



Locational Procurement of Ancillary Services

Webinar 09/07/2025 Q&A

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Understanding the requirement

 Thermal constraints, whether at transmission or distribution level shouldn't prevent local concentrations of service-the timeframes of frequency delivery is far shorter than the duration of these thermal ratings and so should not contradict

The extra flexibility granted by short-term thermal ratings is taken into account when setting zonal transfer limits, so even response delivery within congested zones may need to be limited once that flexibility is exhausted. Pre-fault response services (DM, DR) are virtually always delivering hence they consume transfer capacity and may limit the possibility of activating reserve services.

• Would you be able to explain why you think DC should have a global requirement instead of a locational requirement?

To clarify – we might well still apply regional minima or maxima to the DC requirement. But frequency is predominantly a global quantity which is affected equivalently by response delivered anywhere on the network. We assume that DC can transfer through the network unimpeded by transmission constraints; any regional constraints on DC would be to ensure geographical distribution to mitigate risk of frequency oscillations.

- I agree for stability- regional levels of resource concentration need to not exacerbate existing stability limit- e.g. inter-area mode, or create a new one. One way to mitigate/ increase limit-specify POD & align wrt inertia action in region.
- POD= Power Oscillation Damping- so deliver DC or DM/DR with a control that counters freq of the inter-area oscillation to suppress risk of instability





We will follow up on this alongside our existing work on stability management – thank you for the input.

 Is NESO expecting zonal locational ancillaries to increase voltage support and inertia requirements in Scotland?

No we don't expect locational procurement of reserve and response to impact our requirements for other services such as voltage or inertia at a local level, though inertia is an input to our requirement for response services such as DC.

 What do you mean by 'inertia is an input for DC procurement'? Do you mean it will impact the minimum local requirement?

The overall level of system inertia is a major influence on frequency behaviour following a fault, and hence our forecast of system inertia is a factor in determining the national DC requirement. Regional inertia may be an input to setting local requirements of response as well as their minimum values.

Managing zones and limits in practice

 Are we assuming that the definition of constraints being "binding" would be set at the day-ahead stage? Wind generation can vary considerably from day-ahead forecasts to outturn

The constraints used in day-ahead procurement would be our best view at that lead time; on occasion, these will inevitably differ significantly from the outturn. We will attempt to constrain the market as little as possible while minimising the risk of procuring un-usable services.

- Would you also consider a forward looking quantitative analysis, considering we are expecting significant changes in network, generation and demand, resulting in changes in constraint?
- And will the number/location of procurement zones be set for a period? If so, for how long?
- Will zones certainly be fixed rather than fluid?
- Are or will the results of your quantitative analysis/modelling be published on the website?

Part of implementing zonal procurement of any ancillary services will involve giving as much transparency as possible about forward constraint limits and indeed any potential future changes to the makeup of zones. The exact details are still to be established but we are fully aware of the value of transparency and certainty for maintaining a healthy market. We expect that any set of zones will be fixed for at least 3

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years but this will be consulted on. Similarly, we will consult on what constitutes an acceptable lead time for any changes.

• The example in Slide 24 is showing the upper limit for AS procurement for B2 and B6. Do you have any indication what would be the lower limit, that is what's the minimum that has to be procured behind these boundaries?

In the immediate future we don't expect to set a lower limit for any ancillary services in these groups. Analysis is ongoing and a more comprehensive view will be published as it becomes available.

Primacy

'If a unit is rejected in a service for the DNO, to prevent DNO counter activation.'
Please can you clarify what the DNO action would be in this case?

To activate an equal and opposite quantity of energy – this might be automatic (via an ANM scheme) or manual. For a frequency response service, the ANM scheme would adjust the output of units within the scheme to counteract the effect of the response providing unit.

Wider market reform

• Given that we have seen leaks that zonal is not going to be taken forward by govt., should we assume that fewer procurement zones (e.g. 5) is a more likely outcome?

This work is not linked with other market reforms. While we will attempt to align with other zonal/locational considerations where appropriate, the ancillary service procurement zones will be informed by our quantitative analysis.

 Is the aim to implement locational procurement even before any wider reforms under REMA come into force?

While we don't have firm timelines for either piece of work, it's likely that locational procurement of ancillary services will be implemented first.