

James Hill, Policy Manager, ESO Regulation

26 May 2022

Dear James,

Call for Evidence: Review of the arrangements for electricity ancillary services

Transmission Investment, as one of the UK's leading independent transmission companies manages one of the largest offshore electricity transmission portfolios. We are a strong advocate of introducing competition into the delivery of onshore transmission and we continue to support the development of the required arrangements inter alia through industry groups, responding to consultations such as these and providing evidence to Parliament.

We are encouraged by this Call for Evidence by Ofgem that can help identify potential legislative changes that could be taken forward in unison with industry reforms including Future System Operator, Early Competition and Energy Codes that all need Primary Legislation.

Transmission Investment has participated in each of the recent ESO Pathfinder tenders, with varying success. These processes have been by their nature learning-by-doing and if they are to continue to attract commercial interest there are lessons that will need to be learnt and this call for evidence will hopefully provide useful insight.

We welcome and agree with the scope of the review. We have previously raised with Ofgem similar points, particularly the issues of a level playing field, in the costs parties face in delivering these services, and in the process of assessment of bids versus the TO counterfactual.

From our experience of navigating the current licence framework, we would advocate a separate Licence class for dedicated ancillary services. The structure of the licence should be technology agnostic, provide flexibility for service innovation as operability needs change and should expose all providers to the same charges and costs, e.g. paying for electrical losses.

We would support a model where ancillary services are provided only on a commercial basis. Using a single process where the host incumbent TO is excluded from bidding for these services (except through a business separated SPV). This would remove the multiple conflicts of interest that existing in the development phase of bids and level the playing field for assessment. Together this will enhance competition and simplify the market design going forward.

A single body needs to be accountable for how the requirements of the SQSS are achieved. The ESO (FSO) should be accountable for deciding what, where and how ancillary services are provided to meet SQSS.

We have included answers to the specific consultation questions as an attachment to this letter.

Yours faithfully,



Mark Fitch
Corporate Development and Regulation Manager

ATTACHMENT: RESPONSES TO SPECIFIC 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?

Yes, we agree the objective and scope of the review is appropriate. An additional relevant issue which should be considered is the TO policy on Ownership Boundaries. The incumbent TO's adopt different policies on the ownership boundary (different to the CUSC default) which imposes different costs for connecting in different TO regions.

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.

We would suggest that any future arrangements for dedicated ancillary service providers are technology agnostic. The policy and regulatory treatment of system services must be sufficiently flexible to promote competition and innovation and therefore should not be limited to today's technology or the scope of current ancillary services. We have added additional potential technologies that may be able to deliver these services into the table below:

Table 1: Ancillary service technologies matrix

	Synchronous condenser (including modified generator equipment)	Shunt reactor	Conventional STATCOM	Grid Forming STATCOM With Battery/ Super capacitor
System stability	C	N		C
Voltage management	C	C	C	C
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?

The greatest barrier to success for commercial provision of ancillary services is the establishment of a transparent tender process and level-playing field for all participants in the market for ancillary services.

Commercial providers currently face a range of barriers including:

- **Charging differences** – meaning bidders are exposed to differing industry charges depending on the licence status:
 - A solution with a transmission licence (typically a voltage service) is not exposed to paying for losses or the uncertainty in future prices for losses (as the TO licensee does not need to pay for losses), non-energy costs (e.g. BSUoS), nor (as a licensed activity) are they exposed to Final Consumption Levies.
 - A solution with a generation licence (typically a stability service) is exposed to cost of losses and therefore uncertainty in future prices for losses (as it consumes energy to provide the service, similar to a generation plant), non-energy costs, but not the Final Consumption Levies (FCL)
 - A licence exempt solution is exposed to losses, non-energy costs and FCL, and future uncertainty in these, and therefore is at a significant commercial disadvantage to licensed parties despite them offering a solution that provides the same outputs.
- **Contract durations** are significantly shorter than the asset life – commercial providers therefore must take a risk on future utilisation. This is particularly stark in comparison to the incumbent TO's who enjoy certainty through the RIIO mechanism and have lower risk of stranding.
- **Lack of transparency** regarding the competition – while commercial bids can largely be analysed to understand the competitive advantage that a winning bidder may have, the TO counterfactual has proven extremely hard to decipher. This creates a significant

barrier to entry for investors, where the chance of success in a tender is skewed by TO bidders who have been bidding under a different commercial model, and who are not exposed to the same risks and uncertainties.

- **High cost to bid** – bidders are required to undertake significant work as part of the bidding process. Depending on the tender process, a bid can cost hundreds of thousands of pounds to develop, including: competing to secure land rights, applying for a grid connection, preparing and submitting planning applications, preparing for procurement (market engagement, technical specifications etc). Lengthening the timescales for delivery for these services would reduce development costs of bids assuming adjustments could be made post-bid submission, similar to those envisaged for early competition models for CATO following preliminary works completion.
4. Should assets dedicated to providing ancillary services receive regulatory funding, be commercially provided, or should there be a combination of the two?

Since privatisation the industry has successfully delivered ancillary services through commercial arrangements from frequency response and standing reserve e.g. STOR, to generator voltage contracts. While the types of technologies and business models that provide such services may need to change for a Net Zero system the commercially provided approach need not.

The outcome of the Pathfinder tenders provides direct evidence that a commercially competitive process is driving costs lower for consumers. This is evident in both the early rounds, where commercial third parties were successful by offering services below the TO counterfactual. In the later round the incumbent TO counterfactual bids were remarkably lower (the implied costs appearing to be below market rates), demonstrating a potential consumer benefit from the commercial competition. However, as the funding for the successful TO counterfactual is through the RIIO MSIP mechanism the consumer remains exposed, (through the totex sharing incentive), to the TO's actual cost of delivery (whereas with a commercial provider the consumer has a firm price).

We believe that, to avoid these issues, which at best provides a lack of transparency as to whether there is a level-playing field, and at worst is a distortion of competition, ancillary services should be provided through a transparent single competitive market process. The process should be uniform, with all parties bidding on the same basis. Host licenced TOs should not be allowed to bid into these commercial competitions because, as licenced TOs, they have preferential rights (e.g. sharing risk with customers) compared to a dedicated ancillary service licensee (alongside

the wide-ranging conflicts of interests as discussed elsewhere in this response). This would not prevent business separated SPV affiliated to the Host TO group from participating. This is the simplest approach to providing a level playing field and will provide greater certainty for investors as to the future pipeline of projects.

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?

No, the electricity consumed should not be considered as final demand. Solution providers should, however, be suitably exposed or incentivised to minimise the cost of electrical losses in the provision of the ancillary service. This could be achieved by incentivising the successful bidder's actual losses performance against the assumption included within their bid.

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.

The impact on bids is significantly different depending on the licence arrangements, as shown in the sample modelling results included in the table below. Compared to costs faced by those holding a Transmission licence, a generator licensee would see 10-15% higher costs associated with losses and non-energy costs such as BSUoS, and if licence exempt the costs to be included in a bid are 20-35% higher.

Table 2: Estimated impact on bid price of different licences

Scenario	Site A	Site B	Site C
Transmission License (no power, Non-Energy Costs or FCLs)	100%	100%	100%
Generation License (power & NECs, no FCLs)	111%	115%	115%
Unlicensed (power, NECs and FCLs)	133%	129%	128%

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?

Nothing in addition to the points already made elsewhere in this response

7. Are there any other existing disadvantages between different providers of ancillary services that need to be addressed and why?

Incumbent TOs have a number of additional advantages over commercial providers (over and above those stated in answers to the other questions).

1. **TOs are not exposed to the commercial consequences of their bids**, because through RIIO they are able to share overspends with customers and receive funding mechanistically through terms such as Opex Escalator (NGET Special Condition 3.36)
2. **TO are not exposed to the end of contract 'stranding' risk**, because the assets are included in the RIIO settlement.
3. **TO policy on the Ownership Boundary for connections** – harmonising the connection boundary would avoid costs being imposed on one commercial provider in a TO area that are not borne in another, (or by the host TO).
 - For example, SPTL seek to impose the ownership boundary under CUSC 2.12.1 (f) (i) requiring the user to install an additional circuit breaker, which if connecting to the NGET system under CUSC 2.12.1 (a) would not be required
4. **TO (or an affiliate) own or control the land immediately around connection sites** and have a conflict of interest in timely negotiation with commercial third parties on terms and prices for land rights e.g. TO's not releasing pricing for land prior to bid submission.
5. **TO have wide ranging conflicts of interests** through their wider role in facilitating connections and network infrastructure planning. The TO have privileged information on all of the commercial bidders and detailed information on the wider network development that may allow them to offer or adjust their solutions based on information not available to other competing parties.

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?

We would support the dedicated provision of ancillary services being a separately licenced activity.

a. Risks and benefits of solely TO Ownership

Moving back to rely only on the TO monopoly for delivering these services is a risk for consumers. The benefits of innovation and downward cost pressure from competition has been demonstrated through the Pathfinders and these would be lost if we regress back to solely incumbent TO ownership.

These competitions have seen bidders offer solutions at lower costs and have driven the TOs to respond and offer lower costs solutions, for example NGET costs reduced by over 20%¹ in the second High Voltage pathfinder compared to the first for the same solution. More generally the ESO has also estimated savings of £130m from the Stability Pathfinder Phase 2.

It is not clear that consumers will see any of these benefits of moving to a monopoly provision of these services as the volume for these services continues to grow. While the costs of competition may be avoided, these are significantly outweighed by the benefits already reaped from competition.

b. Risks and benefits of commercial only model

Adopting a model of only commercial ownership has substantial benefits for consumers, securing lower cost and innovation in service provision. A policy of only commercial provision means a truly level playing field (supported by an appropriate separate licensing regime), which will maximise the benefits of competition and reduce barriers such as conflicts of interest with incumbent TO interests.

Consumers may face a re-procurement risk beyond the end of the initial contract term with commercial providers, where there could be opportunities to exploit their market position. However, this risk can be mitigated through an appropriately structured and designed market. We note the work that is ongoing with by the ESO on future markets that is proposing a hybrid design. That design supports both the long-term investment (akin to Pathfinder tenders) necessary to deliver the required ancillary service capacity, and shorter-term markets that expose providers to ongoing competitive pressures on utilisation pricing.

- c. Would different licensing treatment for assets dedicated to providing ancillary services present any challenges? For example, with TO-owned assets licensed under their

¹ Comparing the Total Assessment Present Value of the 200MVA_r projects in the Mersey and Pennine Pathfinder results

electricity transmission licence and commercially owned assets under a different (or no) licence.

Different licences (chosen whether a solution is more like a generator, or a transmission asset or can be exempt) infer different rights and obligations, charges and costs, even though they may be delivering the same service.

Yes, there would be multiple challenges - this is largely the status quo – and therefore the issues raised throughout this response would be similar or equivalent under this multi-licence model.

d. What would be the impact of each of these options on competition?

- a. This option would end competition for these services, leading to monopoly provision by the incumbent host TO.
- b. This option will support competition, levelling the playing field which will encourage and simplify participation in the competition
- c. Status quo, complex and opaque processes mean a likely erosion of competitors as the high cost of bidding, variation in charges/obligations according to licence, uncertainty against the TO counterfactual and uncertainty in pipeline dampens investor appetite to participate.

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?

No, we think dedicated ancillary services should be categorised separately within the licensing framework. Creating a new framework will create flexibility for new and innovative solutions and allow consistency in rights, obligations, charging, and incentives on providers to deliver for consumers.

We have proposed an approach to categorise the licence within the statutory framework, using the electricity interconnector structure as a basis:

“Prohibition on unlicensed supply etc.

(1)A person who—...

(f) participates in the operation of an ancillary services system

shall be guilty of an offence unless he is authorised to do so by a licence”

“ “ancillary services system” is a system consisting of (wholly or mainly) high voltage electrical lines or electrical plant that is (wholly or primarily) used for provision of commercial ancillary services

“commercial ancillary services”, are the ancillary services procured by the holder of a relevant transmission licence, the relevant transmission licence being one that authorises the holder to procure such commercial ancillary services”

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?

We believe a single body needs to be accountable for how the requirements of the SQSS are achieved. The ESO (FSO) would be accountable for ensuring compliance is assessed and deciding what actions, where and how to ensure ongoing SQSS compliance. This would not remove the TO's responsibility to assess compliance with the SQSS as their network changes. The ESO could seek to take operational actions, run a competition for an ancillary service provider or commissioning an investment in the network (which could be carried out by the TO or third party if suitable for competition).

The ESO would be held accountable for non-compliance with the SQSS where it has not taken appropriate action in response to an issue identified by its own network analysis or highlighted by a TO e.g. as part of analysis for a new or modified connection.