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Siemens Response to Ofgem's Regional Energy Strategic Plan Policy Framework Consultation

Consultation response – 08/10/2024

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About Siemens in the UK

Siemens is a technology company, helping our customers to decarbonise and digitalise the industries that form the backbone of our economies – industry, infrastructure, transport, and healthcare.

One of our businesses, Smart Infrastructure, intelligently connects energy systems, buildings and industries to adapt and evolve the way we live and work. Our energy infrastructure offering spans products, services, solutions, software and energy system consulting with a strong presence with customers across electricity distribution and transmission, industry, healthcare, utilities and the built environment.

We have a long-standing and significant footprint in the UK, with a range of manufacturing and service facilities here, with more than 11,000 GB&I employees and more than 600 apprentices, graduates and interns across our businesses.

We are on track to become Net Zero in our own operations by 2030, and are committed to a science-based reduction pathway along our entire value chain.

We are responding to this consultation in our position as a leading expert in UK energy infrastructure, with a long and ongoing record of providing innovative and world-leading technologies to customers across the energy sector.

CHAPTER 2 – LAYING THE RESP FOUNDATIONS

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.

We are supportive of the principles to guide NESO's approach to developing the RESP methodology. By embedding the principles of place-based energy planning at a regional level, the RESP methodology will ensure the future energy system is developed and deployed in a way that:

- adopts a whole system approach across energy sources and incorporates additional needs from transport, industry and housing for the local area
- enables proactive development of, and investment in, network infrastructure, ahead of need by taking a long-term vision-led approach
- can be adaptive in the face of uncertainty on future low carbon technology development

A vision-led, long-term, approach will ensure a degree of certainty, providing more stability and confidence for investment in energy projects and local supply-chains, in turn supporting job growth. As acknowledged in Section 3, this must however be balanced with short and medium term pathways and progress reviews to ensure that the long-term vision remains appropriate and that, for example, any new technologies that emerge can be incorporated where they are more cost effective.

CHAPTER 3 – KEY BUILDING BLOCKS OF THE RESP

Strategic direction setting – modelling supply and demand

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.

Yes, including a long-term regional vision can help with setting a clear regional strategy based on the challenges and needs of the region. However, many regions in the UK already have ambitious Net Zero Targets that are ahead of the National 2050 target, and consideration should be given to how these timelines and targets interact with one another as part of the RESPs.

We are supportive of adopting a 5-10 year horizon for the short-term pathways and as this will provide additional confidence for investors by setting a clear direction based on modelling supply and demand and identifying system need. Aligning the short-term and long-term pathways and refreshing them on a regular basis will enable assessment across various future scenarios and should ensure that short-term actions don't prematurely limit future opportunities.

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 that there should be annual data refresh and that it will be beneficial to align the three year update cycle with the CSNP's whole system assessment to avoid creating an unnecessary "disconnect" and that this will support the overall structure/objective of the SSEP, the CSNP and the RESPs.

We would suggest that more clarity is required on which data inputs would be included in the annual refresh and the full RESP update, respectively.

Strategic direction setting – identifying system need

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

Providing consistent assumptions

We agree there is a need for the central hub to provide a set of common assumptions that can be consistently used across all regions to act as a baseline and to create a common level of understanding of the impact of, for example, emerging low carbon technologies and the growth of flexibility offerings. This, in turn, will support coherent network planning across different regions. It is important that these assumptions are developed in a transparent manner and that they are refreshed in a timely fashion to reflect the latest innovations, research and technological developments.

Setting out spatial view

We agree that developing a spatial view of overall system need for each RESP is crucial to identifying areas of constraint that need to be addressed. Further, by integrating a whole system approach, future demand from sectors such as transportation, housing and industry can be incorporated and modelled. Clear definition of the roles and responsibilities for RESPs and Network Companies should be provided by Ofgem and NESO regarding the expected granularity of network analyses to ensure planning is appropriately coordinated and aligned.

Informing strategic network investment

We support the objective of identifying and informing strategic network investment as part of the function of a RESP. By ensuring that network investments are identified that reflect the future, longer-term, needs of the regional pathway it will reduce this risk of taking short-term actions that may risk suboptimal investment over the fullness of time.

Technical coordination

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

Yes, as referenced in points 3.37 and 3.38, due to the novel nature of the RESPs and NESO, there are not currently existing formal processes for considering whole system benefits as they have not been previously required. By providing NESO a technical coordination role, it can ensure that whole-system, cross-vector, solutions are considered in a consistent manner and that optimal outcomes can be achieved from both decarbonisation and cost perspectives.

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?

As laid out in responses to questions 1-5, we are supportive of the overall structure of the building blocks and are keen to see more detail and clarity of the different elements and definition of roles and responsibilities.

Inputs to the RESP – Data Sources

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

Yes, the data inputs listed will provide a reasonable framework for developing a robust whole-system understanding of both the current regional energy infrastructure and the future regional energy needs. As touched on in point 3.47, it is important to acknowledge that not all relevant stakeholders currently have detailed data for *all* of the inputs listed and there will be varying degrees of data quality within, and across, regions. Nor will they necessarily have them available in time for the proposed publication date of the first RESPs. Therefore, as part of the “Identifying System Need” building block, NESO should establish common assumptions that can be applied to RESPs where required due to either a lack of existing data or inconsistent/low-quality data.

We would further advocate for the creation of a live, intelligent, energy system data sharing infrastructure, in line with recommendations and commitments included in the Government response to the energy system ‘digital spine’ feasibility study, published in August 2024. We believe such a system would unlock barriers to innovation and investment that are exacerbated by the current siloing, and lack of consistency, of data and would support the RESP and NESO objectives of accelerating the transition to net zero. We look forward to engaging with relevant stakeholders as part of the upcoming consultations on this topic.

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

Firstly, we would agree with the statement “...it is reasonable that the level of credibility required could be higher for inputs into the short-term pathway than the long-term pathways” (3.52) – and would reiterate the importance of regular data refreshes to improve and increase longer-term credibility over time.

Secondly, we support the objective for further engagement between Ofgem, NESO and wider stakeholders to define the criteria for assessing confidence in inputs.

Inputs to the RESP – Place-based engagement and local support

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

Yes, ensuring a standard framework of tools and process is developed to support local actors is key to ensuring consistency and coherence across local, regional and national plans. Further, it will support the development, and ongoing improvement, of the RESP by ensuring data consistency.

CHAPTER 4 – REGIONAL GOVERNANCE

Purpose of the Strategic Board

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

The stated purpose of the Strategic Board is “to provide a forum for collaboration, navigating trade-offs and supporting whole system planning and ensuring the RESP reflects the regional context”. We are supportive of this purpose and believe it is an important part of the hub-spoke approach to ensure appropriate representation of regional needs to NESO in their role as final decision maker.

Representation and composition of the Strategic Board

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. It is important that the relevant democratic actors, network companies and wider cross-sector actors are represented in the Strategic Board to ensure that the RESP reflects the broad needs of its specific region. This should be inclusive of, amongst others, transport providers, local businesses, utilities, health and social bodies to ensure aggregation and maximisation of opportunities related to the RESP. We also believe that due consideration should be given to how large organisations with a national presence, that operate within and across multiple different regions, can engage with the development and implementation processes of RESPs – potentially through direct engagement with NESO and the Central Hub to avoid unnecessary duplication of engagement effort.

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 that the preference should be to follow the embedded model for governance infrastructure to bring together democratic and technical actors together on a single Strategic Board. Representation for cross-sector actors will need to be proportionate and adaptive to region-specific characteristics.

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