Product Design

Consider multiple of say 500kW for less than 5 minutes as a building block with very fast response

Make the products as accessible as possible. Don't make it favour larger asset types.

If you're going to have lower inertia, you need faster response for the same MW loss (and the same RoCoF). How fast do you want to response? Sub-second, 200ms?

To ensure the maximum variability in the type of assets that will be able to deliver these products it is essential that there is no symmetry-requirement for the bids to be submitted, i.e. if an operator finds it attractive he should be able to only submit bids for negative reserve. Furthermore making sure that the minimum bid-size is relatively small (i.e. around 500 kW) is an essential enabler.

Optional Fast Reserve could be provided by wind using Spinning Reserve

Don't try to use "baselines" for many different purposes -- the mistake made with DC. Measurement is a completely different function from forecasting, so it makes no sense to try to use the same methodologies for both.

Can we get a sense of the number of events that could be expected for any of the proposed services?

Many wind farm have spinning reserve offering a fixed MW response for frequency response. It's there now ready to go, why don't you use this feature?

Value of inertia needs to be recognised

Will there be availability as well as utilisation payments or just availability?

Conventional reserve, e.g. turning a genarator 'upwards'... well, if you stop, you will reduce output and therefore you're effectively providing downward reserve right? How are you not? Therefore what is the actual difference between single sided markets for upward only / downward

Are you considering carbon impact of reserve procurement? If not, why not?

Previous products have had response time and response duration defined for each product, with response time declining as response duration increases. We don't need to do this in future – new assets can respond quickly and for longer duration so need to reward this. Extension options seems to do this if I understand correctly.

Make it easy for companies to check their assets against what requirements you have. And see what the potential benefits could be. Make it a quick an easy process to build a cost benefit and forecast tool.

Aim to minimise barriers to participation by non-dedicated assets.

There seems to be an implicit assumption that reserve comes from conventional assets - that should not be part of the product design - you should start with the need (MW availability)...

How many MW and for what duration? e.g. response of 1400 MW for 1 second to 30 minutes; reserve of 30 minutes to 4 hours.

Optional Fast REserve is still "in the shadows" - needs t obe more visible and formalised

It would be good to understand the delviery time limits. You will get more competion if you have a 30seocnd rather than a 15 second product

Definitely need stacking of services as long as it does not affect delivery

How would the inertia capacity of optional fast reserve interact with the Inertia Pathfinder?

Procuring by HH period day ahead will give more assets a change to join market

Will you procure both low and high side reserve?

Separate, stackable markets for reserve and inertia

This is a textbox...