

Public

transitional RESP (tRESP) executive summary

Written by Bridget Hartley, head of RESP

Our transitional Regional Energy Strategic Plan (tRESP) provides a consistent starting point across GB for Distribution Network Operators (DNOs) to build their network investment plans for the next electricity distribution price control, which runs from 2028 – 2033 (ED3). This work is crucial to align the DNO plans around a consistent, stakeholder informed, clear trajectory for the future needs of electricity distribution networks. tRESP outputs will help Ofgem's review of ED3 plans, allowing them to focus more on efficiency and performance. As part of tRESP, NESO has delivered a forecast of key drivers of electricity demand and supply out to 2050, underpinned by local inputs. Alongside this, we are recommending geographic areas where a strategic approach to investment is needed, including a subset that should be considered for investment ahead of need in ED3. Importantly, these outputs look beyond the ED3 period, enabling networks to build effectively and efficiently for the future.

Great Britain's energy system is transforming to meet our growing future energy needs. The pace of this transformation to date has been significant, but further changes are now needed to ensure our energy system is able to match the ambitions of local communities and achieve the priorities of the whole of GB. As the independent energy system strategic planner, NESO is at the heart of this change, working to deliver a secure, affordable, and clean energy system. For the first time we are planning the future energy needs of GB strategically at both a GB level, and across every nation and region.

With the responsibility for establishing an overarching strategic energy plan for GB, NESO is providing a strategic view on what energy we need, where we need it, and when. Our new Regional Energy Strategic Planning (RESP) role is a key part of this new approach. We will start to fully deliver our new RESP role from 2026 and will be producing nine English Regional Energy Strategic Plans and two national plans for Scotland and Wales, published by the end of 2028. These plans will convene stakeholders across the nations and regions around a whole-energy system view (including gas, hydrogen and heat networks) of how the energy system will develop to support local priorities and deliver GB-wide goals. By enabling coordination across multiple energy types, RESP will support confident and efficient investment in distribution network infrastructure to support economic growth and enable decarbonisation, whilst minimising costs to energy bill payers.

In advance of developing the full RESP and to start to make the shift to this new approach we have produced a transitional product known as tRESP. This is a first-of-a-kind, intended to support the

Public

upcoming electricity distribution network operator (DNO) investment planning for 2028-2033 (known as ED3), through Ofgem's price control process. Ofgem asked NESO to deliver the tRESP, during 2025/26:

"A transitional RESP output by January 2026 that aims to deliver as much benefit as is practicable to support the ED3 price controls setting process while the RESP function develops to full capability".

To meet price control timelines tRESP has been developed at pace. For this to happen, we have worked closely with Ofgem to determine the scope and approach for tRESP, with Ofgem publishing an open letter on tRESP scope in February 2025.¹ NESO then provided further detail in its response in March.²

At this point, the scope was set as:

- an initial view of the energy landscape and priorities for each nation and region.
- modelled short and long-term whole energy pathways describing future supply and demand to Grid Supply Point area level and to RESP nation/region, including consistent planning assumptions for use by DNOs.
- identification of areas of strategic investment need (areas which merit investment ahead of need).

tRESP pulls together a set of consistent inputs across GB to inform the DNOs business planning work for ED3. Given the ambitious intent of tRESP and delivery through a new RESP team, we have worked closely and iteratively with our stakeholders over the development of tRESP, to ensure tRESP is both value adding and deliverable in the timescales. We have engaged over 2,800 people through our RESP forums, which have taken place once a quarter in each RESP nation and region.

The scope of tRESP has evolved through discussions with Ofgem as we've developed our approach. This has been driven by the need to prioritise the value of what could be delivered while remaining on track to meet the regulatory timetable set by Ofgem for the ED3 price control. We have adapted to a fast-moving policy environment, to ensure our output reflects the latest changes and remain as accurate as possible. In addition to using the latest Future Energy Scenarios, FES 2025,³ we collaborated with the DNOs and gathered insights from their latest Distribution Future Energy Scenarios (DFES) and ran an exercise this November to capture more up to date DNO inputs. This has ensured consideration is given to how connections reform and the UK Government's Clean Power 2030 targets may impact our Pathways. We also note the very recent publication of the Warm Homes Plan by DESNZ⁴, which sets an ambition to deliver 450,000 heat pump installations per year by 2030. Our Pathways forecast 560,000 heat pump installations per year by 2030 in the

¹ [Scope of the transitional Regional Energy Strategic Plan, Ofgem, February 2025](#)

² [Open Letter regarding the scope of the transitional Regional Energy Strategic Plan, NESO, March 2025](#)

³ [Future Energy Scenarios \(FES\) | National Energy System Operator](#)

⁴ [Warm Homes Plan - GOV.UK](#)

Public

context of 29million homes in the GB. The tRESP Pathways will therefore help ensure that the necessary network capacity is in place to enable the Warm Homes Plan's ambition and with sufficient additional network capacity. This is also consistent with the Warm Homes Plan ambition that 'network companies must be ready to support rapid, low-hassle installation of new technologies.'

Our outputs

Our final outputs for tRESP are our description of the energy landscape in each nation and region (now called Nations and Regions Context), our energy Pathways and Consistent Planning Assumptions and our assessment of Strategic Energy Needs. This information is presented in a digital format for each nation and region, enabling readers to access the information most relevant to them, at various levels of detail.

Our digital output for **Nations and Regions Context** provides a consistent view across key energy topics relevant to electricity distribution network planning for each nation and region. It does so by bringing together data on key indicators, such as heat pump installation data, industrial zones and clusters, alongside consideration of local ambitions and national priorities such as the UK Governments Clean Power 2030 targets and connection reform. You can view your nations or regions context here.⁵

Our **Pathways and Consistent Planning Assumptions** set a consistent, strategic direction from which electricity DNOs will plan their networks. They have been refocused from a whole energy system approach to those areas of electricity demand and supply that are forecast to change most in the coming years and hence have most impact on electricity distribution network investment. For our output we have created a short-term pathway for each Grid Supply Point area in GB running from 2025 – 2035, as well as three long-term pathways running from 2035 – 2050. Our Pathways are developed at a grid supply point level, which allows us to break down the electricity distribution system across GB based upon areas which share the same connection point to the higher voltage electricity transmission network. Our Pathways have been reviewed to ensure they are consistent with delivery against carbon budgets and recent Gate 2 connection reform outcomes⁶ aligning to the UK Government's Clean Power 2030 Action Plan.⁷ Our Pathways give a clear trajectory of the supply and demand changes across GB that will be required to meet environmental ambitions of the UK, Scottish and Welsh Governments. They indicate network plans should in 2036 reflect serving 28m EVs, 8m domestic heat pumps, and 1.7m domestic customers supplied by heat-pump supplied heat networks. The tRESP Pathways also indicate the DNO networks will need to accommodate 95 GW of additional generation and storage over the next ten years. You can view these pathways as visualisations here.⁸

⁵ [Nations and Regions Context Digital Output](#)

⁶ [Connections Reform Results | National Energy System Operator](#)

⁷ [UK Government's Clean Power Action Plan](#)

⁸ [Pathways Digital Output](#)

Public

Strategic Energy Need maps out geographic areas where we have identified there is a strategic approach required to electricity network investment, ahead of certain need. This contains a subset of needs, which we suggest should be considered for proactive investment by DNOs in the ED3 price control. Our view has been informed through our external stakeholder engagement, when in summer 2025 over 400 organisations submitted evidence to help us understand strategic energy needs following a NESO request for information. This information has been assessed and assurance checks undertaken to ensure no double counts of demand between our Pathways and Strategic Energy Need outputs. Those projects that are early stage of development and therefore were not yet assessed to require consideration for proactive network investment will form the basis of our in-development register for full RESP. You can find out what this means for your nation or region by viewing our digital output here.⁹

We expect our tRESP (and future RESP) outputs to inform strategic investment projects on DNO networks, to help ensure distribution networks are there in time to meet future demands. Strategic investment projects would typically take a number of years to plan and deliver. This doesn't affect existing processes run by the DNOs, and customers should still follow the connection process

Next Steps

Throughout tRESP we have worked collaboratively with the DNOs and Ofgem to ensure our outputs can be used effectively in the ED3 process. DNOs will publish their ED3 Business Plans by the end of this year. These will be developed in-line with Ofgem guidance and tRESP will be a key input into DNOs developing their business plans. This marks a significant step forward in driving consistency and clarity across DNOs, therefore helping to drive proactive investment ahead of need.

Following the submission of the ED3 business plans NESO will have a role in providing assurance to Ofgem that tRESP outputs have been used by DNOs appropriately. We also expect to continue to work with DNOs and Ofgem as the Strategic Energy Need investment proposals are developed further to ensure that we understand how these plans will inform the future full RESPs.

Delivering tRESP has been a truly collaborative piece of work, which would not have been possible without the timely input and constructive feedback provided by both Ofgem and DNOs as well as wider input from local stakeholders. Through this collaborative approach, we have delivered a step forward in consistent electricity distribution network planning and enabling proactive investment ahead of need in these critical networks. We will apply this invaluable practical experience to the development of our full RESP. The approach and the process we've been through for tRESP is already informing the development of the full RESP methodology and our delivery approach. We plan to publish our approved RESP methodology in summer 2026 setting out our approach for the full RESP, with delivery of the full RESPs by the end of 2028.

⁹ [Strategic Energy Need Digital Output](#)