

Flexibility 5-year Roadmap

The Review of Electricity Market Arrangements (REMA) is seeking views on a wide range of options to address the combined challenges of responding to higher global energy costs, the need to further boost energy security and move the UK to a cleaner energy system.

While REMA focuses on wholesale market and policy reforms, we believe the ESO's markets have and will continue to play a key role in enabling flexibility in the immediate future.

We are therefore developing our first Flexibility market Strategy, to set out our vision, desired outcomes, and a 5-year roadmap to unlock the flexibility from distributed and consumer energy resources needed for a net zero power system.

Our vision is

By 2028, Great Britain is the international leader in flexibility enabling all low carbon flexibility to move seamlessly between markets driven by effective signals, delivering whole system value to consumers.

To achieve that vision, we will pursue a number of outcomes by 2028:

1- Ensure that enough low carbon flexibility is built and in the right place.

The capacity of low carbon flexibility is relatively small today but will grow rapidly over the next 10 years, driven by demand-side policies. FES shows that by 2030, the system is expected to have 25-45GW of within-day flexibility mainly from smart charging of electric vehicles, vehicle-to-grid, smart electric heat, smart domestic appliances and battery storage with duration of a few hours.

Clear price signals including locational price signals are critical to ensuring that we have flexible assets working to deliver whole system value at the most optimal time, in the most optimal place. We will continue to influence policy makers and input to reform of investment policies to support flexibility, as well as delivering on our connections 5-points plan and with DNOs on Regional Development Programmes to accelerate network access.

Smooth provider journeys from investment in assets, through to settlement will be key to delivering this outcome.

2- ESO markets are barriers free.

We believe that deep liquid markets that maximise competition will result in maximum value for consumers and so will review our services and markets to ensure they're fit

for the future whilst ensuring alignment with operability needs. This outcome will involve understanding barriers to entry and resolving issues in service design such as baselines and metering to create a level playing field for all types of technology, both supply side and demand side.

3- Lay a solid foundation for future market arrangements.

Whilst the outcomes of REMA are determined, any implementation of changes will take several years and we cannot afford to wait before acting. We will seek to identify and deliver on opportunities to unlock flexibility within our current market arrangements, aligning with the enduring outcomes of REMA as they are decided.

4- Flexibility is operating to deliver whole system value.

We are rapidly moving away from a centralised power system with passive operation at lower voltage levels, and are seeing system needs arise across distribution networks, leading to new revenue opportunities for flexibility service providers. Already so far this year 2.4GW of flexibility has been contracted by the DNOs and so there is both a real need and opportunity for low carbon flexibility assets to deliver whole system value.

5- Coherent and co-ordinated market access across Great Britain.

We need to maximise consumer value by using distributed flexibility to relieve local and national constraints in a coordinated manner, so service providers can access stackable revenue streams and markets operators can dispatch flexible assets without the fear of conflict. This coherence must extend beyond ESO and DSO services to consider the wholesale and retail markets, balancing mechanism and price signals from network charging. Revenue opportunities must be stackable to create efficient markets, and we must also seek to implement common data standards and coherent digital infrastructure that minimises the cost of investment for FSPs seeking to play in these markets.

6- Successfully establish the market facilitator.

Clarity of roles and clear governance continues to be called for across industry when discussing how to unlock the value of flexibility, and the creation of a Market Facilitator will ensure there is a body with clear accountability to deliver more accessible, transparent, and co-ordinated flexibility markets across transmission and distribution networks, that deliver value for consumers, and work for providers. We believe this role requires market design leadership, delivered by a body that is independent from private interest, capable of concepting and delivering industry changes that can deliver long-term values, and have strong and collaborative relationships with industry participants, we therefore agree with Ofgem's minded to position that this role would be best suited to the FSO.

We would like to invite feedback from the Markets Advisory Council on the vision and the outcomes, as well as to discuss how best to engage the MAC on this topic in the future, and the best way to progress with industry.