Energy UK response - NESO tRESP consultation
03/11/2025

About Energy UK

Energy UK is the trade association for the energy industry, representing companies investing billions of pounds to secure our country's current and future energy needs.

From growing start-ups to major electricity generators, grid and infrastructure developers, and energy suppliers, our members are driving change across power, heat, transport, and flexibility.

We provide a collective voice for the sector working with governments, regulators, charities and other organisations to provide crucial insight that shapes policy, offers solutions and promotes best practice.

Our broad view across the whole system supports evidence-based positions which are not tied to particular technologies, and are focused on delivering strategic benefits for people, businesses and the economy.

We champion initiatives such as our Vulnerability Commitment, which pushes suppliers to go beyond regulation to support customers with additional needs, and TIDE, the industry's drive for greater inclusion and diversity. Through our Young Energy Professionals Forum, we support the development of future leaders.
We are equally committed to our team and are proud to be recognised as a 'Gold' Investors in People employer.

Executive Summary

Energy UK welcomes NESO's consultation on the tRESP and the associated publication on the NESO website. The information is generally well-presented, though minor technical issues on the webpage and opportunities for greater data depth and interactivity remain.

Energy UK highlights the need for enhanced regional data on major consumers (e.g., data centres), flexibility uptake, and the ability to cross-compare datasets such as heat pump adoption and fuel poverty. Consistency across regional content, particularly regarding district heating projects, is encouraged, alongside inclusion of cross-region dependencies and cost projections to enable informed policymaking and investment decisions.

On methodology, Energy UK supports NESO's baseline and pathway approach but calls for greater clarity on how pathways, Strategic Investment (SI) Needs, and

regional contexts interrelate. NESO should incorporate anc clearly signpost sensitivities in the tRESP pathways and "decision moments" to manage uncertainty around electrification and technology adoption.

Energy UK urges NESO to integrate local and third-party data sources to prevent under- or over-investment risks and to ensure robust evidence for RIIO-ED3 planning. The definitions and scope of Common Planning Assumptions (CPAs) are broadly fit for purpose, though flexibility for adjustments is essential.

Finally, the concept of SI Needs is supported, but Energy UK requests clearer definitions, examples, and alignment with DESNZ's emerging Strategic Demand framework. Including cost estimates and ensuring data coordination across NESO and government bodies will be critical for transparency, stakeholder engagement, and informed decision-making.

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Consultation response

1. **Are the Nations and Regions Contexts accessible, clear and easy to interpret? What improvements would you like to see?**

The information provided on the Nations and Contexts webpage provides a useful overview of several key variables that will feed into the tRESP and RIIO-ED3 and presents them in an easily digestible manner.

It is worth noting that there are, at the time of writing, some technical faults on the page, namely, maps/graphs not appearing as one scrolls down the page.

Energy UK would welcome further information in each of the regions, including:

- Further data on the expected rollout of key consumers, such as data centres and other industrial users in each region. This is data that NESO, in coordination with the Transmission Operators (TOs) and Distribution Network Operators (DNOs), should be working to obtain and make publicly available as part of the spatial planning process.
- The expected impact of flexibility uptake in the regions from demand-side response (DSR) and increased flexibility market participation. We understand that these will be embedded in the Consistent Planning Assumptions but should be made visibly clear in the projections provided in the Nations and Context webpage.
- A feature allowing users to compare, contrast and analyse the data presented in an easy manner, such as the expected overlap of heat pump uptake with the regional data on fuel poverty.

2. **How well do the Nations and Regions Contexts reflect your understanding of your nation or region?**

N/A

3. **Do you agree with the elements and topics included in the Nations and Regions Context and is there anything missing that you would have expected to see?**

Energy UK agrees that the important core elements have been included in the Nations and Regions Context pages.

We note the inconsistent inclusion of planned and operational large scale district heating networks, with projects in Wales, the East Midlands and other areas

highlighted, but not in Scotland, which relies on a broader overview. Examples of planned and operational district heating would bring this in line with other regional contexts.

As stated in response to question 1, more information on the level and impact of the expected flexibility uptake and more granular information on the expected demand from strategic demand sources like data centres would be welcome.

More information on cross-RESP region interactions and dependencies across the three Future Energy Scenarios (FESs) would have also been welcome.

4. How do you envisage using the Nations and Regions Context(s)?

Energy UK will use it to evaluate the development of the RIIO-ED3 process and as a database to inform policy positions and proposals to policymakers regarding regional issues.

Transmission Operators might use the Nations and Regions Contexts for setting the scene for whole system conversations between us and regional stakeholders.

5. Do you have any feedback on the data selected for the specific topics included for the Nations and Regions Contexts?

Energy UK appreciates the reasoning why certain local actors were excluded due to the need for robust and standardised data. While recognising the time constraints NESO are under to deliver the tRESP can make sufficient scrutiny and cleaning of third-party data difficult, there is more that can be done in this space. Key data on levels of local low-carbon technology (LCT) rollout and consumption, industrial consumption, and flexibility pathways have effectively been excluded by taking this approach.

The potential for incomplete data informing ED3 and subsequently causing over- or under-delivery of network assets or, at a minimum, delays to powering of key energy assets, is substantial. Energy UK strongly encourages NESO to integrate inputs from local and other third-party actors as the tRESP develops, and certainly as part of the development of the full RESP.

Further, it would be good to understand further how NESO plans to leverage the tRESP (expected Jan 2026) in NESO's first SSEP (expected end 2026) given that, in the long term, these strategic plans are supposed to interplay.

6. Do you have any feedback on how the data was presented visually?

The data on the webpage is generally presented in an easily accessible, intelligible and intuitive manner.

As stated in response to Question 1, at present, there do appear to be some faults on the pages that result in graphs and maps not being displayed.

7. What additional data do you think we should be considering either for tRESP or full RESP?

In addition to the additional data suggestions made in response to Questions 1 and 3, presentation of the estimated total cost for each of the regional pathways, in collaboration with cost data provided by DESNZ, is essential for policymakers and stakeholders to make informed opinions about the pathways and which best serve each region's interests.

Cost estimates should make sure they accurately reflect the scale of opportunity of private finance based on commercial readiness of different technologies and expected price levels. Commercial stakeholders should have the opportunity to input into these before they are confirmed.

8. The purpose of the tRESP Pathways is to drive consistency across DNO forecasting, as part of their business plans for 2028-2033 (ED3). Are the steps we are taking to drive consistency, via the baselining and alignment, clear and proportionate? Are the set of tRESP building blocks and the approach to creating Pathways fit for purpose?

A consistent, baseline short-term and set of long-term pathways to inform tRESP and ED3 is sensible.

Nonetheless, NESO needs to be far clearer on how the pathways, Strategic Investment (SI) Needs and National/Regional Contexts interact when informing the final tRESP.

NESO must also go further when designing the tRESP pathways and how they will inform network plans ahead of RIIO-ED3. There remains a myriad of short-term and long-term uncertainties with the level and pace of electrification in the regions and how final technology mixes will look. This level of uncertainty at present is understandable, but it demands more clarity for wider stakeholders on how the plans might evolve in differing scenarios at key junctures and thus how network operators might forward plan.

Given current uptake rates of LCTs like heat pumps, adhering to projections from FES sources may lead to inefficient investment outcomes from DNOs. We want to understand further how NESO will consider this issue as part of tRESP/RESP.

A single baseline for the core electricity assets the system will need with a high degree is sensible. NESO must integrate key sensitivities and uncertainties in the model and the key 'decision moments' that emerge from them. This might include key policy decisions that may have a large impact on a local area, a key bit of reinforcement that may be needed by a date depending on the pace of electrification by time the date arrives or further information emerging regarding the investment decision for a key industrial asset and subsequently, the need for reinforcement. We would welcome a view from NESO on the range of sensitivities it will test. An adaptable model is key for business certainty and the securing of supply chain slots, both for network and non-network energy businesses.

9. **Will your organisation use the Pathways? If yes, which of the building blocks and for what purpose?**

Energy UK may use and refer to the pathways when formulating policy and advocacy positions for the region.

10. **Pathways will be published for each building block, down to Grid Supply Point feeding area, and for each RESP nation/region. What is your preferred format to receive the Pathways?**

A PDF and a manipulable Excel CSV format that is machine readable would be suitable.

11. **The objective of the tRESP CPAs is to drive consistency across DNO demand forecasting as an input to DNOs' network impact assessment to create their business plans for the ED3 period (2028-2033). Will your organisation use the tRESP CPAs for other purposes? If so, for what purpose? Is the format of the CPA value workbook usable for this purpose?**

Energy UK may examine the CPAs as a reference point for future modelling exercises when forming analysis for industry and formulating policy proposals.

12. **Are the definitions of the CPAs clear, as described in the tRESP methodology and detailed design document and the tRESP CPA value workbook?**

The definitions for CPA criteria and technology type/energy efficiency value definitions generally appear to be well considered.

13. **Based on the methodology, do you agree with the values established as tRESP CPAs in the value workbook? If not, are there any additional or alternative data sources which are more appropriate? Answers should refer to specific CPA numbers e.g. EV01 and adhere to these criteria:**
    - **Be based on a reliable source**
    - **Be relevant**
    - **Be up-to-date**
    - **Be location-specific**
    - **Consider changes through time, and**
    - **Consider weather and climate impact.**

N/A

14. **Do you agree with the scope and granularity of the assumptions in the CPA value workbook, considering the materiality and complexity of implementation of a more detailed or granular approach? If not, can you provide evidence to support the use of a more or less detailed or granular approach? See the value workbook for an overview and further detail of the scope and granularity of the tRESP CPAs.**

Given the current time and resource restrictions on NESO, the level of granularity for now appears to be appropriate, so long as DNOs are given sufficient leeway to modify the CPA assumptions based on their own and third-party data when using the tRESP to inform their RIIO-ED3 business plans. The modifications should be based on the CPA criteria outlined in the consultation.

15. **Do you feel that the definition and framing of Strategic Investment Need (SI Need) is clear?**

The definition of SI Needs would be made clearer by providing key examples to stakeholders of what types of developments would qualify as one. It is difficult to ensure a truly representative picture of SI Needs and encourage wide input from

stakeholders if they feel confused as to whether their project should be considered in the SI category or not.

16. **Are the emerging SI Need areas broadly aligned with the approach and framework we have set out, including the use of Strategic Value and Uncertainty as assessment criteria?**

The overall principle of the SI Need areas is clear and rightminded. NESO needs a pipeline of projects that will have significant implications for network delivery, that have varying degrees of certainty as to whether they will manifest. Projects that are not currently in the connections process with DNOs are a good start, but further clarification on what other projects would be classified as an SI Need is required. DESNZ, through its Connections Accelerator Service (CAS), uses the term 'Strategic Demand' and has pointed to using RESPs. It's not clear if Strategic Demand and SI Need are one in the same, and if they are, then clarity is needed on how RESPs will be adjusted following DENSZ decisions within its CAS. DESNZ and NESO must coordinate here so stakeholders can have clarity on this point.

We think that the cost of projects classified as SI need, as well as those included in the tRESP pathways, must be included in NESO's analysis, with supporting data from the Government if needed. This is essential for determining which the consumer value of the proposed investments

This is important so that stakeholders can confidently and accurately submit evidence to NESO as to whether their project qualifies as an SI Need.

17. **Does the combination of RESP area narratives, maps and hotspot descriptions provide a clear and helpful picture of where emerging needs are arising? Is the level of detail suitable for your purposes?**

The use of SI Need enables a degree of flexibility in the forward plans of DNOs, as these are key projects that may or may not manifest. However, a more concerted effort is needed by NESO to describe the interaction of the regional pathways, the area narratives and the SI Needs.

18. **What level of geographic detail would be most useful in future versions? For example:**
    - **Local authority boundaries**
    - **Project-level details**
    - **Place-based clusters or zones**
    - **GSP (Grid Supply Point) boundaries**

- **Thematic areas (e.g. heat networks, industrial clusters)**
- **Lower layer super output area / data zone**

Given the diversity of types of strategically needed projects, it would make sense in the future for details to be provided on a project-level, with the other suggested levels as categories for each SI Need.

19. **Do you see a role for these outputs in supporting local planning, infrastructure alignment, investment proposals?**

Energy UK sees SI Needs as an essential tool, not only in directly informing the tRESP, but also, crucially, as a tool to allow for an adaptable approach to building out the network and ensuring timely and efficient delivery of assets as uncertainties diminish and needs arise.

20. **Are there any locations you would expect to see identified as SI Need that are not currently being assessed? Please highlight these and, where possible, provide supporting information.**

N/A