

# Hitachi Energy's response to Ofgem's consultation on initial proposals for an OFTO Build model to deliver non-radial offshore transmission assets

## Introducing Hitachi Energy

Hitachi Energy is an exciting global business with a ground-breaking heritage of innovation in pioneering technologies. As a global technology leader, we serve the energy, industrial, mobility, IT, and smart cities sectors. We are a major investor in the UK, with a turnover of £1 billion.

We are advancing the world's energy system to be more sustainable, flexible, and secure. As a technology leader, we collaborate with customers and partners to enable a sustainable energy future – for today's generations and those to come. In the UK, we are already helping to bring clean energy to 4.5 million homes by connecting the world's largest offshore windfarm at Dogger Bank to the grid. We are leaders in the global HVDC market and are currently engaged in delivering close to 13 GW of HVDC capacity into the UK to support the transmission and connection of clean energy. We strongly believe that the UK can lead the world in creating a secure, Net Zero-ready energy system through investing in technologies to make the energy system more sustainable, flexible, and secure.

## Our response

Hitachi Energy has serious concerns about Ofgem's proposals, which we find to be unworkable, with a level of complexity and potential uncertainty from a supply chain perspective that does not compare favourably with other markets, competing for supply chain support. We have therefore, outlined a general response to the consultation below. We have two main concerns about the proposals, centred around the design, build, and operation of shared infrastructure and supply chain considerations.

### Supply Chain Context.

Driven by the unprecedented demand for high voltage transmission equipment and systems, particularly HVDC, Governments across the world are taking strategic action to secure their developments, and there is a growing competition for key supply chain capacity between countries and regions, rather than between or within individual projects. As such, relative market attractiveness is becoming increasingly important to global supply chain players when considering where and how to deploy critical resources and capacity.

This is despite global suppliers expanding capacity at record speed. Hitachi Energy, for example, has increased its global workforce by more than 8,000 since 2020 and invested \$3 billion in expanding our manufacturing and engineering footprint, and Research & Development (R&D). A further \$1.5 billion was recently announced to support ramping up of global transformer production capacity.

From a Hitachi Energy perspective, effective and efficient use of key resources, design repeatability, strategic programmatic planning and long-term partnership working with our customers and partners are fundamental elements for us to maximise our contribution to the energy transition in the UK and elsewhere.

### Design, build, and operation of shared infrastructure

Hitachi Energy is concerned about the proposed delivery models for non-radial offshore transmission assets and which parties will have responsibility for, and have the ability to execute designing, building, and operating such shared infrastructure. The dependence between parties and the likely complexities in detailed design for non-radial offshore transmission infrastructure, indicates that this is a new concept and therefore requires a secure delivery model.

For instance, in a situation whereby two offshore wind farms were connected into a non-radial offshore transmission asset, it would not be clear who was responsible for the asset. Therefore, it is important that the party responsible for all elements of the asset is clearly identified in the guidance and is competent to build and operate the asset.

It also imperative that whoever is responsible for non-radial offshore transmission assets collaborates with other relevant parties. However, this would include sharing their long-term plans for assets ahead of normal commercial timelines, which is unlikely to be feasible. Specifically, important questions arise around assets' operations, interoperability if assets have multiple vendors, and responsibility for fault-finding on shared infrastructure have to be clarified. We believe that Ofgem should give further consideration to these complications.

#### Supply chain considerations

Secondly, in the design of the OFTO Build model to deliver non-radial offshore transmission assets, it is important that Ofgem recognises the current reality regarding the supply chain, both now and for the foreseeable future. As supply chains are currently constrained, the allocation of capacity for delivering projects is being prioritised to parties who can provide long-term visibility of and commitment to projects, as well as committing to multiple projects, rather than single projects. However, Hitachi Energy believes that this not reflected in Ofgem's proposals because the commitments to whoever is ultimately responsible for the OFTO Build model procurement are too late in the delivery process and are on a project-by-project basis. From our point of view, as a business operating in one of the most constrained parts of the supply chain, Hitachi Energy would give preference to customers who can provide long-term visibility of and commitment to multiple projects.

Another concern would be around any change of contracting party during procurement and we suggest any supplier would find it an unacceptable risk to accept a contract to supply equipment where the construction and commissioning party is unknown at the time of contract.

#### Our view

Hitachi Energy suggests Ofgem seriously consider adopting an OFTO design, procure, build, operate model for at least the shared portion of non-radial offshore transmission assets that gives responsibility for all stages including detailed design and consenting for the transmission assets to a suitably qualified OFTO. The competence and relevant experience of the OFTOs would be critical. We note the approach in several European North Sea regimes where their incumbent TOs take the responsibility, bringing the advantage of their experience and competence. To recognise the current supply chain constraints we also suggest consideration is given to the allocation process awarding multiple links to a single OFTO so that they can attract higher supply chain priority. The benefits of a programmatic procurement approach are not only in securing supply chain capacity, but also the efficiency benefits of learning from project to project and supporting the standardisation and repeatability of solutions to deliver projects more efficiently.