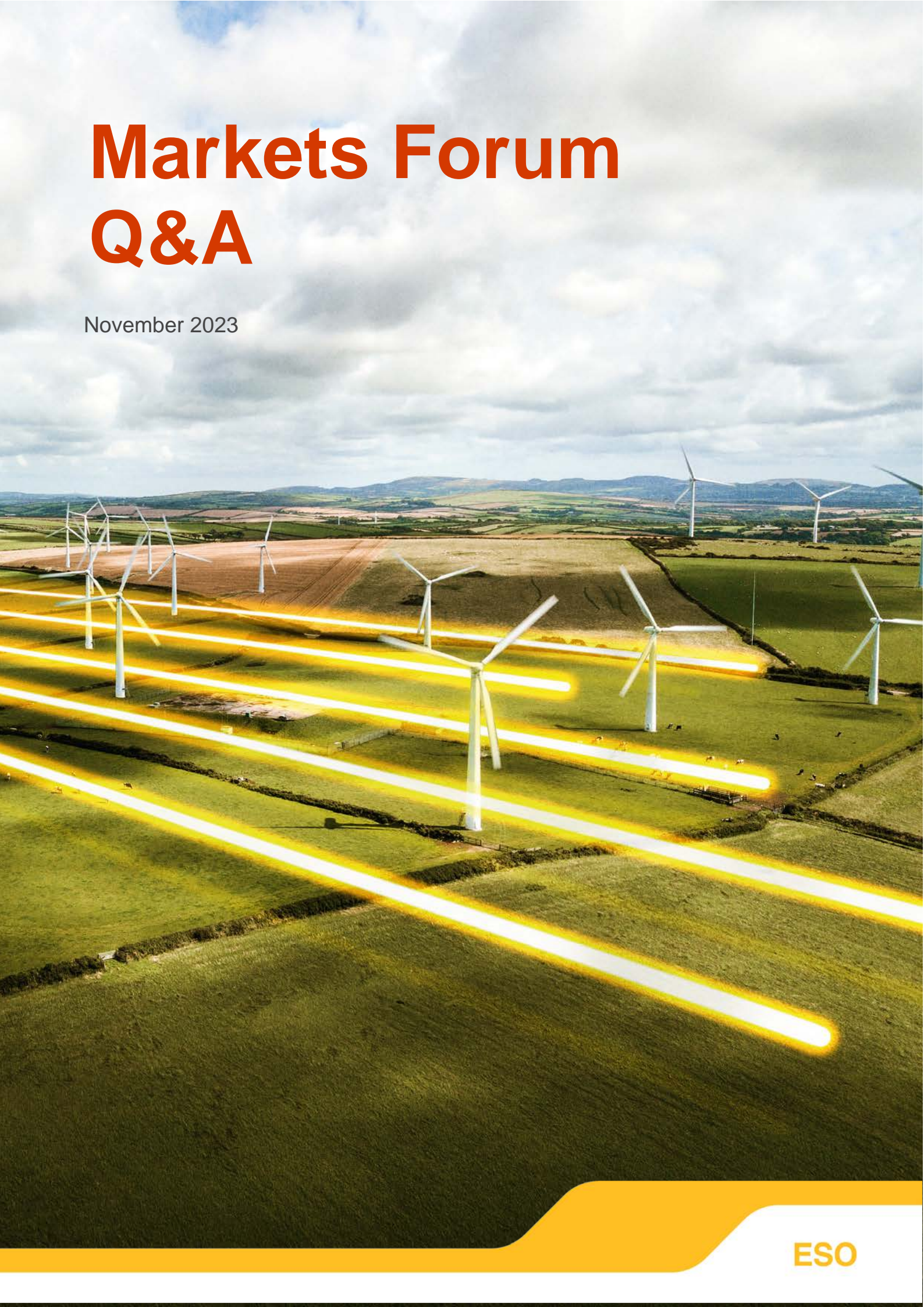


# Markets Forum Q&A

November 2023



Q&A

<p><b>1. What range of MW capacity of DFS are ESO expecting to be able to procure this Winter?</b></p>	<p>We are aiming to grow the market to at least 1.25GW over the winter to deliver a derated volume of 1GW. Please see our Market information report for updates to this, our October report is available here: <a href="https://www.nationalgrideso.com/document/289546/download">https://www.nationalgrideso.com/document/289546/download</a></p>
<p><b>2. Do we expect Ratcliffe to stay on through next Winter too - are there any legal obligations to end coal generation / contingency contracts?</b></p>	<p>The Ratcliffe Unit that was kept available for last winter secured a CM contract for this current delivery year until September 2024.</p>
<p><b>3. Would be good to get the answer to my question on DFS and rota disconnection (Mike kindly answered first part, but unfortunately time didn't permit him to answer second part of my question).</b></p>	<p>In the unlikely event that rota disconnection takes place at the same time as DFS delivery, then providers participating in DFS will be settled as per the service terms. Rota disconnection may increase this effect for some users and decrease it for others (where they can no longer export). Our amendments to the service this year aim to maximise participation to reduce the likelihood of this situation, and ensure that consumers have the opportunity to partake in the service. It is up to providers how they group individual participants into DFS units. We would note that we expect the uncertainty in DFS delivery would increase during this eventuality and would need to consider the operational impacts of whether it would be appropriate to instruct it during these times.</p>
<p><b>4. What is the long-term view for markets with the electrification of heat and transport and how do you envision markets preventing customers from volatile price shocks?</b></p>	<p>We're very supportive of retail market innovation to deliver the benefits of flexibility to consumers seeing delivery of such things as MHHS as key to developing this. We look forward to further working on how industry change can be taken forward to enable consumer value and assist retailers in managing risks.</p>
<p><b>5. The technology at the Distribution boundary (DSO) has low trust that effective day ahead market data will be available for batteries to participate in ancillary services if non-firm. Has this shortfall been accounted in future forecasting?</b></p>	<p>We would value more clarification on this question.</p> <p>Some services restrict participation from units within Active Network Management Schemes, due to the nature of the non-firm connection but we will be working with DSOs to increase the ability for providers to participate in both DSO and ESO markets.</p> <p>Our forecasting contains our most current view of the information and providers available for our market services. We would welcome the opportunity to further understand</p>

	<p>what day ahead market data would enhance this trust – please feel to get in touch with us</p>
<p><b>6. Claire mentioned blockers - appears to have missed lack of standardisation of products for ALL market participants - need same rules for all (not some rules for some / different rules for other) if we are to have a true level playing field.</b></p>	<p>We are not changing the standardisation of services but looking to remove any barriers to participation for all technology, any changes we recommend will be flowed through the normal processes to make changes to the service terms and continue to have standard products.</p>
<p><b>7. Could you explain the zero MW market and non-network solutions you mentioned as part of the reforms being explored?</b></p>	<p>This specifically relates to work we will be carrying out on industry framework reform and understanding the impact of non-traditional market participants on our electricity market governance frameworks. As part of BP2, we are creating a Whole Electricity System Framework Team to take a more holistic view of changes that are, and will be, required to our industry frameworks. Through our work and learnings from Pathfinder projects, involvement in Open Networks and requirements of the Smart Systems and Flexibility Plan we know that this broader, more coordinated approach is needed. The team is currently being set up and more information will be shared with industry in Q1 of next year. Some of the areas that will be reviewed include (but are not limited to): Consideration of zero MW markets within the codes, licences and market frameworks and the implication for costs and efficient economic signals.</p> <ul style="list-style-type: none"> <li>• Consideration of zero MW markets within the codes, licences and market frameworks and the implication for costs and efficient economic signals.</li> <li>• Consideration of the effects of future non-network solutions on the electricity frameworks</li> <li>• Consideration of changes to electricity market frameworks to facilitate DSO and whole system outcomes between us and the DNOs.</li> </ul>
<p><b>8. A suggestion rather than a question. With the wide range of reforms expected over the decade (or more), industry would appreciate a roadmap showcasing all the reforms, interdependencies and</b></p>	<p>Thank you for your suggestion.</p>

<p><b>timelines, for risk /opp. management purposes</b></p>	
<p><b>9. How do you see Rishi Sunaks plan to Max North Sea production impacting the net zero and capacity Market?</b></p>	<p>We have not carried out analysis of this.</p>
<p><b>10. Why isn't there a representative from DSO at this event? Seems like an oversight as both System Operators need to be aligned to ensure the market arrangements are available to all as they dependent on available tech and data</b></p>	<p>There are 6 DSO's and they were invited to the session as guests. We will feedback for the next event and seek to have a DSO as a panel member. The ESO is working proactively through the ENA with the DSOs to ensure that the right answers to the challenges of Net Zero and a flexible energy system are found. We continue to press for an increase in the pace of change which we sense is recognised by everyone.</p>
<p><b>11. Mention of locational signal - does the ESO expect those signals to also apply to demand (as it's to be market participants) - if not why not?</b></p>	<p>This is a policy decision. The more market participant that are exposed, the greater the system benefits from locational signals. But policymakers may want to shield residential consumers from the full locational variation in prices - this is a decision for government.</p>
<p><b>12. What's your empirical evidence that locational wholesale electricity prices only, nor other variables, drives location of new investments?</b></p>	<p>We do not believe that electricity wholesale prices are the only driver of investment location. We have not stated this anywhere.</p>
<p><b>13. Slides refs 'right allocation of risk between generation &amp; consumers'...why is this not 'between market participants (generation, DSR &amp; interconnectors) &amp; consumers'? Why single out generation and NOT all market participants??</b></p>	<p>This was in reference to CFD design, which impacts generators. We agree that, more broadly, risk allocation should consider all market participants.</p>

<p><b>14. As the system naturally trends to becoming more decentralised (consumers investing in home solar / batteries etc), what will incentivise consumers to actually stay on the grid and be managed in a centralised manner?</b></p>	<p>Being able to participate in a fully flexible, locational market, will be a strong incentive for consumers to stay connected and participate in the wholesale and flexibility markets.</p>
<p><b>15. Wholesale market reform should be considered carefully, ESO should act independently rather just in self-interest. Why can't TNUoS reform be considered properly?</b></p>	<p>ESO acts in the interests of consumers. TNUoS reform is being considered in detail by both ESO and Ofgem.</p>
<p><b>16. If GB is to be a global leader in flex by 2028, which other countries/ power grid systems do we have to overtake? I.e., who are the leaders today? Can we learn from them?</b></p>	<p>GB is already one of the leading countries in flexibility when it comes to the size of flexibility market, market design, and opening markets to low carbon flex. Though we need to reform our markets to maximise flexibility from different type of technology and to make sure we have enough flexibility at the right location and the right time with minimum cost to the consumers. As we are aiming to move toward some kind of locational pricing and utilise more flexibility from consumer and distributed sources, we believe there is an opportunity to learn from markets like USA, Australia and European markets where they have implemented locational pricing, centralised markets or self-dispatch while we are working along Ofgem on REMA type reform.</p>
<p><b>17. I may have misunderstood but I think I heard Cian say we will have to start addressing adequacy in 2030's; he defined adequacy as 10's of TWh of storage. Do we not need to start on that project today to achieve adequacy needs of the 2030s?</b></p>	<p>We agree that there is a need to ensure that investment policy delivers the TWh of dispatchable, long duration output that will be needed for adequacy in the 2030s. DESNZ is working on innovation policy to deliver the required first of a kind project in long duration storage, hydrogen generation and carbon capture and storage technologies.</p>
<p><b>18. We are looking for opportunities for domestic DSR to participate in a wider</b></p>	<p>The current Supplier Hub model does present challenges, it is fair to say, in particular around access to data, ownership of the relationship, it prevents true innovations in the home perhaps to come to the fore. We believe that many industry</p>

<p><b>range of markets. What challenges does the current supplier hub model present as a barrier to achieving this? What will be done to overcome these challenges?</b></p>	<p>stakeholders have similar views and that whilst there is no current intention to change it, that the Regulator is aware of the challenges of Supplier Hub.</p>
<p><b>19. DSO-ESO co-ordination. Just around the point of market facilitator. In terms of future stacking, DFS is an ESO product and DSO flexibility is procured on platforms such as Piclo, Flex power etc... is the vision to combine these capabilities?</b></p>	<p>No, DSOs will utilise their own platforms for procuring their needs and the ESO will signal it's requirements in its standard way- what will happen though is that in the future these will be either coordinated or jointly procured, which will ensure best value for customers.</p>
<p><b>20. Request rather than a question - can you publish a single webpage with links to all the different consultations you have open?</b></p>	<p>Thanks for the suggestion.</p>
<p><b>21. Data and digital infrastructure is mentioned as an important factor in the market facilitator Role, but DSO's have already made investments in this area which may not be consistent with ESO model. How will ESO address this?</b></p>	<p>We are currently re-platforming our digital front end and are working with the DNO's to ensure that where there are opportunities to do so that there are common standards. Of course, each DNO's digital platforms may well be different in themselves, the key is ensuring that there are common standards for API's and presentation of data.</p>
<p><b>22. How is ESO coordinating with DESNZ to ensure DESNZ proposals for regulating smart appliances don't raise unnecessary barriers to DER access to flex markets, and fully considers implications</b></p>	<p>The ESO responded broadly in support of the <a href="#">Smart and Secure Electricity System (SSES) Consultation</a>, aiming to consult and then implement Demand Side Response device and operational standards – based around four key principles of: interoperability; data privacy; grid stability; cyber security. The device standards proposed are based around BSI <a href="#">PAS 1878</a> (Publicly Available Specification) for the Energy Smart Appliance (ESA) specification, and <a href="#">PAS 1879</a> for the overall system Demand Side Response operation.</p>

<p><b>for different routes to market?</b></p>	<p>The ESO is represented on three active DESNZ led SSES working groups - the SSES Industry Advisory Group, the SSES ESA Technical Working Group and the SSES Security Working Group, working with Government and industry to finalise the standards. One key area the ESO is contributing expertise is in relation to grid stability measures.</p> <p>Within the SSES ESA Technical Working Group as part of the grid stability principle is to introduce an appropriate protection against very large, synchronised changes in load (e.g. many hundred MW of Energy Smart Appliances switching on at the same time in line with a tariff incentive), and the initial proposal within SSES was to implement a randomised delay before the appliance responds to a routine schedule.</p> <p>This would improve overall system security whilst reducing the cost to consumers of holding greater volumes of frequency response services. It is important to stress that as outlined in the PAS standards, this delay would not occur in some exceptional circumstances - including when aggregated DSR are responding to a flexibility response service – as well as allowing a consumer to initiate an immediate charge manually. Industry are actively considering potential barriers the SSES programme may present to unlocking DSR flexibility, and in this case for example alternative ideas such as a fleet ramp controlled by the DSR Service Provider are under discussion.</p> <p>Outside of the SSES programme, the ESO is working actively with industry to unlock flexibility from small scale assets – for example through our facilitation of the industry led <a href="#">Power Responsive</a> initiative (e.g. there has been work to identify appropriate operational metering standards), the <a href="#">Demand Flexibility Service</a> (DFS) which has commenced year two of operation this winter, and the trial to bring <a href="#">aggregated assets into the Balancing Mechanism (BM)</a>.</p> <p>Therefore, we are actively engaged with DESNZ and industry – and seek to ensure the four principles are implemented in a way that is appropriate for small scale assets, creating the opportunity for much greater volumes of DSR assets to a participate in our flexibility services.</p>
<p><b>23. LMP is a single solution to many issues so I can see why it is attractive. But it will lead to significant investment uncertainty and increases in cost of capital. Shouldn't we be</b></p>	<p>Any reforms will change the profile of market participant risk. Charging and BM reform are also being investigated.</p>

<p><b>working harder on improving what we have? E.g. charging and BM</b></p>	
<p><b>24. What's the view of the investment risk for multipurpose interconnectors and energy islands. Do you think CFDs can contribute in investment confidence?</b></p>	<p>Thanks for the question, but the ESO are not in a position to comment on this.</p>
<p><b>25. How do you see locational mkts developing and if they worked well to soak up excess wind at lower costs, increase/ free up connections etc would this negate the need for REMA Loc. pricing, even if it did or could come in before 2030.</b></p>	<p>We agree that improved locational operational signals are needed in the short/medium term, before any locational pricing reform could reasonably be implemented. We are assessing whether and how the Local Constraints Market on the B6 boundary can be expanded. We do not consider these markets are a substitute for wholesale market reform, since key assets could not trade (e.g I/Cs) and the wholesale price would still provide perverse dispatch incentives, ultimately increasing overall system cost.</p>
<p><b>26. Becky, do you think the CM should be incentivising assets that can provide the critical balancing services needed to keep the sys. running given it has procured wrong MWs that don't provide services. These then bought separately/ more costly?</b></p>	<p>DESNZ response to this question:</p> <p>The Capacity Market (CM) is at the heart of the government's strategy for ensuring security of electricity supply in Great Britain. It is a technology neutral scheme, in which existing and new-build electricity capacity (in the form of generation, interconnectors, Demand Side Response and other technologies) compete to obtain agreements under which they commit to delivering capacity when needed, in return for guaranteed payments. Separately to the CM, National Grid ESO procures Balancing Services to balance demand and supply and to ensure the security and quality of electricity supply across Britain's transmission system.</p>