Alterations to the generation licence for the provision of network services: Carbon Trust response

Background to our response:

The Carbon Trust is a leading partner in the Strategic Innovation Fund (SIF) Innovative Control and Energy Storage for Ancillary Services from Offshore Wind Farms (INCENTIVE) project, which is looking at the viability of offshore windfarms providing stability services from a range of new, grid forming assets. A key finding of the project's Alpha Phase is that upgrading preplanned substation assets (e.g. STATCOMs) with the ability to provide stability services can provide inertia at lower costs than those previously seen in National Grid ESO's Stability Pathfinders. The INCENTIVE assets have the potential to reduce the ESO's stability procurement costs and reduce costs for GB billpayers.

A key issue encountered in our commercial and regulatory workstream relates to INCENTIVE asset ownership. STATCOMs and other dynamic reactive compensation equipment (DRCE) are typically owned and operated by regulated Offshore Wind Transmission Operators (OFTOs) to meet their STC requirements. However, OFTOs are currently barred from participating in the ESO's upcoming Stability Market due to their licensing conditions.

Current licence conditions were conceived at a time where the distinction between generation and transmission activities was clear. Now, as the lines become increasingly blurred, we welcome Ofgem's exploration of network services as a distinct subset of ancillary services.

Consultation Question Responses:

Q1. Do you agree that the current Generation Licence should include a definition of assets dedicated to providing network services in order to activate conditions that were not drafted with these assets in mind?

Yes.

Q2. Do you agree with the proposed scope of assets we intend to capture in this definition?

The scope should include assets such as STATCOMs and other DRCE which have been augmented with the ability to provide stability services (i.e. inertia and SCL) in addition to their typical provision reactive compensation.

STATCOMs are a typical component of AC transmission systems which, at low additional cost, can be upgraded to provide inertia and SCL. This means they can provide "network services" at lower cost than assets (e.g. Synchronous Condensers) designed specifically for this service. This reduces costs for GB billpayers.

Currently, at the culmination of the generator commissioning clause period, STATCOMs are typically transferred over to OFTOs to be operated under a transmission licence. However, transmission licence holders are barred from participation in NGESO's Stability Market. This means there are assets that could reduce the ESOs stability procurement, but have no route to market. This is an issue that is unique to offshore transmission networks, as onshore DRCE is typically owned by generators.

In addition to the above, we note that shunt reactors have been highlighted as an asset that is excluded from future generation licence conditions that relate to network services. In the Voltage Pathfinders, Merseyside Reactive Power limited was granted a transmission licence for a shunt reactor with energy storage. Like STATCOMs, under the current regulatory regime, this asset would be barred from participating in the Stability Market

Q3. Do you agree with our proposed definition and terminology?

We agree with the definition of "network services" as a subset of "ancillary services".

Regarding the "Rationale for restricting to long contract periods" – we agree that longer term contracts provide significant consumer value in the certainty providers gain through longer term contracts.

However, in addition to the issues highlighted within the consultation document, it should be noted that NGESO currently does not procure longer term (Y-4) contracts within the Stability Market. This should be taken into consideration when planning an interim solution. The definition of "long term contracts" should be clearly defined.

Q4. Do you think there are any network services that should be considered in scope that are not currently included in our proposed definition?

Yes. Ofgem should consider including other services that can be provided from grid forming plant, such as active harmonic filtering and oscillation dampening.

Q5. Do you agree with our preferred approach to address any necessary changes through addition of a new Section to the Generation Licence?

This is a challenging question. There is an argument for entirely revamping the licensing system within the UK, as these licences were designed when there was a clear distinction between generation and transmission activities, which is no longer the case.

A dedicated licence for network services is something we support Ofgem investigating.

Q6. Do you have any other comments relevant to the definition of assets to be covered by the purpose of this consultation?

No.

Q7. Do you agree with our current assessment that Licence Condition 14 does not apply suitably for the assets within scope of this consideration?

Yes.

Q8. Do you have views on other conditions in the Generation Licence that may not apply suitably to assets within the scope of this consideration?

Not at this time.

Q9. Do you have any other views on our interim treatment of assets dedicated to network service provision?

Not at this time.