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Regional Energy Strategic Plan policy framework consultation

National Grid response to Ofgem's consultation

8 October 2024

About National Grid

National Grid Group's operations in the UK include National Grid Electricity Transmission (NGET), which owns the high voltage transmission system in England and Wales; National Grid Electricity Distribution (NGED), which owns and operates electricity distribution networks in the Midlands, the South West and Wales; National Grid Ventures (NGV), which owns and operates energy businesses in competitive markets, including sub-sea electricity interconnectors.

This response consists of two sections:

- **Section 1**: Executive statement and key messages
- **Section 2**: Response to specific consultation questions
- **Section 3**: Annex: Worked example 1 discussion of where RESP can enhance investment decisions

Executive statement and key messages

We welcome the opportunity to continue engaging in the creation of the Regional Energy Strategic Plan (RESP). We support the introduction of RESP and recognise the strategic context and the case for change. National Grid supported the development of the RESP as detailed in our response to the previous consultation on the Future of Local Energy Institutions and Governance[1] and continues to do so within this current consultation.

We appreciate the opportunity to have participated in the Ofgem detailed workshops between January and May 2024. We believe that it is important that stakeholders have the opportunity to contribute to the design of RESP. Throughout this period, we engaged with industry bodies, such as the Energy Networks Association (ENA), and attended a number of bilateral meetings with key parties in the establishment of RESP, and we look forward to continuing engaging through the forthcoming workshops as well as other fora.

Our understanding of the RESP:
We welcome the fundamental purpose of the RESP and NESO's mission to enhance strategic planning, coordination across multiple vectors and setting the overall regional vision. To level set what we understand and believe the role of the RESP to be based on conversations over the previous few months, we highlight the following four aspects:

- The heart of NESO's RESP is to be whole system thinking and to get regional stakeholder input to form a view of the energy scenario upon which network companies can formulate their own investment plans. We support Ofgem's aspiration that NESO will work collaboratively and transparently and agree that effective governance will be a critical part of this. While we recognise that Ofgem does not see the need for a distinct conflict resolution mechanism (para 4.10), we believe the inclusion of a specific dispute resolution mechanism will enhance the governance of clear decision-making frameworks and managing conflicting views from the 11 proposed RESPs within and across the regional 'spokes.'

[1] Consultation: Future of local energy institutions and governance | Ofgem (1 March 2023 – 11 May 2023)

- We welcome the proposal that Distribution Network Operators (DNOs) and Gas Distribution Networks (GDNs) retain accountability for detailed network planning and real time operations (including safety and resilience) (para 2.19). In discussions with Ofgem and NESO, we understand that NESO will not perform modelling of the distribution network, nor will it prescribe particular network investments. We would welcome additional confirmation of this principle, as para 3.23 of the consultation states that 'the RESP take a more directive role in identifying the location for strategic investments.'
- We support Ofgem's proposal that 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 (para 4.16). Given our four license areas, we look forward to engaging with at least five regional 'spokes' and five Strategic Boards. This is likely to require additional resource that will need to be appropriately funded to ensure that we are able to fulfil our intended role on the Strategic Boards and within any relevant working groups.
- We welcome Ofgem's recognition that the RESP will have an adaptive approach (para 2.11) which we interpret to mean representation of a 'snapshot' in time, and it is inevitable that there will be subsequent developments that DNOs and GDNs should consider in network planning. Consequently, we agree that it is appropriate and important for DNOs and GDNs to have the opportunity to propose investments – via business plans or uncertainty mechanisms – outside of RESP direction. (para 2.19).

We are pleased to have formed these common areas of understanding and we would welcome additional clarity across four key areas below.

1. **Collaborative working, transparency and coordinated strategic plans should drive our collective approach to establishing institutional reform.**

The RESP is one output which is part of a wider institutional governance reform programme of the energy system, which includes the new National Energy System Operator (NESO) responsible for producing the RESP, the Future Energy Pathways (FEP), the Strategic Spatial Energy Plan (SSEP) and the Centralised Strategic Network Plan (CSNP)[2]. Mission Control within DEZNZ has also commissioned NESO to provide advice and expertise on how to achieve the Clean Power Plan 2030 (CPP2030), which we understand is a precursor to RESP and SSEP.

CPP2030 and strategic plans and pathways should be developed collaboratively taking account of network and industry expertise. This will result in a better plan, and it will help maintain investor confidence. We recognise that CPP2030 is a sprint, and would still welcome the same, basic principles of engagement envisaged for RESP including collaboration, transparency and coordination to ensure that specialised network data and information is appropriately fed into CPP2030.

To deliver best value to consumers from the process, RESP should be developed building on the existing work of DNOs, and we stand ready to offer our experience and learning.[3] Furthermore, the various strategic plans and pathways need to be considered concurrently, and clarity is needed on the interactions between the CPP2030, FEP, CSNP, SSEP, RESP and how they will work together in a coordinated manner to ensure they facilitate a smooth transition towards decarbonisation goals. This is discussed further in the following point.

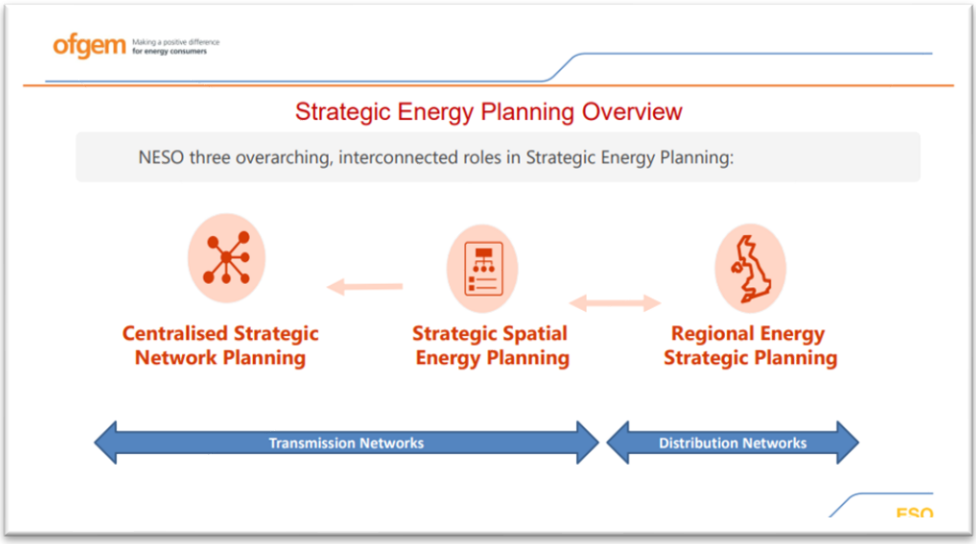
[2] The Holistic Network Design (HND) was the first step towards a more centralised, strategic network planning approach and the precursor to the CSNP.

[3] NGED has the longest running DFES established in 2016; Originally named 'Distributed generation and demand study: Technology growth scenarios to 2032' before being re-named DFES in December 2019

2. NESO and its outputs must be whole system: emergent strategic plans require purposeful alignment, and the RESP has a role to play in facilitating decisions between network companies.

As at the national level, there is a need for the development of whole system decarbonisation pathways at sub-national, or regional, level. There is a need for regional strategic plans to be developed with consistent local input and which reconcile with national plans. However, there are notable differences between transmission and distribution which means different approaches to strategic planning of the networks are required. We welcome ways in which NESO, through RESP, can independently raise visibility and understanding of this.

NESO's strategic plans need to have clear feedback loops between them – particularly between the SSEP and the RESP – set out within a periodic timetable, so top-down planning can influence regional planning, and vice-versa. We seek additional clarity on how the RESP and the SSEP will interact. We appreciate the view that Ofgem offered in its RESP Policy Framework Consultation Webinar held on 4 September 2024 (reproduced below) and the additional detail provided in the response to the statutory consultation on NESO licences.[4] To enhance the understanding and confidence of all stakeholders as well as to ensure coherence and consistency across the initiatives, we believe it would be beneficial to draw out the interaction of these strategic plans and pathways as well as their linkage to the 2030 Clean Power Plan 2030 (CPP2030) target. For example, we are interpreting that the CPP2030 outputs will come first. Then the SSEP will be commissioned sometime in 2025 followed by the first RESPs in 2026, and the first CSNP targeted by the end of 2027, but we are not certain of these timelines nor how the feedback loop will work between the plans. We also understand the SSEP will split the country into zones/regions, but this is yet to be confirmed when Government formally commissions the SSEP. We consider that, when this does happen, it may be most logical for the regions/zones in the SSEP to align to the RESP regions.



Facilitating decisions: There is a significant opportunity for NESO and RESPs to 'Be whole system' as proposed in para 2.8 of the consultation and as mentioned in question 1 of our detailed response. We envisage NESO to play a role in optimising and coordinating discussions and decisions between Transmission Owners (TOs), DNOs, and GDNs where whole-system optioneering is required e.g. across the Transmission-Distribution boundary, or between GDN and DNO investment. While DNOs and TOs can and do have informal conversations and license-mandated data exchanges around whole system

[4] Response to statutory consultation on National Energy System Operator licences and other impacted licences

network planning, currently there is an opportunity for NESO to demonstrate that investment in the Transmission-Distribution boundary is efficient and aligned to the needs of a customer within a region as currently there is no other trigger than a DNO submitting a connection/modification application. We believe that there is a clear case to improve the current formal arrangements and processes. NESO could play a role in convening discussions between TOs and DNOs at an earlier stage, in line with the principle mentioned above that determining the location and type of assets to be built should ultimately rest with networks.

3. Detailed network planning and strategic investment decisions remain with the DNO

DNOs must retain accountability for distribution network planning and real time operations (including safety and resilience). We also agree with the RESP model having accountability to set consistent forecasts for DNOs. We believe the DNO should then be responsible for taking the RESPs, interpreting that into a MW profile on our network and then designing the network and flexibility options to support the output. We do not see a role in RESP modelling our network, as this would be duplication against a backdrop of a scarce skill set. As a precursor to the RESP, we also stand ready to offer our distribution network knowledge to assist with the development of CPP2030.

There is ambiguity regarding the RESPs role to inform strategic investment. The consultation proposes that the RESP take 'a more directive role in identifying the location for strategic investments' (para 3.23). Subsequent discussions with NESO and Ofgem indicate that RESPs will not determine the necessary network interventions and such decisions will remain with the DNOs. We kindly request formal confirmation of this.

We also look forward to engaging collaboratively and constructively on creating a clear, purposeful framework for strategic investment decision making suitable for use within distribution as well as defining the role of the RESPs' input on strategic investment. We consider the definition offered in the Appendix of the consultation 'investment that goes beyond the needs of immediate system needs' is wide and open to interpretation. In the Annex, we have also prepared 'Worked Example 1: Discussion of where RESP can enhance investment decisions' to help inform this conversation.

4. RESP RIIO-ED3 Transitional Arrangements are needed, along with an associated timeline

We recognise that, given where things are in the NESO and RESP development cycle, it will be too ambitious for RESPs to influence the RIIO-ED3 (ED3) price control comprehensively. We agree with Ofgem's approach stated in its RESP Policy Framework Consultation Webinar held on 4 September 2024 that transitional arrangements are needed. We offer the following views and ideas to help determine an appropriate approach to transitional arrangements for NESO and the RESPs for ED3. In any eventuality, a simple timeline that shows the NESO's RESP development, what it will do and when, is needed. This can then be overlaid with the ED3 timeline to show the RESP input and interaction with the various ED3 milestones.

As we discussed in the Ofgem-led RESP workshop held on 17 September 2024 and given the tight timelines, we believe the appropriate role for the RESP in RIIO-ED3 is based on leveraging existing DSO capabilities. The bottom-up analysis should be based on the work NGED already does, given that our process is the most experienced and mature of the DNOs[5]. The RESPs could then be overlaid to ensure consistency[6] of assumptions across regions.

[5] See footnote 3

[6] Consistency may not equate to the same in each region, but any differences are deliberate and understood

Conclusion

We look forward to working with Ofgem in the next stages of CPP2030 and RESP framework design. We need to work on this in a timely manner to ensure RIIO-ED3 business plans, which are due for submission at the end of 2026, meet expectations. We are also keen to support NESO in building the necessary capability and knowledge to deliver CPP2030 and RESP. In this context, we will make ourselves available to share our expertise and learnings from pertinent areas, such as network planning, Distribution Future Energy Scenarios (DFES) and stakeholder engagement.

We are keen to remain engaged with Ofgem on this topic. Should you have any questions about the points raised in this consultation, please contact Paul Branston, NGED Director of Regulation, at Paul.Branston@nationalgrid.com and/or Cathy McClay, Managing Director of DSO, at Cathy.McClay@nationalgrid.com.

Response to specific questions

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.

National Grid agrees with the principles for the RESP. We are particularly supportive of

- Be whole System: we see that this is an area where NESO can convene impactful discussions between different actors in the energy system, including improving current formal arrangements and processes as mentioned in our Key Message 2 in the Executive Summary, though central to this principle is how this works in practice.
- Be Vision-led: we agree on the long-term objectives for energy system developments. Design of the RESP methodology must embed strong foundations such that bottom-up and top-down are given equal credence in aligning with national policies including the SSEP.

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.

We agree RESPs should have a long-term pathway as well as a short-term pathway because (1) this allows the energy landscape to change and adapt quickly to the needs of CPP2030 and beyond and (2) this will bring RESPs in alignment with other strategic pathways and plans including FEP and SSEP.

We believe that the RESP should have a long-term and a short-term pathway. A long-term pathway of 25 years is where RESPs can add the most value, namely outside the time horizon where investments decisions are made by DNOs/GDNs. Notwithstanding, we also see that RESP can add value utilising a 5-10 year time horizon. Whatever the outcome, we believe that a guiding principle is there should be alignment with the FEP and the SSEP. The FEP guidance (para 2.1-2.2)[7] acknowledges there should be 'multiple, longer-term strategic pathways and a single short-term pathway."

In addition to this, it is important that DNOs retain the ability to respond to significant changes within price control periods through the provision of price control uncertainty mechanisms (or similar processes) as mentioned in paragraph 2.19 of the consultation document. We consider that the ability to adapt is important for all network companies as we expect that all strategic reports/pathways will be closely influenced by the output of the CPP2030 exercise for the period leading up to 2030.

We further recognise that moving towards pathways aligns with the direction of travel in the FEP and SSEP. As pathways are more prescriptive than scenarios, this can help shed light on the anticipatory investment needed in the network, so that networks can build what is needed while protecting the interests of consumers.

Q3: Do you agree there should be an annual data refresh with a full RESP update every three years? Please provide your reasoning.

We agree with this in principle, but it needs greater consideration in the context of different publications undertaken by different actors who will rely on RESPs' input.

There are many different publications and activities undertaken by different actors within the energy system that will rely on the RESPs as a key input to the process. We have provided Table 1 below as an illustration and recognise that it is not exhaustive. We agree in principle with a full update every

[7] Guidance: Future Energy Pathways | Ofgem (13 Aug 2024)

three years and a data refresh annually could be appropriate and could have advantages such as setting a foundation for the SSEP and assisting reopener applications with updated data. We ask that Ofgem maps out the interactions between the iterations of datasets used in the publications to consider whether the 3+1 years is an appropriate time interval.

As mentioned previously, para 2.19 of the consultation acknowledges that in-period adjustments will be allowed. Depending on transitional arrangements, we anticipate that within the RIIO-ED3 price control period, there may need for a reopener in 2029 and 2032 when RESP refreshes might occur. Alternatively, a single 2030 reopener might be appropriate, depending on the overall price control arrangements. Irrespective, drawing from our extensive DFES experience, we would recommend that the annual data refresh for the RESPs takes place in June/July each year to align with the FEP which then feeds into the DFES cycle. Our recommendation is that the RESP in RIIO-ED3 should leverage existing DSO capabilities. To ensure we can best reflect the fast-moving policy landscape and align to business plan preparation timescales, we are reviewing our current DFES processes and expect DFES 2025 iteration to be available materially earlier than the first RESP outputs, which may become available too late to influence the RIIO-ED3 process. We are keen to work with NESO, for instance through our PRIDE innovation project, to develop a mutual understanding of how DFES can best support the RESP process.

Table 1: Illustrative set of publications requiring interaction with RESPs

Publication/activity	Undertaken by	Cadence	Time taken to prepare
Electricity Distribution business plan submission	DNOs (TO networks influence the regional network)	Every 5 years 2023-2028 2028-2033	2.5-3 years before start of price control
Electricity Transmission business plan submission	TOs (DNOs and regional needs influence the national network)	Every 5 years 2021-2026 2026-2031	2.5-3 years before start of price control
Gas Distribution business plan submission	GDNs	Every 5 years 2021-2026 2026-2031	2.5-3 years before start of price control
Load related reopeners within price control	DNOs; potentially TOs	For DNOs, currently two windows in RIIO-ED2, January 2025 and January 2027	At least 6 months prior to submission
Network Development Plan (licence condition 25B)	DNOs	Every 2 years, first publication in 2022	9 months prior to publication
Centralised Strategic Network Plan	NESO/TOs, but could impact DNOs	Every 3 years (major update), starting in 2027, otherwise annual minor refresh	Unknown, as methodology still being developed
Strategic Spatial Energy Plan	NESO/TOs, but could impact DNOs	Every 3 years	Unknown, as methodology still being developed

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.

We stand ready to help and explore how the identification of system need will function as part of the detailed design stage. We are broadly supportive of RESPs helping to inform, though not direct, the identification of system need and comment on each of the three areas in para 3.20 of the consultation in turn.

Regarding 'Providing consistent assumptions'

Providing consistent assumptions is an area where Ofgem is keen for RESP to take the lead. National Grid is supportive of this and believes, in the short term, the focus should be on aligning on the methodology used to define profiles and consumer behaviour changes rather than dictating profiles to use. As part of the RIIO-ED2 Load Related Expenditure Volume Drivers Governance document, DNOs developed a joint method statement for consistently defining utilisation of secondary substations, and this model could be used as a starting point. DNOs collect significant data regarding consumer usage patterns and measured data, and we suggest there should be forum to discuss updates to methodologies and new data sources as they arise.

We acknowledge that there are currently different assumptions used by networks for the purposes of planning, and NESO can add value to drive consistency in these assumptions. We believe this should take the form of NESO owning the methodology for assumptions which networks will use to plan. This is due to diversity and due to data changing quickly. For example:

- *Customer behaviour* is a quickly evolving area with a lot of innovation, and new data becomes available with increased uptake of low carbon technologies and smart meter data.
- *Diversity:*
    - Currently, networks utilise a suite of profiles suitable for network planning at different voltage levels to account for the diversity of demand and generation customers. A methodology is required for this.
    - Regional factors can impact the consumption and generation patterns within a region. For example, EV miles driven per year varies across the country which impacts the electricity consumption of customers in those regions. Similarly, assumptions on the amount of demand side flexibility available can be regionally specific.
- *Company risk appetite:* Some of the assumptions on load diversity are also linked to the appetite to risk when planning networks, which is a key input to network planning and is company specific.

Transparency is a key principle that National Grid believes in for system planning, and since 2020 we have published our assumptions[8] used to map Distribution Future Energy Scenarios to the MW/MVAr impact on our network assets. We welcome the collaborative approach from NESO and look forward to supporting the methodology design.

Regarding 'Spatial context for capacity needs'

We have found that this is the area with the least clarity in the consultation document. We are happy with RESP utilising existing spatial data published by DNOs to indicate where there may be capacity shortfalls, but this should inform, rather than direct.

We believe that detailed network planning is required to identify capacity shortfalls across the network. How the RESP will be able to influence strategic investments without undertaking network

[8] https://www.nationalgrid.co.uk/downloads-view-reciteme/655314

planning is key to understand. We explore this point in 'Worked Example #1: Discussion of where RESP can enhance investment decisions.'

National Grid sees an opportunity for how a spatial view of demand/generation can inform investment, without undertaking network planning to identify areas of constraint or capacity shortfall (potentially demonstrating how a spatial energy view correlates to investment triggers and capacity released). We can see value in NESO combining datasets from different vectors in one place (rather than just for a single vector) to display the context on energy requirements for a region. NGED's current PRIDE (Planning Regionally In A Digital Environment) innovation project is already examining data exchange principles between RESPs and DNOs, and we welcome the opportunity to explore this further.

Regarding 'Informing strategic network investment'
We believe that by setting the decarbonisation pathway in a region, any subsequent investment triggered from that will be by nature strategic and should form the vast majority of our investment decisions. This is where RESP will add the most value to existing processes, by ensuring the planned future aligns to local and national needs. This should be reflected in price control submissions.

The consultation provides a definition of strategic investment. We have given additional context to how this could be translated to the day-to-day decisions made by a distribution network in Annex 'Worked Example #1' that NGED carries out that result in capacity being added to the distribution network. This is a wide spectrum, of which there are buckets that are not strategic, and others that we believe are strategic, including integrating the 'touch the network once' principle. Some of the activities outlined could be enhanced by the introduction of the RESP function within NESO.

In addition, there is an opportunity around technical coordination to help support the justification of need (which we cover in the next section). We support Ofgem's clarification that network planning is a DNO activity, which is required to identify the need for strategic investment, so for NESO to inform strategic investment it should focus on large strategic projects with multiple parties involved (such as at the transmission/distribution boundary).

Q5: Do you agree technical coordination should support the resolution of inconsistencies between the RESP and network company plans? Please provide your reasoning.

We agree that a technical coordination role would add value to existing network-led planning processes. Acting as a convener and facilitator between licensees will demonstrate the 'whole system' principle of the RESP.

Technical coordination should be cognisant of the different institutional roles of the different actors at the local level, which we outline as follows:

- NESO/RESP: setting the single short or long-term pathways for decarbonisation for a region based on gained insight from LAs, GDNs, DNOs & national Government
- TOs/DNOs and GT/GDNs: demonstrating that an effective blend of network solutions is planned and can be delivered through the price control to meet the single decarbonisation pathway
- Local Authorities and regional government: spatial plan alignment and timely decision making for distributed energy resources and network infrastructure across the whole system
- Ofgem: consumer value, efficiency of network investment and administration of price controls and uncertainty mechanisms

We believe the technical coordination role can contribute in two ways:

1. Development of a Regional Energy Strategic Plan that considers the whole energy system will ensure that the regional pathway considers both gas and electricity (among other vectors) through the same lens. As both gas and electricity distribution networks will use the RESP as a key input to develop network plans, this should ensure that the investment decisions are more coordinated across vectors.
2. Provide whole system assurance for investments identified which involve multiple licensees across the transmission-distribution boundary or between GDNs and DNOs. While DNOs and TOs can and do have informal conversations and license-mandated data exchanges around whole system network planning, currently there is an opportunity for NESO to demonstrate that investment in the Transmission-Distribution boundary is efficient and aligned to the needs of a customer within a region as currently there is no other trigger than a DNO submitting a connection/modification application. We believe that there is a clear case to improve the current formal arrangements and processes. NESO could play a role in convening discussions between TOs and DNOs at an earlier stage, in line with the principle mentioned above that determining the location and type of assets to be built should ultimately rest with networks.

To assist the development of this role, we have provided additional information in the Annex 'Worked Example 1: Discussion of where RESP can enhance investment decisions.'

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?

We broadly agree on the three areas. The granularity of the lower super output area (LSOA) is too granular and subject to inaccuracies. We prefer data to be represented at a Local Authority (LA) level as it provides the best interface with existing network processes. We also believe that presenting outputs at LA level will be the most useful for broader stakeholders. The key item to understand in the detailed methodology design is to understand how the RESP impacts decisions made by DNOs and over what cadence this happens.

Under the second building block ('identifying system needs'), the consultation proposes that "the RESP take a more directive role in identifying the location for strategic investments[footnote omitted] in line with the long-term vision for the region" (para 3.23). There is ambiguity regarding the RESPs role to inform strategic investment. Subsequent discussions with NESO and with Ofgem indicate that RESPs will not determine the network location of strategic investment and such decisions will remain with the DNOs. We kindly request formal confirmation of this.

We also look forward to engaging collaboratively and constructively on creating a clear and purposeful framework for investment decision making for networks. This needs to be suitable for use within distribution as well as defining the role of the RESPs' input on strategic investment and whether this applies to all strategic investments or just those where it can add value. We consider the definition offered in the Appendix of the consultation 'investment that goes beyond the needs of immediate system needs' and consider this wide and open to interpretation. For example, we can see the advantages should the RESPs provide information regarding the geographic location of potential strategic requirements, but not the network location. Also, RESPs may be able to add value to strategic investment on the primary network, though it is much more difficult to see how RESPs can help with the secondary network apart from on indicating, for example, the expected volume of heat pumps or EVs expected in a local authority area. In the Annex of this response, we have also prepared 'Worked Example 1: Discussion of where RESP can enhance investment decisions' to help inform this ongoing conversation.

Q7: Do you agree with the framework of standard data inputs for the RESP? Please provide your reasoning.

We believe there should be standard data inputs and outputs for the RESP. Standard outputs in and of themselves are important to us as a DNO and ensuring that these are as simple as possible is also a priority, as we will need to use multiple RESPs to plan our networks.

Our view is that NESO should set out a transparent methodology for how each of the input data sources will inform the RESP. From stakeholder feedback we've heard thus far and from our own experience, this will drive effectiveness in assessing the credibility/maturity of inputs to the RESP. Such inputs must also indicate how the bottom-up and top-down approaches to modelling supply and demand are adjusted, particularly if RESP deviates from local ambition in its need to ensure bottom-up/top-down alignment.

The impacts and reflection of other wider governmental policy (top-down in nature, but heavily impacting a RESP) should also be detailed in the methodology. The introduction of the Clean Power Plan 2030 is an example of this.

Some considerations for the detailed design of the methodology include:

- Our digital teams will need to be involved ahead of NESO implementing a data sharing infrastructure to ensure compatibility and alignment. We ask that sufficient time for design and implementation is afforded to this activity. We expect that the digital spine to play a role in data sharing in the future, though it is unlikely to do so in the first iteration of the RESP.
- Customer needs forecasts (provided on a spatial basis) cover most input datasets, but do not include some of the additional information that is required to process information, for example planning permission status and other information which can indicate the likelihood of connection for some generation projects.

Q8: Do you have any suggestions for criteria to assess the credibility of the inputs to the RESP?

National Grid would expect there to be clear metrics established to measure the effectiveness of the Regional Energy Strategic Plan. The assessment could take the form of looking at historical projections compared to actual outturn for each of the building blocks/input data sources so that the variance between a pathway/plan indicated in the past and the actual outturn can be determined. However, due to the level of uncertainty in net zero pathways, historical data should not be the only metric used. In addition to analysis of historical data, understanding the impact of significant changes in local and national policy on the uptake projections of technologies should be included as a metric.

The credibility of assumptions should be informed by historical accuracy assessments of the various input data sources generated using top-down or bottom-up approaches. Using domestic customer connections as an example, comparison of the historical numbers of houses built against Local Plan information and how this aligns to top-down assumptions which would be based on population growth statistics would help inform the methodology. Our long DFES experience means we have data that NESO could use to set a baseline for assessing the credibility of some of the inputs.

Q9: Do you agree with the framework for local actor support? Please provide your reasoning.

National Grid considers local actor support as a key input to modelling future supply and demand and can see value in NESO delivering some of the items listed in the framework of support. We agree with the consultation document that when engaging with local authorities (LA), NESO should build on existing relationships (paragraph 3.62). In our experience, we have seen that local authorities face time and resource constraints. The framework should be cognisant of these constraints and aim to enable local authorities to engage in the strategic planning process. Alongside this, we also expect engagement between network companies and local government to continue.

As an independent and impartial institution, NESO can provide advice and share good practice in such a way that DNOs and GDNs are not able to. We suggest that the framework can be improved:

- We observed that the detailed design workshops held in the first half of 2024 calendar year demonstrated that some stakeholders (mostly Local Authorities) felt that NESO would be more supportive in providing personnel or financial support to projects.
- Local actor support should be flexible and tailored to local area need. e.g. If an area hasn't already gone through a Local Area Energy Plans (LAEP) or Local Heat and Energy Efficiency Strategies (LHEES) process, RESP may need to provide additional support and attention to these as stated in the consultation (para 3.56).
- We suggest that NESO should aim to make LA engagement easier for local actors at a principles level and to enable engagement with the RESP at a practical level. We agree with training and capacity building and suggest that there should be dedicated engagement with individual LAs to explain and translate for each LA what the RESP means for their area and to facilitate their local input.
- As part of RESPs, NESO/Ofgem should provide clarity on who engaged whom and when as well as outline how stakeholder engagement and local actors' views have been fed into the assumptions as an input data source.
- Para 2.22 of the consultation document indicates that RESPs are expected to be utilised by local actors for planning purposes, but there is no requirement on local government to follow the RESPs. This creates a risk of conflict between network investment signals and the development outturn in each region.

Q10: Do you agree with the purpose of the Strategic Board? Please provide your reasoning.

We agree with the purpose of the Strategic Board and see there is scope for additional development, particularly around conflict resolution. Our interpretation of the proposal is:

- The Working Group is where the detail of the data and RESP development and drafting takes place.
- The Strategic Board is an advisory and governance body to provide oversight and facilitate transparency. It is where NESO needs to prove that they have understood and have incorporated the regional aspirations into the regional plans and pathways. If there were to be a deviation, then NESO needs to explain why. There should be no detailed, technical review/assessment at this level, but it is up to NESO to explain how the plan was created and what assumptions went into it. Furthermore, if democratic representation is expected, membership of the Board may consist of elected (non-expert) members with officers briefing them and working groups carrying the responsibility to agree detailed inputs/recommendations.

Conflict resolution: Ofgem's proposal that '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' (para. 4.6) is a step in the right direction and this requirement should be codified in a licence condition. However, this only creates a 'light-touch' obligation for NESO, whereas there are no processes or mechanisms for stakeholders to challenge the RESP output.

The consultation states that there is no need for a conflict resolution mechanism (para 4.10). While the Strategic Board can be a collaborative forum for stakeholders to resolve intra-regional disagreements and co-shape the outputs of the Strategic board, the proposed arrangements do not foresee any avenues for regional stakeholders to challenge the RESPs. NESO will be making decisions from a whole-system perspective which will necessarily involve trade-offs between intra- and inter-regional interests, and for this reason, it is important for regional stakeholders to have avenues for reviewing/scrutinising the RESP output.

Board and Working Group interaction: The interaction between Strategic Boards and working groups needs further development. There is a developing assumption that working groups is where place-based evidence and data is gathered, and if that's the case, this needs to be clarified. There is risk that upper tiers of local government appointed to the Strategic Board do not have the knowledge/capacity to effectively represent the views from the hyper-local level across the RESP area.

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?

We agree with this proposal, and there should be more clarity on how democratic representation is defined. For example, is democratic representation expected to be formed from locally elected politicians nominated to sit on the board or will local authority officers (e.g. with an energy or net zero role) be able to represent.

We support Ofgem's proposal that 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 (para 4.16). We expect that transmission owners might also have a role to play on the Strategic Board which might be to gain insights and provide feedback loops in relation to other strategic plans.

Q12: How should actors (democratic, network, cross-sector) be best represented on the board? Please provide your reasoning, referring to each in turn.

We agree with the consultation document that there is a trade-off between maximising stakeholder participation in the Strategic Board whilst ensuring that the membership is lean and efficient. Striking the right-balance will be highly region-specific (e.g. some regions may have industrial clusters, some regions may be part of devolved governments etc) and so the composition of each Board may vary from region to region.

In relation to the three categories of actors:

- *Democratic actors*: The interaction between Strategic Boards and working groups needs further development as also mentioned in question 10. There is a developing assumption that working groups is where place-based evidence and data is gathered, and if that's the case, this needs to be clarified. There is risk that upper tiers of local government appointed to the Strategic Board do not have the knowledge/capacity to effectively represent the views from the hyper-local level across the RESP area.
- *Networks*: this may be a category where common rules may be established, as there are fewer region-specific differences to consider (compared to the other two categories of actors), and

a small number of TOs, DNOs and GDNs will operate in each RESP boundary. Ofgem's proposal (para. 4.16) that network companies be represented on the Strategic Board to 'provide technical oversight and review the implications of the RESP, especially in how it will impact network planning' is sensible. The document refers to "networks" or "network operators" without distinguishing between DNOs/DSOs. It is worth exploring whether Ofgem foresees a specific role for the DSO in the RESP framework.

- *Cross-sector*: arrangements for this category of actors is likely to be highly region-specific (e.g. energy-intensive industry in particular areas).

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

We do not have strong views about the delineation of regional boundaries and will work with either option. Under either of the two options, network companies will often have to engage with multiple NESO regional 'spokes' in the same licence area. For this reason, it is crucial to have streamlined and efficient processes for engagement and data/information sharing to minimise as much as possible the administrative burden and duplication of efforts.

We understand the SSEP will split the country into zones/regions, but this is yet to be confirmed as-and-when Government formally commissions the SSEP. We consider that, when this does happen, it may be most logical for the regions/zones in the SSEP to align to the RESP regions.

Q15: Do you agree a single region for Scotland is optimal? If you think a two-region 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).

We do not have a strong view regarding the regional boundaries for Scotland. We believe those directly affected by this decision are best suited to weigh in on this question.

Annex

Worked example #1: Discussion of where RESP can enhance investment decisions

The table below shows typical activities undertaken by DNOs that result in capacity being added to the distribution network. These are intended to facilitate discussion on whether these would be defined as anticipatory investment, strategic investment or otherwise.

#	Activity	Description	Typical cost/timescale (full lifecycle)	Trigger for investment decision
1	Asset replacement	Replace existing asset with the nearest modern equivalent size, which results in a capacity uplift	Considered like for like in terms of costs (factored into unit cost) Delivered in 1-2 years	Asset replacement programme
2		Replace existing asset with a larger size, as requirement for a larger asset in the future identified	Dependent on project, next size up roughly 20% more expensive than like for like Delivered in 1-2 years	
3	Secondary reinforcement	Replacing looped LV services/cut-out fuses based on projected uptake or notifications of LCTs in an area	<£10k per service < 3 months to replace	Based on LCT notifications or MPAN level projections
4		Uprating of distribution transformers and circuits based on projected LCT uptake and current utilisation	Transformer = £80k-£120k Circuit (per km) = £65k - £170k *(Unit cost)* Identification to delivery within a year	Periodic assessment of secondary networks including load projections for duration of price control, asset sizing based on longer term
5		Multiple projects brought together as a programme of works for area-wide upgrade (such as 6.6 kV to 11 kV conversion)	Dependent on scope of works (>£5M) Likely to take 2-5 years	Analysis using load projections at both primary and secondary and coordinated solution identified, with clear benefits from combining
6	Primary reinforcement	Uprating existing assets across primary networks based on load projections and current utilisation.	£1-10 million 1 – 5 years	Triggered through analysis using load projections, investment aimed at delivery in anticipation of projected need. Asset sizing based on longer term
7		Establish new substations/circuits across primary networks based on load projections and current utilisation, where multiple reasons for work brought together	£1-40 million 2 – 10 years	
8	New transmission capacity	Application by DNO to NESO for new transmission capacity at existing site	£10-100 million 4 – 10 years	Triggered through analysis using load projections and Grid Code data exchanges. Investment triggered by connection application by NGED to NESO
9		Application by DNO to NESO for new transmission capacity at new site, because of multiple drivers	£60-300 million 6 – 15 years	
10	Connections led reinforcement	Reinforcement triggered by connection applications, where customer is offered **Minimum Scheme** as per CCCM Schedule 22	Cost and timescales dependent on scale of works, reinforcement costs now heavily socialised	Triggered through connection applications, perceived highest level of certainty
11		Reinforcement triggered by connection applications, where customer is offered **Enhanced Scheme** as per CCCM Schedule 22	Cost and timescales dependent on scale of works, reinforcement costs now heavily socialised	Overlap identified between primary reinforcement plan and connections led reinforcement

The table demonstrates that there is a wide spectrum of activity undertaken by network which results in capacity being released across the network. Of those, we have outlined below the areas which we believe could be enhanced by input from Regional Energy Strategic Plans. These are driven by the following factors:

- Nature of the work to be undertaken, by identifying a solution to solve multiple constraints or sizing new assets based on long-term projection of load growth.
- Where input is required by multiple licensees to identify the optimal solution.

5: Secondary reinforcement (significant programme of works)

We expect RESP to inform our network planning which, in turn, helps identify reinforcement across secondary networks. Much of the investment will be done on an incremental basis for specific assets. However, there could be some schemes identified which are strategic in nature. An example of this would be city-wide uprating of a network operating at 6.6 kV to 11 kV to release capacity for future load growth, which could be triggered by upstream constraints on the primary networks.[9] Such works may be unsuitable for funding through the same volume driver mechanism as currently used in RIIO-ED2.

We envisage that the RESP could provide additional assurance of the needs case for anything identified in DNO plans as a coordinated and efficient investment and the views of relevant stakeholders impacted by the plans.

The following two examples demonstrate where we believe NESO can bring the whole system principle to life (paragraph 2.8 of the consultation).

7: Primary reinforcement (extensive new build)

Primary reinforcement covers a very wide range of activities; however, the establishment of significant new substations and circuits could be considered strategic due to the amount of external engagement and capacity released by such solutions. An example of this would be the establishment of a new Bulk Supply Point (132/33 kV) substation with associated circuits.[10] The location of the new site should be chosen aligned to the spatial view of load growth and demonstrate it meets the current and future needs of customers.

We envisage that the RESP could convene discussions between multiple network license holders. This could provide additional assurance of the needs case for anything identified in DNO plans as a coordinated and efficient investment across the whole energy system.

9: New transmission capacity (extensive new build for distribution customers)

The electricity Transmission/Distribution interface is an area where RESP could add value by ensuring the SSEP and the RESP is aligned and to provide assurance to Ofgem given the highly strategic nature of the work and requirement for whole system engagement. An example of this would be the location of a new Grid Supply Point substation driven by the long-term demand requirements of customers[11].

[9] See constraint 3.2 Salutation primary transformer and circuit overload in The Leicester Group Network Development Report as part of the 2024 Network Development Plan publication.(https://www.nationalgrid.co.uk/downloads-view-reciteme/662715)

[10] See constraint 4.6 Combined Reinforcement Strategy (Briton Ferry and Tir John groups) of the Briton Ferry & Tir John Network Development Report as part of the 2024 Network Development Plan publication https://www.nationalgrid.co.uk/downloads-view-reciteme/662727

[11] See constraint 2.11 Stanton / Heanor N-2 in the Willington 132 kV Network Development Report as part of the 2024 Network Development Plan publication https://www.nationalgrid.co.uk/downloads-view-reciteme/662715

The location of such a substation should be considered with reference to the transmission and distribution assets required to establish the new substation.

Specifically, NESO could convene discussions between different licensees where a cost benefit analysis between solutions needs to be carried out. NESO can ensure that the justification of need is aligned to RESP and SSEP for a given proposal and ensure that each licensee has considered whole system has been sufficiently considered in any solutions.

For the examples given above, it may be beneficial to ringfence funding through the regulatory framework where active and specific NESO involvement provides the additional assurance of the needs case for specific high impact investments. This is something which needs to be considered further as part of the RIIO-ED3 policy development.