

Hi Calum,

Zenobe wish to respond to [Ofgem's open consultation on NESO's latest Frequency Risk and Control Report for 2025](#).

Zenobe's Response:

Question 1 – What is your view on NESO's FRCR 2025 policy to reduce the minimum system inertia requirement?

Please explain your reasoning, with relevant evidence to support your views.

NESO's key recommendation is to lower the minimum inertia level further from 120GVA.s down to 102GVA.s (with a minimum 5 week period at 110GVA.s). The modelling suggests this is likely to save £100m a year, with an additional cost of £3.2m for increasing the procurement of the Dynamic Containment Low product by 200MW.

NESO's analysis does not consider the wider market changes that are happening in inertia. NESO have taken a long time to implement the Y-1 inertia market and DA inertia market (which is still not implemented or designed), we do not think that NESO's cost modelling considers the benefits that these markets could provide in reducing the expected inertia cost – which could mean that the savings expected from reducing the minimum inertia level will reduce as NESO will be able to access cheaper inertia through the market mechanisms. It is likely to become more cost effective to procure inertia via these markets compared to via the BM, and as the Frequency Response markets saturate further there may be limited value procuring additional response.

We believe that NESO should take a longer time before reducing the overall system inertia, especially with the recent Iberian Peninsula event. ENTSO-E are still investigating the reasons for this event, and we believe it would be prudent to wait for the outcomes of this investigation to understand whether anything needs to be changed in the way that NESO manage the stability of the system, and especially need to consider the risks with lowering the minimum inertia level.

Considering the below paragraph in NESO's FRCR: *"We observed a few Sub-Synchronous Oscillation (SSO) events on the Transmission System in Scotland in 2024.*

During one of the events, system inertia was recorded at 125.6 GVA.s which was close to the 120 GVA.s minimum requirement. For the remaining events, national inertia was much higher than the minimum level. Our investigation finds no correlation between lower system inertia and the SSO events. NESO has other workstreams actively addressing this issue to ensure that any potential impacts are thoroughly evaluated and managed.”

There were huge oscillations on the Iberian System before the collapse happened. It feels sensible to extend the period before the minimum inertia level of the GB grid is reduced below 120GVA.s. More and more renewables and inverter based resources will be connecting to the GB system over the next 5-10 years and this should be accounted for in NESO’s proposals.

NESO also highlight that the probability of simultaneous events has increased since FRCR 2024 from 1-in-20 years to 1-in-1.3 year. NESO should gather more years of data at 120GVA.s before reducing the minimum system inertia further. Especially as they have access to markets for inertia procurement (without the need for expensive gas unit procurement via the BM) which will reduce the savings expected from reducing the inertia.

Question 2) Do you have any further comments?

NESO need to prioritise the inertia markets to ensure they are utilising the industry to best access inertia and not assuming that inertia will be solved via the BM (costly gas plants). This needs to form part of the FRCR assessment as they currently only assume the Dynamic Response products and do not consider the value they could get from inertia markets vs reducing the minimum inertial level.

The current design of the Y-4 market (Long-Term 2029 Tender) does not maximise NESO’s access to services at the lowest cost to consumers. The bundling of inertia and Short Circuit Level (SCL) limits participation to only regions where SCL is required, parties either already have to have a connection or use one of the reserved bays. NESO have only reserved bays which have 0MW associated with them, this limits the technologies that can use these bays to the more expensive technology of synchronous condensers vs batteries which can provide all the services at lowest cost but require

access to MW to stack revenues. All of this limits the technology which can tender and increases rather than reduces costs for consumers.

If you have any questions on our response at all, please get in contact with us.

Kind Regards,

Hannah

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