

## Energy UK response to Demand Flexibility Service (DFS) EBR Article 18 consultation (August 2024)

### About Energy UK

Energy UK is the trade association for the energy industry with over 100 members – from established FTSE 100 companies right through to new, growing suppliers, generators and service providers across energy, transport, heat and technology. Our members deliver nearly 80% of the UK's power generation and over 95% of the energy supply for 28 million UK homes as well as businesses. The sector invests £13bn annually and delivers nearly £30bn in gross value - on top of the nearly £100bn in economic activity through its supply chain and interaction with other sectors. The energy industry is key to delivering growth and plans to invest £100bn over the course of this decade in new energy sources. The energy sector supports 700,000 jobs in every corner of the country. Energy UK plays a key role in ensuring we attract and retain a diverse workforce. In addition to our Young Energy Professionals Forum, we are a founding member of TIDE, an industry-wide taskforce to tackle Inclusion and Diversity across energy

**Contact:** for any questions on this response, please contact Naomi Baker, Senior Policy Manager, on [naomi.baker@energy-uk.org.uk](mailto:naomi.baker@energy-uk.org.uk). This is a trade association response and is not confidential.

### Summary

Energy UK supports the move of the Demand Flexibility Service (DFS) to an in-merit service.

As [currently proposed](#), the design will work well for automated sources of DSR (from domestic and industrial and commercial sources [I&C]). This will help to 'bridge the gap' until the ESO's main balancing 'market', the Balancing Mechanism can effectively accommodate aggregated volumes.

Whilst we acknowledge this value, the DFS has primarily operated as a route to market for manual DSR since this is unable to access other ESO markets. However, the proposed design may not be viable for many of the ~2.6 million households without smart assets (such as electric vehicles, heat pumps or domestic batteries), that participated last winter - even where they are prepared to shift their demand at relatively short notice so that this type of demand can compete more effectively in the market. This is disappointing given the ESO [analysis](#) of the 2023/4 service which concluded that it was '*significantly beneficial*' when the system is '*extremely tight*' and '*competitive*' on against '*mild, and moderately expensive days*'.

We are pleased that the ESO has enabled stacking with the Capacity Market. We agree that, where customers can respond within-day, this change will support industrial and commercial (I&C) demand-side response (DSR). However, we note that a significant portion of existing I&C DFS customers need more notice to respond and would be excluded with the removal of the day-ahead procurement.

Moreover, we highlight that this change is unlikely to support many of the nearly 2.6 million households who participated in the service last year. Most households will not be settled on a half-hourly basis until 2027 and significant change to the Capacity Market would be required for CM-availability payments to support domestic DFS customers.

Until the current issues with the Capacity Market can be rectified, Energy UK calls for the addition of an availability payment for the service. This is proposed as a 'stop-gap' measure until 2027 to 'level the playing field' and allow domestic DSR to compete in the face of a Capacity Market which has not

kept pace with the changing energy system. With an availability payment as proposed above, we support the proposal as a vehicle that would support DSR to grow and compete in the market.

## Questions

### Service Positioning

#### **5. Do you agree with the proposal to evolve the DFS away from a last resort enhanced action winter contingency service and operate as a merit-based margin tool? Please provide your rationale.**

Members support the move to an in-merit service

We accept that the forecast system margins for this winter do not warrant an ‘enhanced service’ to bring forward additional capacity at a higher price but support the ESO in seeking to provide market access for DSR to grow and mature as a technology class.

As currently proposed, the design will work well for automated DSR (from domestic and industrial and commercial sources [I&C]). In this, it will provide a route to market, enabling automated DSR to compete against other forms of flexibility. This will help to ‘bridge the gap’ until the ESO’s main balancing ‘market’, the Balancing Mechanism can effectively accommodate aggregated volumes.

Whilst we acknowledge this value, we note that automated assets delivered just 9 percent of 2023/4 DFS volume ([ESO’s End of Year report](#)). We note too, that since DFS continues to be framed mainly as a service to shift volumes away from the evening peak, electric vehicle charging - the most widespread form of domestic smart asset, is likely to be less suited to the service (as these assets would usually be smart-charged outside of peak hours via time/type-of-use tariffs).

Our view is that, as currently proposed, the service will not be viable for the majority of manual (non-automated) domestic DSR which participated in DFS last year – even where those households are able to respond within-day. Last year, over 2.5 million households participated in the service, delivering on average, 70 percent of volume. Manual DSR (domestic and I&C) has a very limited ability to play into other markets outside of DFS but represents an additional form of capacity.

Last winter, the DFS provided an extra reserve at significantly lower cost than had been provided by the coal plant reserve the previous winter (estimated £11 million versus £340 million). Whilst system margins are not forecast to require an additional buffer this winter, they may in the future. In the meantime, it would be disappointing if this ‘new’ capacity were not able to contribute if and when it can compete in-merit to deliver benefits for energy bill payers. We note that the ESO’s analysis of the 2023/4 service concluded that the 2023/4 scheme could be ‘*significantly beneficial*’ when the system is ‘*extremely tight*’ as well as ‘*competitive*’ on against ‘*mild, and moderately expensive days in 2023*’.

Extract from the [2023/4 End of Year Report](#):

*‘Given DFS was designed for extreme tight margin (and likely expensive days) DFS has also proved to be competitive against mild, and moderately expensive days in 2023, as well as significantly beneficial for use on extreme tight and expensive days in 2022. It is the conclusion of our analysis from winter 23/24 that DFS is a valuable tool for the control room to use when margins are tight, and alternative offer prices are dearer than that of DFS’*

Whilst we support the improved route to market for automated DSR, it would be disappointing if this came at the expense of displacing existing DFS manual volume where it can compete.

#### **Capacity Market (CM) stacking will not adequately support domestic volumes**

Services that occur infrequently generally rely on an availability payment to encourage participation. The previous iterations used the Tests (a form of proxy availability payment) to fulfil a similar function. The proposed design enables stacking with the CM in lieu of providing a separate availability payment for the CM. This will mean that providers with an existing contract can use these availability payments

(where they apply to the same assets) and providers without a contract could competitively bid for a contract to support the winter DFS from 2025/6 onwards. Whilst the process for I&C DSR contracts in the CM is not without friction, it works reasonably well, especially where assets are larger. Given this, we are pleased that the ESO has enabled CM-stacking and we agree that this will support I&C volumes, where these are able to respond within-day.

However, CM stacking will not support domestic DSR in the same way since:

- i) The CM requires assets to be half-hourly settled. This applies to only 4% of total domestic MPANs (and to 6% of the nearly 2.6 million domestic MPANs that participated in DFS last year).
- ii) The CM is currently largely inaccessible to domestic DSR. Whilst [proposals](#) to (somewhat) reduce these barriers were expected to improve this from 2025 onwards, delays resulting from the snap election means that this will not change until after the 2025 CM auction (we accept that this would not have been known when the design was developed).

Without an availability payment of some form, manual domestic DSR, even where it can respond within-day and price-beat alternative measures (interconnectors and the balancing mechanism) may not be viable. Automated DSR from domestic sources (batteries, EV charger, heat pumps) is less likely to be affected as the decisions to demand-shift are made ahead of time and require less input on a per event basis. A DFS that is primarily composed of automated DSR would be less useful as a vehicle to support consumers to transition to a half-hourly settled world – an objective that has previously been expressed for retaining the service.

Until the current issues with the CM can be rectified, Energy UK supports the addition of an availability payment for the service, where this cannot be reasonably obtained via the CM. This is proposed as a 'stop-gap' measure until the CM becomes more accessible to domestic DSR (potentially in 2026) and more domestic MPANs are half-hourly settled. This is not a request for extra support or a subsidy for domestic DSR (which we do not support), but instead one for a 'level-playing field'. Availability payments are standard for these types of schemes and would properly be sought via the CM. In this instance we suggest that they are required because the CM has failed to transition fast enough.

Our preference would be for an availability payment (rather than tests) since this will enable providers to dispatch the service at a lower cost and compete more effectively. If this were not possible, we would support the reinstatement of tests as a (less preferred) alternative. More discussion with industry would be needed on how such a payment could work but an option would be for it to be paid in advance for the duration of the winter service (6 months), based on forecast volumes. Where an availability payment has been allocated but there has been a delivery shortfall, this could be recouped. We note that forecasting could be challenging for providers (given the new design), so discussions with industry would be needed on the best way to implement any change.

With an availability payment as proposed above, we support the proposal as a vehicle to support DSR that is able to respond within day to both grow and compete in the market.

### **Hard-to-unlock flex**

The removal of the day-ahead auction risks excluding DSR that needs more notice to respond. For the purposes of this response, we are terming this 'hard-to-unlock' DSR/flex.

We agree that this flex can have less value for the system when margins are comfortable since forecasting errors at this stage can lead to either over- or under-procurement (and additional cost to rectify any differential). However, there is value in supporting this type of DSR as:

- i) a source of additional low carbon capacity that can play a valuable role when margins are tight.
- ii) an investment in the future system. Enabling customers to demand-shift ahead of LCT take-up, can support them to 'buy-into' a future where demand-shifting is widely accepted (we acknowledge that the latter objective is not a mainstream objective of the ESO and is more usually supported via innovation or research funding).
- iii) Enabling wider participation – the current design will primarily benefit households with LCTs such as batteries, electric vehicles and heat pumps. This contrasts with the

previous iterations in which there was strong participation from low-income households (for example, those on the Priority Services Register). Whilst the DFS data is limited here, some providers think there could be strong overlap between more vulnerable domestic customers and those likely to need day-ahead notice to respond manually. Providers involved in Crowdflex highlight this as a useful source of extra data here that the ESO could use to identify a potential correlation..

Whilst we acknowledge that supporting domestic customers to transition and ensuring broad access to its services are not part of the ESO's remit, the DFS has proved an effective vehicle for both these ends. These could continue to be supported if a set number of day-ahead auctions (potentially framed as tests) were added onto the main service. The aim of these could be to support hard-to-unlock flex to participate and, in time, to transition into the main service. This innovation/ capacity function would be essentially piggybacking onto the commercial service and could prove a more efficient and successful means of engaging a high number of consumers than a separate campaign or innovation project.

### **1. Do you have any other comments or questions on the proposal to the DFS operating as a merit-based margin tool?**

Members agree that, if the Capacity Market was more accessible to domestic DSR, the new design parameters would be sensible given the parameters that the ESO has to work within – to deliver grid services that are economic and efficient, recognising that the cost of the service will ultimately be borne by the consumer.

We recognise that design changes such as the removal of tests, and shift to closer to real time procurement will improve the economic efficiency of the service. We also recognise that these were recommended in the Ofgem approval letter for the 2023/4 service ([October 2023](#)). With a CM able to support domestic DSR and for customers able to respond within-day, the new design would constitute a step forward in learning how to use DSR in the future system and understanding how competitive it could be in different situations. We support the ability of DSR to be able to compete regularly on an equivalent basis to interconnectors and hope that this could lead to it being used more regularly.

#### **The need for an availability payment**

However, we also recognise that these design changes, whilst improving economic efficiency, will make the customer proposition more challenging and potentially unviable, especially for the manual demand that has made up the large majority of DFS volumes to date. Providers will need to invest (by regularly engaging with their customers and testing their delivery) updating customer propositions and testing their delivery, and making systems changes whether or not the service is called by the ESO.

The current design is unlikely to support the ongoing costs that this will require. Whilst in time, the Capacity Market will support this, it will remain largely inaccessible to domestic DSR until at least winter 2026/7 for the reasons outlined above. Whilst stacking with DNO services will help, it will not be sufficient where a CM availability payment cannot be accessed. Given this we recommend the inclusion of an availability payment (or reinstatement of the tests for volumes that is reasonably unable to access a CM contract).

Ideally we would like the service to continue to support wider access (even where less competitive), whilst driving flex-that-can-adapt to become both more useful to the system (closer to real time and in higher volumes) and more efficient (lower costs driven by greater utilisation and revenue stacking).

#### **Hard-to-unlock DSR**

We class 'hard to unlock' flex as manual industrial and commercial (I&C) DSR that relies on process disruption rather than automation to shift, as well as manual domestic volume where households require longer timescales to change their behaviour (for example, cooking ahead of time or altering schedules).

Hard to unlock I&C DSR – this includes customers where process interruption is required to switch either because there is not yet a sufficient business case to automate relevant assets or because the DSR inherently relies on process disruption.

Hard to unlock domestic DSR – whilst the data so far (from the six within-day tests from the 2023/4 service) shows that reasonable volumes of domestic customers can accommodate closer to real time demand shifting, providers expect that many will either not be able to, or will not sufficiently motivated given lower prices. Whilst more data is needed, there could be strong alignment between this ‘hard-to-unlock’ domestic flex and more disadvantaged customers.

We accept that this flex may have a lower value to the System Operator and be less efficient. However, we believe it still has a value - both in itself as additional capacity (that can in some situations be cost-effective) and an investment in the future system.

All the evidence here suggests that a future system with a high degree of domestic flexibility will be a lower cost system with lower running costs and avoided additional infrastructure costs (networks and generation). Whilst we expect this flex to be predominantly come from assets responding to price signals rather than manual changes, this change will be dependent on consumers accepting that energy is priced differently at different times of day and pre-planning accordingly (charging/ pre-heating ahead of need). The past two iterations of DFS have had a value above and beyond the immediate additional capacity / grid balancing role – that of engaging and building support for this future state.

The new design of DFS is a step forward for DSR allowing it to compete in the system in a similar way to interconnector volumes. However, it would be disappointing if this was achieved at the expense of reducing participation.

A way of accommodating both outcomes could be to include a set number of day-ahead tests funded via alternative innovation funding. If this is not possible, then some members feel that a better option would have been to spread the changes over a longer period. For example, to have introduced fully competitive pricing and no tests this winter and then removed the day-ahead procurement closer to 2030 when the sector and consumers are more mature (and there is a higher roll out of LCTs).

Some members also suggest that whilst seeking to be technology-neutral, the ESO’s design may have the opposite effect. DSR has unique characteristics and some forms of it may inherently need different parameters to drive mass participation.

## **Stacking**

### **2. Do you agree with the proposal to facilitate stacking with the Capacity Market and DNO Flexibility Markets? Please provide your rationale.**

Yes. We support the proposal but highlight that the CM is largely inaccessible to domestic DSR and requires HHS. Until this can be rectified we recommend availability payments are included in the service for any volumes that are unable to realistically access a CM contract.

The DNO stacking is a welcome improvement but not sufficient in itself to support the service where an availability payment cannot be accessed.

We note the current challenges required for the ESO in dispatching distributed and aggregated assets via the Balancing Mechanism and anticipate that the DFS will be needed after half-hourly-settlement in 2027 as a means to help these assets access markets. Since the service may be utilised for a longer period than anticipated, it will be important to get the design right now.

### **3. Do you agree with the proposed additions within the baseline methodology to offer clarity on how stacking will impact parties baseline calculations? Please provide your rationale.**

We agree with the proposed additions to the DFS baseline methodology.

We highlight that the only changes proposed so far are to the DFS methodology but parallel changes will also be required to the CM and DNO methodologies to avoid an DFS event day eroding the baselines for these services. We assume that these changes will follow in due course.

**4. Do you have any other comments or questions on the proposal to facilitate stacking with the CM and DNO services?**

As DFS is unlikely to be viable for providers as a stand-alone service, it will be important that revenue stacking across the permitted services is as friction-less as possible, and that changes to both the CM and the CM portal are made to reduce the current barriers to DSR.

**Performance Incentives**

**5. Do you agree with the proposed performance incentive structure? Please provide your rationale.**

Members are broadly comfortable with the proposed changes.

We support the direction of travel to encourage greater accuracy but agree that the sector is too nascent for penalties to be appropriate.

Some members would support an evolution to greater penalties for providers with a high degree of persistent over and under delivery especially where this comes automated assets. Other members, however, would prefer not to differentiate by the source of DSR.

In general, members support an approach whereby performance incentives are based on the additional costs that inaccurate delivery represents for the system rather than seeking to be punitive or serve as a deterrent.

**6. Do you have any other comments or questions on the proposal and proposed wording?**

No

**Procurement /Utilisation**

**7. Do you agree with the proposal to move the procurement of the service to within day only? Please provide your rationale.**

No. Whilst we agree that there is a value to driving flex-that-can-adapt to act closer to real time, it is likely/ possible that excluding day-ahead procurement will also exclude hard-to-unlock flex.

Both outcomes are important (though we do appreciate the potential challenge of accommodating both within the same product). Please see our response to Q6 for more detail here.

**8. Do you support our intention to enable the DFS as an ongoing service without the need for continued new derogations season to season? Please provide your rationale.**

Yes.

We support the DFS as a valuable way to support the growth of DSR, helping to support consumers, providers and grid services to manage the transition to a future with higher level of flexible demand.

We support the ESO's efforts to date to transition its procurement and dispatch capabilities to accommodate distributed and aggregated assets (for example the Open Balancing Platform capability and bulk dispatch). However, it seems unlikely to scale-up fast enough to keep pace with the LCT roll out. DFS then is likely to have a dual role in supporting the growth of DSR (by providing a more accessible service) whilst providing more space/ time for the ESO capabilities to transition.

We recognise that new iterations of DSF are resource-intensive - for the ESO, industry participants and the regulator. Given this, we support any design features that will help the service to evolve without the need to seek further derogations (but acknowledge the challenge of achieving this within the requirements of the European Balancing Regulations [EBR]).

**9. Do you have any other comments or questions on the proposal and proposed wording?**

No

**Metering**

**10. Do you agree with our proposal to further facilitate the participation of asset metering within the DFS by removing the requirement for asset meters to be associated to a Half hourly Settled (HHS) boundary meter? Please provide your rationale.**

In past iterations of the service, Energy UK has strongly opposed proposals to support participation via the asset meter due to concerns about gaming risk and potential reputational risk for the fledging sector. We acknowledge, however, that the removal of the Guaranteed Acceptable Price and in-market design of the new service reduces this risk.

We also acknowledge that the change made last year to allow assets to participate when the customer was half-hourly settled, had limited impact as only a small minority of domestic customers are settled in this way (4% of domestic MPANs and 6% of those that participated in DFS 2023/4).

However, most members still do not support the change due to the impact on the related supplier.

The change would mean that sub-metered assets can participate in the service, shifting their demand in a way that is not visible to their supplier. This makes it more difficult (and therefore expensive) for the supplier to hedge their customers' supply. Most member feels that there needs to be greater visibility of other parties actions to support suppliers to anticipate and minimise any potential costs from these actions.

It is recognised that this issue is broader than DFS (for example, the changes that will be implemented with code modification P415 to support aggregator access to the wholesale market).

**11. Does the additional wording provided in the contractual terms offer suitable clarity around premises with multiple boundary meters? Please provide your rationale.**

**12. Do you have any other comments or questions on unique metering setups and proposed wording?**