

## Open letter to industry on DER Participation in NESO Reactive Power Markets

6 July 2026

Dear all,

### Executive Summary

In 2022, the Future Reactive Power Market Design [innovation project](#) included a [report](#) on distributed-energy resources (DERs<sup>1</sup>). This report highlighted the potential routes to market for the provision of reactive power services on the transmission network alongside possible barriers.

The report identified that whilst there is additional reactive power capacity embedded in the distribution networks, further work would be required to assess the efficacy of their contributions to the transmission network; and by extension whether or not DERs and DNO/DSOs should participate in NESO Reactive Power Markets.

This open letter to industry provides an update on the further work that has now been carried out, our decision and next steps.

### Background information

NESO are required to manage voltage on the transmission system and at the distribution interface within the limits defined in the Security and Quality of Supply Standard (SQSS). When maintaining these limits under conditions of low transmission system demand, we experience added challenges around high levels of embedded generation and reduced availability of reactive power assets. We continue to see significant changes across the system: increasing renewable and embedded generation, shifting demand patterns, new network assets, and planned/un-planned outages of existing generation and network assets.

Over the past decade, the rapid expansion of the distribution network (including the increased adoption of DERs, greater cable penetration in distribution networks and changes in consumer load) have led to a significant reduction in reactive power demand within distribution systems, making it increasingly difficult and costly for NESO to maintain regional system voltages within SQSS limits. As demand has dropped, traditionally heavy populated areas lack assets with reactive power capability that can respond to the change of conditions.

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<sup>1</sup> By DER we mean providers connected through the distribution networks, typically at 132kV or below in England and Wales, and below 132kV in Scotland, including embedded Grid Code Users with a BEGA, BELLA and Licence Exemptible Embedded Medium Power Station (LEEMPS). These generators have embedded connection agreements with the relevant DNO which have additional technical conditions and parameters. Any access to these assets through their Connections Agreement with the DNO is not impacted by this decision, however users with a BEGA, BELLA or LEEMPS will not be eligible to participate in NESO commercial reactive power markets as they fall under the definition of DER. The position in the open letter does not impact ORPS obligations for embedded Grid Code Users with a BEGA, BELLA and LEEMPS.

Ahead of real time, reactive power is primarily secured via network assets (such as shunt reactors) and as the by-product of the active power of generators who have self-dispatched in the wholesale market.

At times these routes are insufficient and therefore we must instruct and pay, assets via the Balancing Mechanism (BM). There are two payments associated with this. The first is the Obligatory Reactive Power Service (ORPS) which is the pre-determined price paid to generators providing reactive power. The second is for the change in active power that some assets may be required to make to enable them to provide the reactive power required. This means that we procure significant volumes of surplus active power via BM offers and balance this increase elsewhere in the system via BM bids, causing a significant rise in operational expenditure (in some cases circa £1m per day). As demand has dropped, traditionally heavy populated areas lack assets with reactive power capability that can respond to the change of conditions.

For further detail please see the [Operability Strategy Report](#) (OSR) voltage chapter.

### Update

At this time NESO will not allow DERs and DNO/DSOs to participate in NESO Reactive Power Markets, with the reasoning behind this decision explained in this letter. We will keep this decision under review and welcome further views from stakeholders.

Reactive power issues observed at the transmission level are driven by actions taken on both the transmission and distribution networks, and increasingly so from how distribution networks are designed and managed. There are significant concerns with allowing DERs and DNO/DSOs to participate in NESO Reactive Power markets and receiving payment for reactive power services on the Transmission Network. We see these as avoidable costs that require addressing at source through Codes and policy, rather than through costly actions in the BM.

This approach is consistent with the direction of regulation. Ofgem's ED3 Sector Specific Methodology [Decision](#) will introduce voltage management as a new responsibility of the DSO role. [NESO's response](#) to the ED3 consultation supports Ofgem's decision that DNO/DSOs should manage reactive power and voltage on their own network. Improved voltage control capability from DNO/DSOs will reduce the Transmission System impact, improving overall system security and helping support our continued drive to reduce consumer costs. We will continue to work with Ofgem and the DNO/DSOs to ensure the observed issues are resolved at source, to support solutions that address the root causes of these issues and ultimately deliver the best outcome for consumers.

### Our vision for the future of distributed energy in Great Britain

NESO is developing a longer-term vision for improving visibility of and access to distributed energy resources across the GB system. As the volume of DERs increases, enhanced visibility, coordinated access arrangements and clearer operational interfaces between distribution and transmission networks will be important to support efficient system operation.



Work on the [DER and CER<sup>2</sup> Visibility and Access Roadmap](#) is being progressed in collaboration with industry. While this work does not change NESO's position on DER and DNO/DSO participation in NESO Reactive Power Markets, it does represent an important step forward in establishing the system capability and coordination frameworks that would be required to support broader participation of distributed energy resources in the future.

### **DER participation in the South West Reactive Power Summer 2026 requirements**

On 5 June 2026, NESO launched our South West Reactive Power Summer 2026 Requirements [Consultation](#). This consultation is seeking market feedback regarding the possibility to procure near-term reactive power capability to address voltage needs in the South West of England in Summer 2026, prior to the launch of the Mid-term Reactive Power market.

NESO is seeking feedback from Transmission and Distribution assets that have a demonstrable influence on 400 kV and 275 kV voltage control in the SW. Any distribution connected asset that is interested will require further discussion with the DNO National Grid Electricity Distribution (NGED) to understand how this could be accessed.

For the avoidance of any doubt, as NESO has yet to launch the Mid-term Reactive Power Market, NESO considers this mini-tender process to be outside of this market to help meet needs from 2026. In the future, requirements like these would typically be sought through the Mid-term Reactive Power Market once available, in which DER would not be eligible for participation at this moment in time.

### **Conclusion**

NESO's current approach is that DERs and DNO/DSOs will not be permitted to participate in our reactive power markets.

In the future, we will keep this decision under review and this approach may be revisited, once the recommendations from ED3 have developed further and been implemented.

The timeline for any review will be context dependent.

### **Further Engagement**

NESO will publish slides and a recording [on our website](#) alongside this letter informing industry of the decision not to allow DER and DNO/DSOs to participate in NESO Reactive Power Markets.

On Wednesday 22 July 2026 at 14:00 there will be an industry call for you to ask questions related to this decision. To register for the Industry Q&A call: DER in NESO Reactive Power Markets, [please use this link](#). We would encourage you to submit any questions via email to

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<sup>2</sup> Consumer Energy Resources (CER). These distributed energy assets include everything from commercial batteries and small-scale wind to domestic energy sources, such as electric vehicles (EVs), rooftop solar panels, and home batteries.

Public

[box.voltage@neso.energy](mailto:box.voltage@neso.energy), however there will be the opportunity to ask questions on the day. Responses will be published afterwards on the [Reactive Power Market web page](#).

Yours sincerely,

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