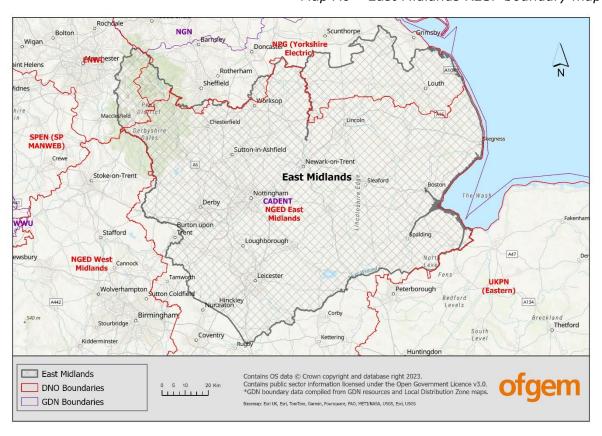
DNO Networks	RESPs	RESP
Electricity North West	3	East MidlandsNorth East, Yorkshire & HumberNorth West
NGED East Midlands	3	East MidlandsEngland's Economic HeartlandWest Midlands
NGED South Wales	1	South West
NGED South West	1	South West
NGED West Midlands	3	England's Economic HeartlandSouth WestWest Midlands
NPG Northern Electric	1	North East, Yorkshire & Humber
NPG Yorkshire Electric	2	East MidlandsNorth East, Yorkshire & Humber
SPEN	1	North East, Yorkshire & Humber
SPEN Manweb	2	North WestWest Midlands
SSEN South	4	England's Economic HeartlandGreater LondonSouth EastSouth West
UKPN Eastern	3	EastEngland's Economic HeartlandGreater London
UKPN London	3	EastGreater LondonSouth East
UKPN South East	2	 Greater London South East

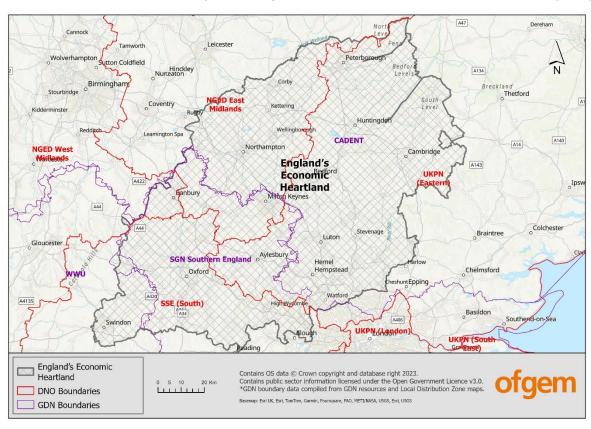
A1.10 The following maps (A5-A13) cover each of the proposed English regions showing the boundaries of the GDNs and DNOs that serve that region.

Map A5 – East RESP boundary map

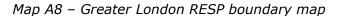


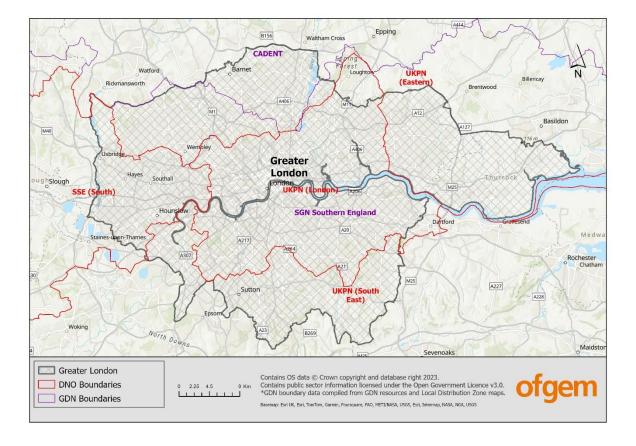
Map A6 - East Midlands RESP boundary map

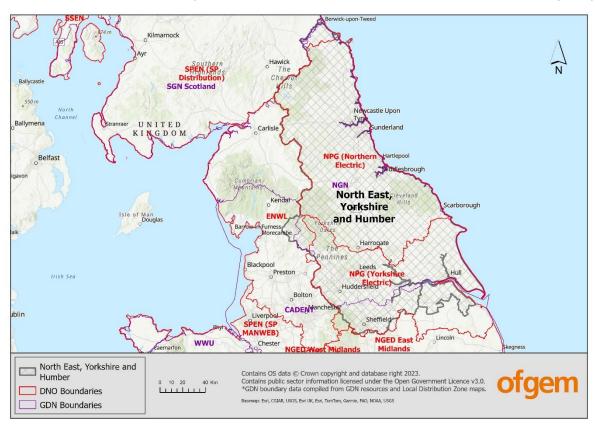




Map A7 - England's Economic Heartland RESP boundary map

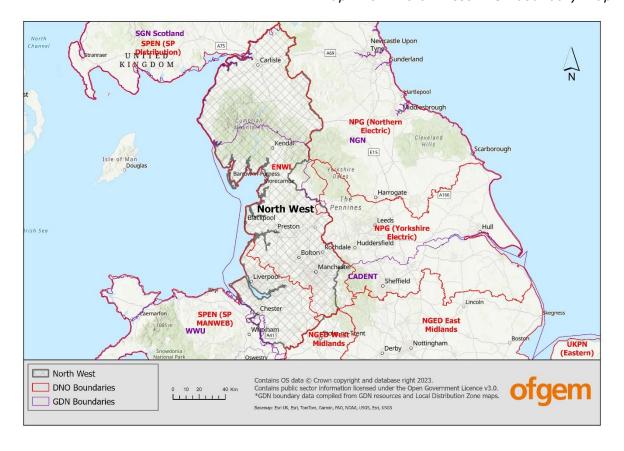






Map A9 - North East, Yorkshire & Humber RESP boundary map



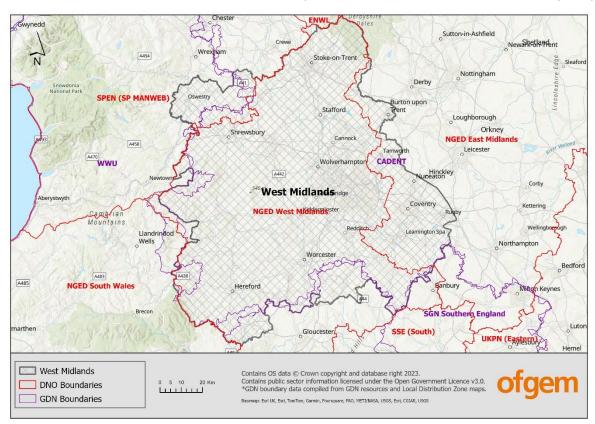




Map A11 - South East RESP boundary map

Map A12 - South West RESP boundary map





Map A13 - West Midlands RESP boundary map

Great Britain: RESP boundary proposal summary

A1.11 Table A9 provides an overview of each proposed region in Great Britain, listing the DNOs and GDNs that will operate in each.

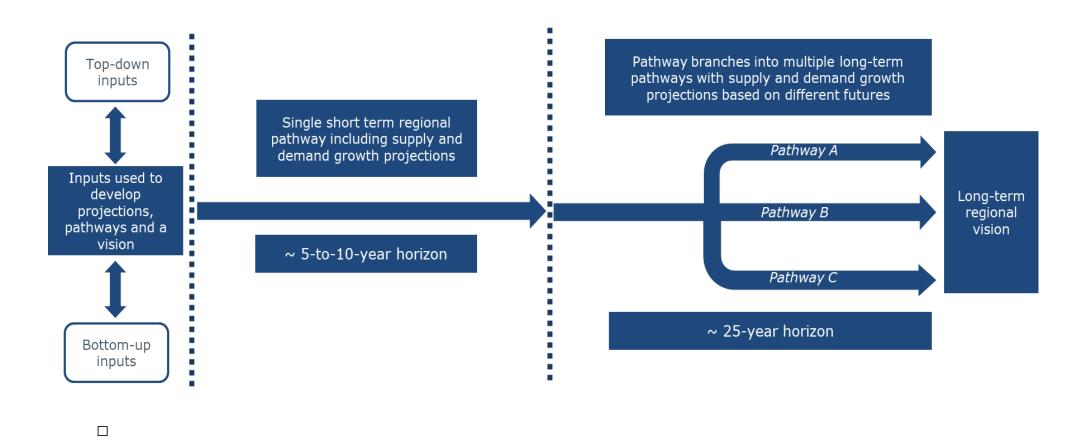
Table A9: GB RESP regions - DNO and GDN breakdown

RESP area	DNOs	GDNs
England East	2 licence areas operated by 1 DNOUKPN EasternUKPN London	2 GDNsCadentSGN Southern England
England East Midlands	 3 licence areas operated by 3 DNOs Electricity North West NGED East Midlands NPG Yorkshire Electric 	1 GDN • Cadent
England England's Economic Heartland	 4 licence areas operated by 3 DNOs NGED East Midlands NGED West Midlands SSEN South UKPN Eastern 	3 GDNs Cadent SGN Southern England WWU

RESP area	DNOs	GDNs	
England Greater London	4 licence areas operated by 2 DNOs SSEN South UKPN Eastern UKPN London UKPN South East	2 GDNsCadentSGN Southern England	
England North East, Yorkshire & Humber	 4 licence areas operated by 3 DNOs Electricity North West NPG Northern Electric NPG Yorkshire Electric SPEN 	3 GDNs Cadent NGN SGN Scotland	
England North West	 2 licence areas operated by 2 DNOs Electricity North West SPEN Manweb 	2 GDNs Cadent NGN	
England South East	3 licence areas operated by 2 DNOs SSEN South UKPN London UKPN South East	2 GDNsSGN Southern EnglandWWU	
England South West	 4 licence areas operated by 2 DNOs NGED South Wales NGED South West NGED West Midlands SSEN South 	3 GDNs Cadent SGN Southern England WWU	
England West Midlands	 3 licence areas operated by 2 DNOs NGED East Midlands NGED West Midlands SPEN Manweb 	3 GDNs Cadent SGN Southern England WWU	
Scotland Scotland	2 licence areas operated by 2 DNOs SSEN (SHEPD) SPEN	1 GDN • SGN Scotland	
<u>Wales</u> <i>Wales</i>	2 licence areas operated by 2 DNOs NGED South Wales SPEN Manweb 1 GDN WWU		

Appendix 2 – Supporting diagram

Figure A1: Visual representation of the directive pathways and long-term regional vision, further details in paragraphs 3.6 - 3.16.



Appendix 3 - Glossary

Centralised Strategic Network Plan (CSNP)

Plan for the onshore and offshore transmission network to accommodate additional demand and generation, and planning where interconnection should be sited on the system. The CSNP will be delivered by NESO.

Combined Authority (CA)

A legal entity that enables two or more local authorities to work collaboratively on decision-making across council boundaries.

Cross-sector

Broad set of interdependencies which impact energy system planning, such as heat networks, transport, water and housing.

Cross-vector

Interdependencies between energy vectors, such as electricity, gas, heat and hydrogen.

Decentralisation

Refers both to the general trend of distributed sources of generation and storage, but also a trend towards decisions being made at a local scale when it comes to the energy transition.

Delivery Body

An entity responsible for overseeing, managing and driving forward initiatives, to meet the expectations of the role. The entity (NESO) that will be responsible for producing the RESP.

Democratic legitimacy

Process to ensure those with a democratic mandate have a formal role in the RESP to effectively reflect place-based perspectives.

Department for Energy Security and Net Zero (DESNZ)

This is a ministerial department focused on delivering the energy portfolio.

Digitalisation

Integration of data tools into energy system planning and operations.

Distribution Network Operator (DNO)

A company that operates the electricity distribution network, which includes all parts of the network from 132kV down to 230V in England and Wales. In Scotland 132kV is a part of transmission rather than distribution so their operation is not included in the DNOs' activities. There are 14 DNO licensees that are subject to RIIO price controls. These are owned by six different groups.

Flexibility

Modifying generation and/or consumption patterns in reaction to an external signal (such as a change in price) to provide a service within the energy system.

Forecasting

Uses data to provide an informed view of how the future energy system may evolve.

Gas Distribution Network (GDN)

A company that operates the gas distribution network that transports gas from the transmission system to homes and businesses.

International Territorial Level (ITL)

A geocode standard for referencing the subdivisions of the UK, used for statical purposes by the Office for National Statistics (ONS). ITL1 regions are the highest spatial level, allowing for international comparisons, with 12 regions in the UK.

Local Area Energy Plan (LAEP)

A collective term for an integrated approach to inform detailed place-based whole energy system plans for net zero, usually coordinated by local or combined authorities.

Local Heat and Energy Efficiency Strategies (LHEES)

Plans that underpin an area-based approach to heat and energy efficiency planning and delivery in Scotland.

Market facilitator

A new role tasked with reducing friction across distribution markets and aligning distribution and transmission market arrangements, to help unlock the full value of flexibility.

National Energy System Operator (NESO)

A new body that will take on the existing roles and responsibilities of National Grid ESO and longer-term whole system planning, forecasting and market strategy functions. NESO will be the Delivery Body for the RESP.

Pathway

Provides a whole system strategic assessment of energy need and a directive view of how the energy system should develop to reach net zero.

Place-based

A bottom-up approach for looking at the needs and requirements of a local area and applying this lens to how options (for social, economic, energy, environmental and infrastructure development) are progressed and decisions are made.

Price controls

The regulatory mechanism developed by Ofgem to set targets and allowed revenues for network companies. Its characteristics are developed in the price control review period depending on network company performance over the last control period and predicted expenditure (companies' business plans) in the next.

Region

An area granular enough for place-based understanding, yet sizeable enough to facilitate coherence across GB between different energy vectors and across sectors. The geographical and administrative foundations for RESP regions vary across GB, reflecting democratic governance arrangements and approaches to functional economic areas, spatial and infrastructure planning.

RIIO-ED2

The price control applied to the electricity distribution network operators. It runs from 1 April 2023 to 31 March 2028.

RIIO-ED3

The price control applying to the electricity distribution network operators that will apply from 1 April 2028.

Scenarios

A range of potential future situations that the energy sector will need to prepare for through. Scenarios consider how, when and where energy may be needed across a spatial area.

Strategic Board

A governance mechanism for the RESP that involves local democratic institutions and wider stakeholders in providing oversight and steer to the RESP development process and strategic outputs.

Strategic investment

Investment that goes beyond the needs of immediate system needs, reflecting the future needs of the system.

Strategic planning

A coordinated whole-system approach to spatial planning that will allow a more holistic understanding of the long-term changes across the whole energy system.

Strategic Spatial Energy Plan (SSEP)

A spatial energy plan to inform energy network plans, whereby government targets across the whole energy system would be spatially mapped across GB and over several years. The SSEP will be delivered by NESO.

Sub-national Transport Body (STB)

The eight organisations for transport governance in England, responsible for coordinating local arrangements to maximise efficiency. There are seven STBs, with similar powers invested in the Graeter London Authority – for ease, we refer to these as the eight STBs.

System need

The amount of energy needed (MWh) dependent on regional customers and economic, net zero and cross-vector plans.

Technical coordination

Integrating and analysing plans across different vectors and identifying improvements and opportunities for system optimisation.

Transmission network

The system of high voltage electric lines and high-pressure pipelines providing for the bulk transfer of electricity and gas across GB.

Whole system

An approach that considers the gas, electricity (transmission and distribution) networks as well as the impact the heat and transport sectors and wider industry have on the system.

Appendix 4 – Workshop topics

Table A10: workshops hosted and the main discussion points.

Workshop topic	Date	Key discussion points
Detailed Design Kick-Off	30 January 2024	 Provided an overview of the RESP detailed policy design workstreams Outlined timelines for RESP development
Strategic Planning: principles to inform investment planning	14 February 2024	 Evaluated Robust Static Planning and Adaptive Planning approaches Identified challenges for the RESP strategic planning function Reviewed where on the network strategic planning can have the biggest impact
Governance: Local Engagement	19 February 2024	 Established the purpose of the governance mechanism Reviewed the use of a board as a governance mechanism Took a theoretical approach to inform the potential board composition
Strategic Planning: RESP inputs and outputs	6 March 2024	 Set out the proposed principles to inform the RESP outputs Reviewed an initial process flow to consider the potential RESP outputs Identified key RESP inputs
Governance: Technical Oversight	7 March 2024	 Outlined two types of technical expert: Independent and Sector Based Discussed initial models to identify desirable characteristics for the board structure
Boundaries: North of England	9 April 2024	Evaluated the need for 1 or 2 regions in the North, considering the potential for 1 region with 2 plans
Boundaries: England's Midlands	10 April 2024	Evaluated the need for 1 or 2 regions in the Midlands, considering the potential for 1 region with 2 plans
Boundaries: Scotland	11 April 2024	 Evaluated the need for 1 or 2 regions in Scotland, considering the potential for 1 region with 2 plans. Reviewed spatial variation across remote and urban areas of Scotland

Consultation – Regional Energy Strategic Plan policy framework

Workshop topic	Date	Key discussion points
RESP Function	1 May 2024	 Outlined the potential role of the RESP in identifying capacity need on the network Identified assumptions that the RESP could support by developing common assumptions Explored the spatial nature of the regional plans
Governance and Place-Based Engagement	20 May 2024	 Linked the governance mechanism to the RESP function Introduced a Hub and Spoke model Discussed the governance process flow Initial considerations for place-based engagement

Appendix 5 - Full list of consultation questions

- What are your views on the principles (in paragraph 2.8) to guide NESO's approach to developing the RESP methodology? Please provide your reasoning.
- 2. Do you agree that the RESP should include a long-term regional vision, alongside a series of short-term and long-term directive net zero pathways? Please provide your reasoning.
- 3. Do you agree there should be an annual data refresh with a full RESP update every three years? Please provide your reasoning.
- 4. Do you agree the RESP should inform the identification of system need in the three areas proposed? Please provide your reasoning, referring to each area in turn
- 5. Do you agree technical coordination should support the resolution of inconsistencies between the RESP and network company plans? Please provide your reasoning.
- 6. What are your views on the three building blocks which come together to form the RESP in line with our vision? Are there any key components missing?
- 7. Do you agree with the framework of standard data inputs for the RESP? Please provide your reasoning.
- 8. Do you have any suggestions for criteria to assess the credibility of the inputs to the RESP?
- 9. Do you agree with the framework for local actor support? Please provide your reasoning.
- 10.Do you agree with the purpose of the Strategic Board? Please provide your reasoning.
- 11.Do you agree that the Strategic Board should include representation from relevant democratic actors, network companies and wider cross-sector actors in each region?

- 12. How should actors (democratic, network, cross-sector) be best represented on the board? Please provide your reasoning, referring to each in turn.
- 13.Do agree with the adaptations proposed for Option 1? Please provide your reasoning.
- 14.Do you agree with our assessment that Option 1 is a better solution than Option 2? Please provide your reasoning.
- 15.Do you agree a single region for Scotland is optimal? If you think a tworegion solution is better, do you agree the split should occur at the SSEN and SPEN DNO boundary? If not, please provide your reasoning and alternative option(s)

Appendix 6 - Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

4. We will not share your personal data

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for twelve months after the project is closed

6. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- · know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- · ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services

- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/, or telephone 0303 123 1113.
- 7. Your personal data will not be sent overseas.
- 8. Your personal data will not be used for any automated decision making.
- 9. Your personal data will be stored in a secure government IT system.
- 10. More information For more information on how Ofgem processes your data, click on the link to Ofgem's Privacy Policy https://www.ofgem.gov.uk/privacy-policy.