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Digitalisation and Decentralisation  
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**Non-confidential**

Dear Digitalisation and Decentralisation Team,

**Response to the Call for Input on Distributed Flexibility**

Drax Group plc (Drax) owns and operates a portfolio of flexible, low carbon and renewable electricity generation assets – providing enough power for the equivalent of more than 8 million homes across the UK. The assets include Drax Power Station in North Yorkshire, which is the country's single largest source of renewable electricity, and Cruachan pumped storage hydro power station in Scotland. Drax also owns two retail businesses, Drax Energy Solutions and Opus Energy, which together supply renewable electricity and gas to over 250,000 business premises. Our retail businesses also offer a burgeoning energy services proposition focused on Electric Vehicles and optimisation of consumers' energy assets, and provide route-to-market services for over 2,000 distribution-connected generators.

We welcome Ofgem's vision and the exploration of different IT platforms for flexibility but believe this may be a case of putting the cart-before-the-horse, and it may be more appropriate and effective to first focus on designing the right market framework to unlock flexibility before designing the IT platform to underpin it.

Rather than focusing on the design of IT platforms, we would welcome a more strategic overview of how Ofgem envisage the distributed flexibility market working in the future. Getting the right market design and signals for flexibility, accompanied by a clear framework mapping the different market roles and functions should be the priority. We also believe a number of key enablers would quickly unlock further distributed flexibility volumes and we encourage Ofgem to consider how these can be addressed in the near term. Once there are more established routes to market for distributed flexibility and a clear strategic vision, this would be a better time to begin designing an optimal IT platform to facilitate distributed flexibility markets.

Our responses to the questions in the call for input are appended. Should you wish to discuss any aspect of our response, don't hesitate to get in touch.

Yours faithfully,

**Joshua Logan**  
**Regulation Officer - Markets**  
Drax Group plc

## **Appendix – Responses to the questions in the Call for Input**

### **1. What do you think distributed flexibility could contribute to the energy system?**

With increasing renewable capacity and variable generation output on the system, we agree that distributed flexibility will play a vital role in future helping to balance the system, alleviate constraints and enable further decarbonisation of the electricity system. Whilst the call for input focuses on Consumer Energy Resources (CER), we believe it is equally important to focus on Distributed Energy Resources (DER), as they will also have a critical role to play, including but not limited to I&C consumer demand side response, distributed generation, storage and commercial EV fleets.

Currently, revenue uncertainty and regulatory risk are a barrier to investment in both CER and DER. This is particularly true for those larger and more expensive DER assets such as large-scale vehicle-to-grid smart charging projects and heat pumps. We therefore believe there needs to be a greater focus on designing flexibility markets which deliver clear investment signals, coupled with addressing some of the key enablers of flexibility which are highlighted in the call for input.

In the case of EV charging, we believe there needs to be consideration given to the existing legislation to ensure it is aligned with the requirements and definitions elsewhere, such as in the Electric Vehicles (Smart Charge Point) Regulations 2021 and the Alternative Fuel and Infrastructure Regulations 2017. In addition, it is worth noting that EV charge points are fundamentally quite similar despite being deployed for consumer (CER) or business (DER) use cases. Therefore, it is important that charge point manufacturers and solution providers are not mandated to have unique requirements depending on the use case, despite deploying an identical asset. Misalignment between the different legislation, regulation and market rules could present challenges and barriers to entry for EV charging as a flexibility provider.

### **2. Will a focus on CER flexibility also help enable other forms of flexibility, especially distributed flexibility?**

Firstly, we don't believe the difference between CER or DER is entirely obvious and there would be merit in defining their scope in more detail. From a market design perspective, the goal should be to design something which is compatible with CER and DER, whilst recognising their similarities and differences.

There are some synergies between DER and CER, and we agree that it is particularly challenging for CER to currently access flexibility revenue streams, as they have a less clear route to market and are more reliant upon aggregation. This is driven by the inherently small nature of these assets and the fact they are residential assets where their primary purpose is not related to energy flexibility.

That said, we do not believe that purely focusing on designing a market / platform that works for CER will automatically work for DER - there needs to be a more holistic approach looking across DER and CER. Whilst DER does have a clearer route to access the BM or other balancing services, it is still complex and there is no guarantee of dispatch for these assets, with the ESO's lack of visibility of assets and constraints on the distribution network being a key challenge. Depending on exactly what type of asset it is, DER is typically more capital intensive than CER meaning predictable cashflows are more important. DER requires more clear and predictable revenue streams and stacking opportunities to bring forward the investment at the scale that is required.

More generally, we urge Ofgem to work with industry to focus on the market design and key enablers as a priority, and to leave the consideration of different IT platforms to optimise participation across different markets until a later stream of work.

**3. Is there a 'case for change' and a need for a common vision for distributed flexibility?**

We agree there is a strong case for change and fully support the need for a strategic vision for the future of distributed flexibility, but the immediate focus should be on market design. Initially, the key enablers need to be addressed and the markets for distributed flexibility need to be established. DNO's need to work collaboratively with industry to develop some standardised products and market rules, and only once this has been established should IT platforms be considered.

**4. What is your vision for how to accelerate the delivery of accessible, coordinated and trusted markets for distributed flexibility?**

Both CER and DER can provide flexibility on a larger scale than currently. To facilitate this, there needs to be a clear strategic vision to map out the different market roles, coupled with whole system thinking, to design distributed flexibility market arrangements. There are also a number of quick wins which could be realised by addressing some of the enablers listed on page 35 and 36 of the call for input. In particular, greater visibility of assets on the distribution network and more data detailing the constrained parts of the network. This would be of great value to those looking to invest in or facilitate flexibility solutions on different parts of the distribution network. It could also be beneficial from a system operation perspective, giving NGESO a better view of available capacity and resources across the system and allowing for better whole system modelling and forecasting of demand and generation across the system.

Whilst we recognise further development work would be required to clarify the details, and there would need to be a well-defined scope, purpose and remit, an asset register could be a simple and effective way of providing greater visibility of flexibility on the network and would help facilitate commercial propositions between asset owners, suppliers and aggregators.

**5. Will certainty of an end vision help accelerate enabling work and make it cohesive?**

The final vision and deliverables need to be flexible and adaptable as the system is rapidly evolving. We support an end vision that not only focuses on the design of any IT platform but also the distributed flexibility market arrangements more holistically.

**6. When should a common digital energy infrastructure be in place? And therefore, when should development begin?**

The timeline for implementation will be a key determinant of how much benefit the digital infrastructure will deliver. The sooner distributed flexibility markets are established and an IT platform put in place, the greater the benefit. Subject to the exact design and scope of the common digital infrastructure, it needs to be in place as soon as possible to enable transition to a fully decarbonised system by 2035. However, the priority should be for the infrastructure to support the optimal market design to enable DER and CER. Hence, it cannot be fully scoped without having clarity on what the market arrangements are. We support the goal to develop common digital energy infrastructure, but the detailed design of distributed flexibility markets should be the priority.

**7. What should a common energy digital infrastructure look like, and why? Please consider the archetypes or develop your own proposition.**

As we have previously indicated, we believe it's premature to be designing an all-encompassing digital energy infrastructure at this point. As a minimum, we would support easily accessible data on what flexibility assets are already connected to the network, and greater visibility of network constraints. We believe this would be of value and should be something which can be delivered relatively quickly.

**8. What is your view on the desirability and feasibility of the archetypes or your own alternative proposition?**

Principally, we believe it's too early to be considering the granular detail of the digital infrastructure at this time without a clear strategic objective for distributed flexibility – market design and key enablers should be the priority. Nevertheless, we have provided some commentary below on the different options included in the call for input.

**Thin**

In theory, such a directory would be useful, although, the scope needs to be well-defined. For instance, a fully comprehensive directory for every CER would be excessive and it would be difficult to obtain data of this granularity. The scope of the register, as well as its commercial and operational deliverables, needs to be more clearly defined. Currently, it is not entirely clear how the register would operate and what data will be available to parties. It's also not clear whether the register will be an industry-wide mandatory database or will only include a number of select assets. There would need to be consideration given to customer consent and opt-in / opt-out arrangements would need to be developed which could add additional complexity.

As a starter, we would suggest the development of a simplified and transparent opt-in asset register to provide more visibility of flexibility opportunities on the distribution network for DER assets. Another alternative could be exploring ways of adding a distributed flexibility flag to assets in existing registers, for example in ECOES. This could be as simple as adding a flag to show that an asset is flexibility-enabled (automated control) or participates in flexibility market already. These options could be developed relatively quickly and could evolve further as they become more established and move closer to the overall vision for the "Thin" archetype.

**Medium**

In a future world with well-established flexibility markets of sufficient commonality and clear eligibility requirements, a 'Flexibility Exchange' could be an effective way of coordinating participation through one platform. However, this archetype would not be compatible with current arrangements and would likely be very complex, unless there are perfect synergies between different markets that would enable them to be bundled into one single platform for participation, designing this platform would be very challenging.

It's unclear what the benefit of the "medium" archetype would be beyond facilitating supplier aggregation in the BM, which is something the industry has been exploring for many years. A strategic vision is required setting out the market roles and rules, without which it's not possible to begin the development of such a digital system at this time.

In the near term, we would suggest streamlining the route to different markets, reducing any barriers to entry and establishing clear primacy rules. This would go a long way to unlocking more flexibility and wouldn't require the significant effort that designing and implementing this archetype would require.

### **Thick**

Implementing this archetype would be hugely complex and almost impossible to achieve given the constantly evolving landscape and market structures. The expected delivery date of 2035 is too late and would surpass the critical period when flexibility is needed the most. On these grounds we do not believe the "Thick" archetype to be a credible option.

#### **9. Should a common digital energy infrastructure be new-build, or should it buildout from existing infrastructure?**

It would be very challenging to build the "Medium" or "Thick" archetype from scratch given the constantly evolving nature of the market. Any such initiative would likely come with significant risks of delay and overspend. Instead, we would suggest some form of asset register accompanied with network constraint data in the first instance, which could then evolve naturally to a more comprehensive directory akin to the "Thin" archetype.

#### **10. What are the important areas for consideration when designing institutional delivery models for a common digital energy infrastructure?**

In addition to the points made above, other important areas for consideration include:

- The governance framework
- Who's responsible for the design and ongoing operation
- Implementation challenges and lead time
- Ensuring compliance with data protection regulation
- How will the digital infrastructure be funded
- Interaction with existing market rules and how they will need to change

#### **11. What are the important areas for consideration when designing financial delivery models for a common digital energy infrastructure?**

We agree that financing will require careful consideration in the future, however, we consider it premature to be considering financial delivery models at this stage.