Operability Strategy Report 2024

Webinar Q&A 23 January 2024



Contents

General	3
Stability	
Thermal	4
Frequency	4
Within Day Flexibility	4
Adequacy	4
Restoration	

General

1. It is not clear that the CSNP is going to deliver the 'right' equipment in the 'right place. Does ESO believe as FSO they will have more ability to determinate plant location?

CSNP will for thermal, stability and voltage, forecast the system need. ESO/FSO will determine the best route, with a focus on competition to deliver that need. So that's the highly locational ancillary services. In terms of energy related plant, the Strategic Spatial Energy Plan and Regional Energy Strategic plan which are new roles coming into the FSO will be more focused on what the strategic location of large-scale demand and generation for SSEP and how that interacts with more local plans and direction from the RESP.

2. Wasn't 2025 the target for zero carbon?

We're on track to deliver zero carbon transmission system for short periods during 2025.

3. How does the digital twin project help deliver net zero?

Digital Twin enables us to understand and analysis the systems in different ways which will support in reducing risk uncertainty and enabling us to direct the system development in a more positive way.

4. How is TO fault level reinforcement being identified and CBA assessed versus say grid forming paid solutions? Is this through NOA?

Yes, it will be through the new Centralised Strategic Network Plan (CSNP) process.

5. Does 22nd December event with three assets trips within a very short timeframe change any of your current thinking?

All events feed into our strategy. The benefit of introducing FRCR in 2021 is that we can use these events to review our policies more regularly and easily than we did in the past. The 22 Dec is an important event to feed into this thinking.

Stability

6. [slide 4] What about stability phase 2? is that effect folded into the stability phase 3 bar- or somewhere else?

Stability Phase 2 isn't included mainly because Ph2 was to ensure an operable system by providing short circuit level in Scotland rather than having a significant impact on zero carbon operation. There are other projects which will help with ZCO but are not included on the graph.

7. [slide 4] Why does PF3 have so little benefit on zero carbon ops?

It will increase the number of periods in which we are able to operate at zero carbon so does have a great positive impact.

8. Ref. report Slide 26 of the publication – future market implementation for remaining two stability market designs (long term and short term). "At present our modelling does not suggest a need for additional long-term, new asset development". Could you comment further please? Are you anticipating a long-term market based exclusively on assets which are already existing on the system?

At the moment, our studies don't indicate that it would be economic to conduct long term procurement of new assets for system stability. This is largely why we've launched the Y-1 market for existing assets to ensure we're procuring in the most economic fashion. We are re-running our studies this year so this position may change, dependent on the size and location of our requirements. We wouldn't envisage a long term market being for existing assets, but mainly for new asset development, however we don't see an economic case for that type of procurement.

9. Grid Forming is mentioned as being used more in the future. How will it be funded? Will it become obligatory?

Some assets will be delivered through Pathfinders, will update industry on our position on whether to mandate GF capability.

Thermal

10. You may get more locational response if parties had more information on constraints. You have information that you refuse to share, making the market less efficient. There is nothing on the slides so far about information.

Last week some of our colleagues launched the Constraints Collaboration Project items like this are definitely something that we would welcome through that process, if there's things we can do that will help please submit them. Thermal constraints collaboration project

Frequency

- 11. What are the timeframes for MFR reform to allow grid scale storage to participate more widely? We will respond to this question through the Operational Transparency Forum.
- 12. How do large interconnectors at 1400MW or Nuclear at 1800MW negatively impact ability to achieve zero carbon ops?

With the largest loss increasing we need to increase the volume of certain reserve and response services, so we'll need to increase our Dynamic Containment level and our STOR/Slow Reserve holdings when the largest loss increases as these services volumes are largely based on the largest loss size.

Within Day Flexibility

13.DFS is not "flexible" - it requires as much notice as coal! It is also eye wateringly expensive. Unless customers want to compete with gencos at the same/comparable prices we should stop chasing DSR. We don't need more "non-flex" at £3k+. Do you think customers will react at c£100/MWh?

DFS is classed as a within-day flexibility service as it's moving the flexible demand that has signed up to the service within a day, normally it lasts for a period of 1-2 hours when the service is required. We don't have the answer to 'will customers react at a certain price point', that's something we are investigating as an industry.

14.Market wide Half Hourly Settlement may 'allow' some customers to see the prices (you need a smart meter and to engage) but the evidence so far is demand is relatively price inelastic. Should you not focus more on using real flexibility in the BM, reducing skip rates, etc.?

We want to do both of these things, so encouraging flexibility within the BM is a priority for us and as I said in the content something we're doing through trials such as small-scale aggregated assets in the BM. You're right, MHHS only helps if the tariffs are in place and people have smart meters in their homes. But we also want to encourage more domestic demand through the wholesale market and MHHS is a key to doing that.

Adequacy

- 15.Ref. report Slide 49 apologies if I missed a publication.... have you published or are you planning to publish the participants in the "Adequacy technical advisory group"?
 - We haven't published the participants in the adequacy technical advisory group yet. But we will acknowledge them in our final study report.
- 16.on Adequacy- it would be worth reviewing capacity assumptions for MPIs- very different resource dynamics to pure interconnectors and opportunities available for more support, particularly with international TSO alignment on the principles of this (dunkel-flaute conditions not withstanding).
 - Thanks for the feedback. We will definitely review assumptions for MPIs.

Restoration

17.Ref. report Slide 31 - Do you feel that the system requirements – restoration targets (5 days for national restoration) are suitable for one of the FES, where high uptake of heat pumps is the primary route for home heating?

System Resilience becomes more critical as more sectors decarbonise. The ERSR target of 5 days is for national restoration in the event of a national power outage. We are very focused on developing capabilities to prevent these events and improve the overall resilience of the network to minimise large scale events to prevent National power outages.