Offshore Transmission Network Review: Enduring Regime

Aldersgate Group written evidence, November 2021

BACKGROUND

- 1. The Aldersgate Group is an alliance of major businesses, academic institutions, professional institutes, and civil society organisations driving action for a sustainable and competitive economy. Our corporate members, who have a collective turnover in excess of £550bn, believe that ambitious and stable low carbon and environmental policies make clear economic sense for the UK.¹ They have operations across the UK economy and include companies such as Associated British Ports, BT, CEMEX, the John Lewis Partnership, Johnson Matthey, Vestas, Michelin, National Grid, Octopus Energy, Orsted, Ramboll, Scottish Power, Siemens, SUEZ, Tesco and Willmott Dixon. Our membership also includes environmental organisations RSPB, WWF and Green Alliance.
- 2. We develop independent policy solutions based on research and the expertise and diversity of our members. Through our broad membership, we advocate change that delivers benefits to an ever-growing spectrum of the economy.

EVIDENCE

- 3. The Aldersgate Group welcomes the opportunity to respond to the Offshore Transmission Network Review (OTNR) proposal for the introduction of an Enduring Regime.² The Group recognises the critical role offshore wind will play in decarbonising the UK's energy system by 2035. The Group is also supportive of the Climate Change Committee's recommendation for at least 100GW of offshore wind to be installed by 2050.³ Delivering the 2030 target will require a four-fold increase of the current 10.5GW capacity, but in just nine years instead of twenty. Delivering an infrastructure project this size requires immediate and increased collaboration and coordination between different sectors and across Whitehall, well as engagement with communities and environmental groups.
- 4. The Aldersgate Group agrees with the view set out in the consultation that the current approach to designing, planning and building offshore wind was developed when it was a nascent sector, and industry expectations for offshore wind generation were as low as 10GW by 2030. The current offshore planning system which is market-led has been described as complicated to navigate, with marine environment industrial users largely operating in silos.
- 5. The Group therefore welcomes the proposals for a strategic plan for the offshore space. We have carried out engagement on this subject already, through discussions with members from offshore wind development and environmental groups, who advocate the need for greater coordination. Only through taking a strategic approach can the government ensure delivery of its net zero and biodiversity restoration ambitions, in a coordinated and sustainable way. This will ensure infrastructure is rolled out as quickly and efficiently as possible, in a way which protects marine ecosystems and creates jobs across the UK.

¹ Individual recommendations cannot be attributed to any single member and the Aldersgate Group takes full responsibility for the views expressed.

² Please note, this consultation response only covers the proposals for an Enduring Regime; it does not cover the questions included in the proposals on Multi-purpose Interconnectors.

³ The Climate Change Committee (9 December 2020) "Building back better – Raising the UK's climate ambitions for 2035 will put Net Zero within reach and change the UK for the better"

Towards a Strategic Plan

- Q1. We think that a more strategic approach to the planning and development of offshore wind is needed to achieve the Offshore Transmission Network Review's objectives. Do you agree?
- Q.2 If you agree, do you have any views about the scope of the strategic plan? For example, should it cover generation or be limited to transmission?
 - 6. The Aldersgate Group agrees that a more strategic approach for delivering the UK's existing offshore wind targets is needed, and welcomes the proposal to introduce an Enduring Regime. Planning and development of future offshore wind capacity must become more strategic and holistic than the current approach. It is welcome to necessary for the new, coordinated approach to identify the best geographic areas for wind farm development and cable corridor routes, consider environmental impacts, and seek to avoid the need for biodiversity compensatory measures.
 - 7. Taking a strategic approach will ensure that delivering the 40GW by 2030 target which will necessitate at least an additional 30GW to be installed during the next nine years and require over 5,000km² of seabed⁴ is done in an efficient and environmentally-positive way. The marine environment is already under pressure from other sectors, with UK seas not currently achieving Good Environmental Status⁵, and it must be restored in line with government plans being set out in the Marine Strategy and other nature restoration strategies.
 - 8. The Aldersgate Group believes this strategic plan should cover both generation and transmission. The installation of offshore wind farms and their associated cabling is currently uncoordinated, which is leading to an inefficient use of offshore infrastructure space and risks greater environmental impacts as developers install infrastructure to support each individual project. Addressing generation and transmission in a strategic plan will ensure the deployment of turbines, farms and associated cabling, is coordinated. This will reduce the environmental impact of the infrastructure, as well as ensure the efficient allocation of the limited seabed space.
 - 9. The Aldersgate Group recommends that the strategic plan outlines how users of the marine industrial users will be coordinated with delivery of the UK's climate and environmental targets in mind. The consultation document makes reference to a strategic plan "considering other marine environment users such as fishing, shipping, aggregates, oil and gas". However, it does not set out any proposals for ways in which to do this, nor clarify what "considering" would entail. Taking a holistic view of the space and prioritising the users most important in delivering these goals will be vital.
 - 10. Further clarification is needed with regards to how a strategic plan would link with other government strategies which impact the marine environment, particularly the proposals set out in the UK Marine Strategy Part 3: Programme of Measures, which aim to deliver or maintain Good Environmental Status of UK marine ecosystems. Similarly, it will be vital for the OTNR Enduring Regime to be coordinated

⁴ Calculated using the weighted average capacity density for the North Sea of 6.0MW/km² from Deutsche WindGuard GmbH (2018) *Capacity Densities of European Offshore Wind Farms*

⁵ Marine Strategy Part One: UK updated assessment and Good Environmental Status (publishing.service.gov.uk)

⁶ The Institute for Engineering and Technology (2021) Offshore energy infrastructure landscaping – UK and neighbouring waters

with existing and newly established Marine Protected Areas. The generation map proposed as part of the Pathway to 2030 will be critical here.

Q3. What governance arrangements would be appropriate for a strategic plan? For example, who should be the lead organisation, and what roles and responsibilities would other partner organisations have?

- 11. Currently, no single organisation has responsibility for overseeing and coordinating the offshore space. When offshore wind was a nascent sector this posed marginal risks, but as the sector grows and other industry users increase their activity in UK seas (such as green hydrogen production or Carbon Capture, Use & Storage), this lack of oversight poses a risk to the deployment of wider infrastructure and the marine ecosystem. The proposals for a holistic and strategic system-coordination are welcome, but it is vital that a lead organisation is established with the remit and responsibility of overseeing a strategic plan, rather than continuing with the developer-led system currently in operation.
- 12. At the government level, this should be a cross-departmental action which could be led by the Department for Business, Energy & Industrial Strategy (BEIS) with involvement from the Department for Environment, Food & Rural Affairs (Defra) and the Department for Levelling Up, Housing and Communities (DLHC) to coordinate. Cross-Whitehall coordination will be critical to ensure there is alignment between the different department's energy, environment and planning strategies and policy frameworks, as well as coordination cross-county and internationally.
- 13. This coordination should feature Ministerial-level governance. The Aldersgate Group welcomed the announcement of a Ministerial Delivery Group to oversee the expansion of renewable power in the Energy White Paper (December 2020). Further details about this Group's focus and co-ordination, in particular with the Offshore Transmission Network Review, would be helpful.
- 14. In addition to government departments and figures, it is vital that key stakeholders are involved in the development and governance of a strategic plan. This should include, for example, The Crown Estate, Ofgem and National Grid, along with environmental and civil society groups. This will ensure that the benefits of a strategic plan are clear to all organisations involved in consenting, leasing and installation, and that they buy in to changes to the way the offshore space is planned. The Aldersgate Group recommends establishing a strategic steering group which includes these stakeholders, to advise government on policy detail.

Q4. How should stakeholders be consulted during the development of a strategic plan?

- 15. Ahead of consultations commencing, it is vital that interactions between an offshore wind strategic plan and existing strategies, plans and policies for the marine environment be mapped out, for example, between the Enduring Regime and Energy National Policy Statements, Crown Estate Leasing, and the Marine Strategy. This will help to identify which stakeholders should be involved in consultations at which times, and can ensure targeted discussions are arranged to discuss key policy and planning solutions.
- 16. Stakeholders from different sectors must then be consulted regularly during the development of the strategic plan. In addition to establishing a strategic steering group (as proposed in point 14), consultation should include roundtables, bilateral meetings, and opportunities to submit written feedback. As with the governance process, it is important that consultations include stakeholders with different

experiences and expertise of working in the offshore environment. This should include offshore wind developers, National Grid, The Crown Estate, Ofgem and environmental groups. Users from oil and gas, fisheries and shipping should also be consulted on a regular basis. This will ensure that all views and sectors are represented as part of developing the detail of the strategic plan. It would be beneficial to establish a Taskforce with representatives from different sectors affected by the strategic plan.

17. Finally, it is important to engage the public and local communities on the purpose and benefits of the strategic plan. This will, in particular, help to ensure buy-in among communities in areas within close proximity to offshore wind sites or onshoring points. Engaging these groups early on will ensure a greater understanding of the role offshore wind will play in delivering the UK's climate goals, and minimise risks associated with the rollout of new infrastructure – for example, local-level planning objections.

Q5. What time period should be covered by a strategic plan and how frequently do you think it should be updated?

- 18. The Aldersgate Group recognises that offshore wind projects have long time horizons, and that construction will need to accelerate rapidly to meet the government's 40GW by 2030 target. The Group also supports the Climate Change Committee's recommendation that the offshore wind sector deliver at least 100GW of energy by 2050. As the Aldersgate Group understands it, the proposals set out as part of the OTNR aim to divide a strategic plan into three parts; Early opportunities and Pathway to 2030 will focus on in-flight projects and projects expected to be completed ahead of 2030 respectively, with the Enduring Regime looking from 2030 and beyond.
- 19. A strategic plan which identifies near-term and long-term actions together will be necessary to deliver both the 2030 and 2050 targets. It is vital that the plan helps keep an oversight of all planned construction, proactively identifies risks to deployment, and accelerates planning approval by enabling early consultation with local communities. Dividing the strategic plan into separate parts risks retaining issues with the existing system's short-term approach to infrastructure planning. Such an approach is incompatible with delivering the longer-term UK government goals. For example, the current Electricity Systems Operator (ESO) plans only cover the next 10 years. Identifying *Early opportunities* without having a plan in place for what will need to happen next could lead to unexpected policy changes when the time comes to transition to the next part of the plan, which would be disruptive to developers, or reveal gaps in planning which could have been identified earlier if a longer-term plan had been put in place.
- 20. The Group therefore recommends that the strategic plan should cover at least a 20-year time horizon, with formal revisions to the plan occurring at least every five years. The strategic plan will need to have some flexibility, given that rapid technology advancements and increased climate ambition could be reflected in changes to infrastructure deployment targets or strategies over time.

Holistic Network Design

Q6. We think that there is a need for a Holistic Network Design that plans offshore transmission for the long-term as an integrated part of a transmission network, Do you agree?

Q7. If you agree, do you think a Holistic Network Design should also include onshore transmission?

- 21. The Aldersgate Group agrees that there is a need for a Holistic Network Design (HND) for offshore transmission, and that this should be part of a long-term integrated transmission network which includes onshore transmission. The current developer-led approach leads to unnecessary installation of more infrastructure than is required to transmit electricity generated offshore to the shore. This approach leads to a number of risks to the installation of offshore wind which would be overcome by having a HND such as the impacts on marine ecosystems and the associated implementation of the mitigation hierarchy, as well as the risk of objection to planning proposals. Similarly, a HND would be more cost-effective for developers, as construction costs would be reduced by having shared installation projects.
- 22. The new HND will need to be long-term, as this will help to truly address barriers to anticipatory investment in the offshore space. It must include onshore transmission network requirements as part of a whole system approach, which also considers wider network solutions for example, interconnectors and multi-purpose interconnectors. As recommended by Ofgem, and according to the proposals in the BEIS consultation *Proposals for a Future System Operator role*, an Independent System Operator could play a key role in developing and implementing the HND, delivering coordinated oversight of future generation and network developments. This is crucial if a decarbonised electricity system is to be delivered alongside rapidly increasing electricity demand, and if network and wider system costs are to be effectively managed. Such coordination includes the interaction between transmission and distribution system development, operation, access and pricing (and is linked to the objectives of Ofgem's current Access and Forward Looking Charging Significant Code Review). As such, the role of Distribution Network Operators (DNOs) with respect to the new ISO must also be clarified and, if appropriate, strengthened in parallel.

A range of options

Q11. Do you have any views on the relative merits of these high-level approaches?

#1 Incremental change

23. Due to the concerns already outlined regarding the current developer-led approach to the design and delivery of offshore transmission – including the environmental impacts which arise from an uncoordinated approach to infrastructure rollout – the Aldersgate Group would not recommend moving forward with an incremental change approach, even if it introduces new incentives to encourage cooperation between developers (#1). Instead, a holistic network design would be more appropriate, and agrees that there are benefits and concerns with both approaches #2a and #2b.

#2a Holistic network design and delivery

- 24. If #2a is taken forward it will be necessary to provide further clarity around the details of the approach, to reduce the risk of uncertainty for developers. For example, #2a would not require a strategic plan for the location of offshore generation in advance, and it proposes multiple options for who would take responsibility for the design for infrastructure delivery (for example, the ESO or Independent Transmission Owners).
- 25. The proposals regarding transmission infrastructure in #2a could create further challenges for developers. The proposal for a requirement for early transmission infrastructure, ahead of a developer securing seabed leasing or being awarded

government support, creates a risk of stranded assets. This model would also still allow late delivery of transmission infrastructure, which would perpetuate existing regulatory barriers to anticipatory investment, which has been identified as a systemic issue to date.

#2b Holistic network design with combined seabed lease and financial support

26. Combining the seabed lease auction with the allocation of government support into a single competitive process, as proposed in approach #2b, would remove uncertainty for offshore wind developers, and would be supported by the Aldersgate Group. In the proposal for seabed leasing to come with planning permission already granted, this combination could shorten the timeframe for offshore wind deployment and increase the likelihood of delivering the UK's offshore wind targets.