

# Call for Evidence – Review of the arrangements for electricity ancillary services

# This Call for Evidence is open from 8 April 2022 to 31 May 2022

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# 1. Objective and scope of our review

- 1.1. This call for evidence welcomes stakeholder views as part of a wider review of the arrangements for assets dedicated to providing ancillary services to the national electricity transmission system ("NETS").<sup>1</sup> The annex to this letter contains a list of questions to help us<sup>2</sup> gather and understand stakeholder views.
- 1.2. The objective of our review is to ensure that future arrangements for dedicated ancillary service providers support the transition to a net zero energy system at the lowest possible cost to consumers. We want to ensure that the policy and regulatory treatment of these system services promotes competition and innovation, whilst ensuring security of supply for consumers. The scope of our review will consider level playing field issues, licensing arrangements and roles and responsibilities.
- 1.3. We will work with stakeholders to consider these issues in more detail and to develop a set of recommendations on the appropriate future treatment of dedicated ancillary service providers. Once we have considered all responses, we will issue an open letter to industry, detailing the findings of our review. We intend to publish this open letter by

<sup>&</sup>lt;sup>1</sup> By 'ancillary services', we refer to zero megawatt stability and voltage service provision, as outlined in the ESO Operability Strategy Report (OSR) for 2021. The 2021 OSR can be found at:

https://www.nationalgrideso.com/document/227081/download. For clarity, we are considering assets dedicated to providing these services in this review, not assets whose main purpose is provision of MWs. Existing generation assets modified to allow them to operate as ancillary service providers (without delivery of megawatts to the system) are within the scope of this review.

<sup>&</sup>lt;sup>2</sup> The terms "we", "us", "our", "Ofgem" and "the Authority" are used interchangeably in this document and refer to the Gas and Electricity Markets Authority. Ofgem is the office of the Authority.



the end of 2022. This could lead to further consultations on changes to how the existing regime works, where appropriate. To the extent that we identify limits to what we can achieve through our existing powers, we will work with the Department for Business, Energy and Industrial Strategy ("BEIS") to assess whether desirable outcomes can and should be delivered through legislative change.<sup>3</sup>

## 2. Background and issues

- 2.1. The transition to Net Zero requires major investment in the energy sector. Ofgem has an active role facilitating this investment and ensuring that it is efficiently spent. One of our core objectives is to enable competition and innovation, which drives down prices and results in new products and services.<sup>4</sup> Ensuring that regulatory frameworks provide a level playing field to all market participants is a key enabler for competition that drives down prices.
- 2.2. There is a strong need for new sources of stability and voltage support to connect to the transmission system as the volume of traditional synchronous generation declines. It is important that the right regulatory and policy regime is in place to encourage innovation and support investment in the most efficient solutions. The Electricity System Operator ("ESO") is currently running several 'pathfinders',<sup>5</sup> which are procuring solutions to key electricity transmission system needs, including system stability and voltage management. This has led to market participants seeking to develop new assets dedicated to providing these ancillary services, such as synchronous condensers<sup>6</sup> and shunt reactors. The pathfinder process has highlighted several issues with the existing policy and regulatory framework that we believe need to be considered further.

<sup>&</sup>lt;sup>3</sup> We note that future changes to legislation will depend on the availability of Parliamentary time and so changes may not be possible within short timeframes.

<sup>&</sup>lt;sup>4</sup> Our core objectives can be found in our forward work programme 2021/22: <u>https://www.ofgem.gov.uk/publications/forward-work-programme-202122</u>

<sup>&</sup>lt;sup>5</sup> For more information please see: <u>https://www.nationalgrideso.com/future-energy/projects/pathfinders</u>

<sup>&</sup>lt;sup>6</sup> Also known as synchronous compensators.



#### Level playing field issues

- 2.3. We want to consider the different costs and charges providers face and the extent to which this could create an uneven playing field. This includes the costs and charges governed by industry and regulatory frameworks (such as use of system costs) and those governed by wider policy (such as final consumption levies). We are aware that unlicensed providers face different costs to licensed providers as the former may need to pay additional charges on the electricity they consume. Additionally, those that receive regulatory funding could face very different investment risks and costs to those that provide solutions to the ESO on a commercial basis.
- 2.4. An example of this is the Final Consumption Levy ("FCL")<sup>7</sup> regime. We do not consider that this regime envisaged assets dedicated to providing ancillary services being commercially provided when it was designed. The payment of FCLs by these providers could materially affect the outcome of pathfinders and any future competition for system services. We believe it is important to consider our licensing regime and the charging and levy frameworks in parallel, to avoid adverse impacts on competition for ancillary services in the future.

#### Licensing arrangements

2.5. Several participants in the pathfinders have sought licences for the operation of their assets. The legislation on licensing was introduced by the Electricity Act 1989,<sup>8</sup> when stability and voltage services were typically provided by large generating sites or transmission network assets. There was therefore no need to specifically consider how assets dedicated to ancillary services should be classified. With the emergence of new providers, we believe there is a need to review if, and how, ancillary service

<sup>&</sup>lt;sup>7</sup> FCLs are applied on the consumption of electricity to recover the costs of government schemes such as the Renewables Obligation, Feed-in Tariffs, Contracts for Difference and the Capacity Market. Under the existing framework, unlicensed ancillary service providers must pay FCLs for their electricity as the electricity they consume is considered as 'supply'.

<sup>&</sup>lt;sup>8</sup> The Electricity Act currently defines licence categories for electricity generation, transmission, distribution, supply, operation of an interconnector and provision of a smart meter communication service. Electricity Act 1989, Section 4: <a href="https://www.legislation.gov.uk/ukpga/1989/29/section/4">https://www.legislation.gov.uk/ukpga/1989/29/section/4</a>



technologies should fit within the licensing regime, particularly as their classification has knock on impacts on the costs and charges that parties face.

- 2.6. We previously set out temporary positions on the appropriate licensing treatment of synchronous condensers and shunt reactors in the absence of clarity on the appropriate enduring regulatory treatment of assets dedicated to providing ancillary services. Our short-term position on the operation of synchronous condensers is to continue granting generation licences,<sup>9</sup> subject to our usual assessment processes.<sup>10</sup> We also decided to grant an electricity transmission licence to Mersey Reactive Power Limited for the operation of a shunt reactor.<sup>11</sup> However, we stated that this should not be seen as a precedent ahead of this review and that we will continue to assess any similar applications on a case-by-case basis.
- 2.7. In the past, generation, transmission, and demand were much more clearly distinct activities and there was more homogeneity in the way the different activities were carried out. As we move to a decarbonised energy system these distinctions are becoming less clear.<sup>12</sup> For example, prior to the pathfinders, most stability providers provided this service as a secondary function, whilst Transmission Owners ("TOs") typically owned a substantial part of the network making up the NETS. The new parties coming forward through the ESO's pathfinders differ considerably to large generators and incumbent TOs both in terms of the scale and scope of activities, as well as having a different business model.
- 2.8. We want to review whether dedicated ancillary services should be licensed at all. Given the critical nature of these services to system security, there could be benefit in having greater regulatory oversight. On the other hand, we do not intend to create a

<sup>&</sup>lt;sup>9</sup> For the avoidance of doubt, while operators of synchronous condensers are eligible to receive a generation licence in the short term, most providers are not required to hold one to carry out this activity. For further information, please see: <u>https://www.ofgem.gov.uk/publications/review-regulatory-framework-ancillary-service-assets-and-clarification-our-short-term-treatment-synchronous-condensers</u>

<sup>&</sup>lt;sup>10</sup> Please see: <u>https://www.ofgem.gov.uk/industry-licensing/how-become-licensed-gas-or-electricity-company</u> <sup>11</sup> Mersey Reactive Power Limited – Notice of grant of an electricity transmission licence:

https://www.ofgem.gov.uk/publications/mersey-reactive-power-limited-notice-grant-electricity-transmission-licence <sup>12</sup> For example, as electricity storage deployed it was not clear which licensing category, as defined by the Electricity Act 1989, it should fall within. Electricity storage imports electricity to store it and either release it on site or export it back to the grid and ultimately the end consumer. In October 2020, we provided regulatory clarity by making changes to the electricity generation licence: <u>https://www.ofgem.gov.uk/publications/decision-clarifying-regulatory-</u> <u>framework-electricity-storage-changes-electricity-generation-licence</u>



disproportionate regulatory burden through unnecessary processes, especially where parties may only own a single asset of this type.

2.9. If these solutions are licensed on an enduring basis, then there is a question of how they should be classified. As discussed, we do not consider that any of the existing categories represent a perfect fit for these new dedicated ancillary service assets and there could therefore be merit in considering a new categorisation. There is also a relevant question of how these solutions should be incentivised and funded in the long run, as that could have implications for the type of licence the providers are granted.<sup>13</sup>

#### **Roles and responsibilities**

2.10. There are also broader questions around the responsibilities that new and different participants have to the wider industry to ensure that the NETS is operated safely and securely, and responsibilities for asset and financial resilience. Currently, the ESO and TOs share responsibilities under the SQSS<sup>14</sup> to ensure the system is planned in line with security standards. Some stakeholders have said this has led to confusion about where the boundaries of responsibility should lie and who should be taking forward solutions.

### 3. How to respond

- 3.1. The purpose of this call for evidence is to obtain your views on the current policy and regulatory framework for dedicated ancillary services and whether it is fit for purpose for the future electricity system. We welcome responses from all stakeholders to the questions set out in Annex 1 and any other relevant views for our review.
- 3.2. Please email your answers and any other comments to <u>ESOPerformance@ofgem.gov.uk</u> by **31 May 2022**.

<sup>&</sup>lt;sup>13</sup> For example, whether such a licence would be similar to a generation licence (no regulatory funding, purely commercial asset) or more akin to a traditional Transmission Owner transmission licence, with a regulatory asset base and fixed returns.

<sup>&</sup>lt;sup>14</sup> The Security and Quality of Supply Standard (SQSS) sets out the criteria and methodology for planning and operating the National Electricity Transmission System (NETS). The SQSS applies to transmission licensees. For further information, please see: <u>https://www.nationalgrideso.com/industry-information/codes/security-and-quality-supply-standards</u>



3.3. You can ask us to keep your response, or parts of your response, confidential. We will respect this, subject to obligations to disclose information, for example under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you want us to keep your response confidential, please clearly mark this on your response and explain why.

### 4. Next steps

4.1. Once we have considered all responses, we intend to use them to inform our ongoing regulatory treatment of dedicated ancillary service providers and any recommendations we make to BEIS on the appropriate regulatory and licensing arrangements for assets dedicated to providing ancillary services. We will also issue an open letter to industry, detailing the findings of our review. We intend to publish this by the end of 2022.



# Annex 1 – Questions

### **Objective and scope of our review**

- 1. Do you agree with the objective and scope of our review? Are there any other relevant issues we should consider?
- 2. Table 1 summarises the key dedicated ancillary service technologies and the ancillary services that they provide. Do you consider other technologies as capable of providing dedicated ancillary services? If so, please indicate what services they can provide.

#### Table 1: Ancillary service technologies matrix

	Synchronous condenser (including modified generator equipment)	Shunt reactor	Other
System stability	С	Ν	
Voltage	С	С	
management			
Other			

\*C – capable of service provision; N – not capable of service provision

### Level playing field issues:

- 3. What are the barriers to commercial dedicated provision of ancillary services?
  - a. Are there specific barriers for dedicated stability service providers? If so, what are they?
  - b. Are there specific barriers for dedicated voltage service providers? If so, what are they?
  - c. Are there specific barriers for other types of assets dedicated to providing ancillary services? If so, what are they?
- 4. Should assets dedicated to providing ancillary services receive regulatory funding, be commercially provided, or should there be a combination of the two?



- 5. On an enduring basis, should electricity consumed solely to provide an ancillary service be exposed to the costs, charges and levies that consumption of electricity in general (such as final demand) is exposed to? Please provide details to support your position, such as the magnitude of the impact to your business, and the impacts on competition and energy consumers more widely.
- 6. Are any other changes to the licensing and charging regime needed which could better enable competition that drives down prices for the dedicated provision of ancillary services and why?
- 7. Are there any other existing disadvantages between different providers of ancillary services that need to be addressed and why?

#### Licensing arrangements:

- 8. Should the dedicated provision of ancillary services be a licensed activity?
  - a. What are the benefits and risks for consumers and other stakeholders of assets dedicated to providing ancillary services being provided solely through Transmission Owner (TO) ownership?
  - b. What are the benefits and risks for consumers and other stakeholders of assets dedicated to providing ancillary services being provided only through commercial ownership?
  - c. Would different licensing treatment for assets dedicated to providing ancillary services present any challenges? For example, with TO-owned assets licensed under their electricity transmission licence and commercially owned assets under a different (or no) licence.
  - d. What would be the impact of each of these options on competition?
- 9. Do you think that the dedicated provision of ancillary services should fit within an existing licence category as an enduring solution? If not, how should this activity be best categorised within the licensing framework?



### Roles and responsibilities:

- 10. Do you think there is enough clarity around existing roles and responsibilities in the provision of ancillary services?
- 11. Are changes to arrangements needed to clarify responsibilities? If so, what changes are needed?