ESNZ Committee – National policy statements – consultation response

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The IET is a trusted adviser of independent, impartial, evidence-based engineering and technology expertise. We are a registered charity and one of the world's leading professional societies for the engineering and technology community with over 155,000 members worldwide in 148 countries. Our strength is in working collaboratively with government, industry and academia to engineer solutions for our greatest societal challenges. We believe that professional guidance, especially in matters relating to sustainability, is critical to good policy making. For further details on the evidence submitted, please contact policy@theiet.org.

Technical challenges

The IET welcomes the opportunity to contribute to this consultation. We note that the primary focus of the consultation is on the planning approval challenges associated with the delivery of new infrastructure.

Although the planning approval process has been identified as a key obstacle to implementing the transition to net zero, our areas of expertise (and also our concerns) lie more with the technical and systems-level challenges involved in delivering a decarbonised electricity system by 2030. Therefore, the feedback provided here is focused on these areas. The UK electricity system is undergoing rapid transformation to accommodate higher demand and significantly greater levels of renewable generation, as envisaged in the Government's Clean Power 2030 plan. There may be an increase in the risk of system failures occurring as the electricity system rapidly transforms. Government should be aware of this and support efforts to address the risks identified by NESO in their advice on Clean Power 2030 and Operability Strategy Report.

These developments will place unprecedented demands on the resilience, flexibility, and coordination of the electricity system. These challenges are compounded by the broader context of geopolitical instability, economic volatility, and increasingly unpredictable climatic conditions—all of which further underscore the need for resilient and adaptive energy systems. It is the Government's stated priority to deliver a long term robust and resilient system that delivers cleaner and cheaper energy to the public by 2030 and beyond. The IET can offer expertise, advice and support to help enhance the probability that the Government's stated objectives and priority outcomes will be achieved in practice.

In this context, we can offer input around implementation from both a technical and whole energy system perspective. Specifically, we see benefit in identifying any potential gaps or areas of concern—such as where insufficient information may limit confidence in the adequacy of current planning. This highlights the critical importance of adopting robust and holistic whole system planning methodologies that integrate all elements of the energy system.

We therefore urge the committee to consider how government departments and regulatory bodies—including DESNZ, NESO, Ofgem, and Mission Control—can work together in a coherent and coordinated manner to manage system-wide risks and ensure delivery.

The IET would be pleased to support the committee in further exploring these issues and contributing technical expertise where relevant in their future projects and we hope that the Committee will reflect these points back to the Government in their response to the Government's call for evidence.

The Institution of Engineering and Technology

Gaps in Government thinking and ensuring coherence across planning frameworks

For the proposed changes to the National Policy Statements to deliver the most benefits, the Committee should engage with prospective developers and planning authorities to understand whether the proposed updates are proving helpful in practice—particularly in the preparation and assessment of future applications for new generation, energy storage, and electricity transmission infrastructure. The updates themselves are a welcome step, as they place specific weighting on the Centralised Strategic Network Plan (CSNP), which should assist in streamlining and potentially accelerating the delivery of clean power. However, greater attention is required in clarifying planning policy in relation to smaller-scale onshore wind and solar generation projects (under 100MW), as well as battery energy storage systems and the associated electricity distribution infrastructure. This is particularly relevant in England and Wales, where much of this infrastructure will be located. These distributed projects are expected to play a critical role in decarbonising the grid, and their timely delivery will be essential. To this end, the forthcoming Regional Energy Spatial Planning (RESP) process would benefit significantly from the support of clear and consistent national policy statements that address these smaller projects/technologies directly. At present the RESP process which has been presented by NESO does not reference or clarify how this process might interface with the recently created National Infrastructure and Service Transformation Authority (NISTA) body and the CSNP.

Furthermore, we emphasise the importance of ensuring a clear and coherent relationship between the various planning frameworks and national strategies. Specifically, the interdependencies between the National Policy Statements (NPS) for energy infrastructure, the Strategic Spatial Energy Plan (SSEP), and the CSNP should be articulated in a transparent and integrated manner. This will be essential to reduce regulatory complexity and facilitate informed, coordinated decision-making across the planning and delivery landscape. Additionally, the interaction between the NPS and other emerging government policies that directly influence energy infrastructure and spatial planning—such as the proposed Planning and Infrastructure Bill and the forthcoming Land Use Framework—should also be carefully considered. Ensuring alignment between these instruments will be vital to delivering infrastructure at the scale, pace, and geographic distribution required to meet net zero commitments.

In addition to the issues raised above, there is an urgent need to broaden the current focus on electricity to adopt a more comprehensive, whole energy system approach to planning. Both the transitional Regional Energy Spatial Planning (tRESP) process and the CP2030 Action Plan concentrate primarily on electricity. While the CP2030 Action Plan does acknowledge the need for complementary technologies—stating that “where renewables alone are unable to meet demand for longer periods, we will enable a suite of technologies to be deployed and maintained to provide longer-duration power capacity,” including pumped hydro storage, low carbon dispatchable generation such as gas with carbon capture, hydrogen-to-power (H2P), and innovative solutions like liquid air energy storage (LAES)—there remains a lack of integrated planning across the broader energy landscape.

This narrow focus is insufficient given that UK industry has committed to significant interim emissions reductions between 2030 and 2035, which will require not only electrification, but also hydrogen fuel switching and widespread deployment of carbon capture technologies. At the same time, the electricity system will depend on the development of large-scale, long-duration storage capacity to maintain operability as renewable penetration increases. Hydrogen production from excess renewable electricity could offer a vital off-take route, particularly if aligned with industrial demand. However, without an established infrastructure

to absorb and distribute this surplus energy, valuable clean electricity may go unused. The current target of 27GW of battery storage—much of it limited to three to four hours of discharge—is far from sufficient to replicate the energy buffering function currently provided by the UK's gas network. While power generation with carbon capture, utilisation and storage (Power CCUS) can offer vital dispatchable capacity to fill gaps in generation, it does not address the equally pressing challenge of managing oversupply and overcapacity during periods of high renewable output. To ensure the electricity system remains both efficient and resilient, planning efforts must give greater attention to whole-system balancing strategies, including long-duration storage, hydrogen infrastructure, and demand-side integration across sectors.

If these interrelated issues are deferred, addressed in isolation, or rushed through ahead of the 2030 target there is a serious risk of misalignment and inefficiency in infrastructure delivery. It is therefore critical that these considerations are brought into the energy planning framework now—rather than postponed—so that the UK can develop a truly holistic and resilient energy system fit for 2030, 2040, 2050 and beyond.

Gaps in policy clarity for renewable energy projects

The Government's *Clean Power 2030 Action Plan* sets very ambitious timelines for planning approvals, stating that most new electricity transmission and offshore wind projects must secure consent by 2026, and most large-scale onshore renewable projects by 2028, in order to remain on track for delivery. These timelines are critically important, yet there remain notable gaps in the supporting policy framework that could hinder their achievement.

While the current 2023 version of the National Policy Statement (NPS) did not include a dedicated section on onshore wind, the 2025 draft (Section 2.12, p.116) now explicitly states that "onshore wind projects over 100MW are now considered Nationally Significant Infrastructure Projects (NSIPs) and are included within the scope of this NPS." This represents a step forward in policy recognition; however, it remains highly restrictive in its scope. Projects under 100MW—which may be community energy projects funded via the £1bn budget that the Government has allocated via GB Energy—remain outside the NSIP regime, with limited national guidance on how they should be treated under the planning system. Given the scale of deployment required, greater clarity and support for sub-100MW projects is essential.

Similarly, with regard to offshore wind, the 2025 draft (Section 2.8, p.33) states only that "the government expects that offshore wind (including floating wind) will play a significant role in meeting demand and decarbonising the energy system," with a stated ambition of deploying up to 50GW of offshore wind capacity, including 5GW of floating wind, by 2030. While these targets are welcome and consistent with CP2030 ambitions, the absence of detailed planning or consenting guidance is concerning. Without clearer frameworks for delivery—especially around location, grid connection, and environmental constraints—there is a risk that these ambitions will be delayed or undermined.

We encourage the Committee to consider how these areas of policy can be strengthened, with more explicit and practical guidance to support the timely planning and deployment of both onshore and offshore renewable energy infrastructure.