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To whom it may concern,

## **Consultation Response: Consultation on changes intended to bring about greater coordination in the development of offshore energy networks**

Scottish Renewables is the voice of Scotland's renewable energy industry. Our vision is for Scotland leading the world in renewable energy. We work to grow Scotland's renewable energy sector and sustain its position at the forefront of the global clean energy industry. We represent over 260 organisations that deliver investment, jobs, social benefits and reduce the carbon emissions which cause climate change.

Our members work across all renewable energy technologies, in Scotland, the UK, Europe and around the world. In representing them, we aim to lead and inform the debate on how the growth of renewable energy can help sustainably heat and power Scotland's homes and businesses.

Scotland's ambition to be a leading offshore wind market is clear. The Scottish Government's Offshore Wind Policy Statement states that as much as 11GW of generation could be deployed by 2030, and with sizeable leasing opportunities being run by Crown Estate Scotland, offshore wind's contribution to Scotland's 2045 net zero emissions target could be in excess of 30GW of clean generation.

Scottish Renewables welcomes the opportunity to provide our view on the proposals outlined in this consultation. In summary, we would like to highlight the following general points:

- A more strategic approach to the delivery of offshore and onshore transmission, at the appropriate stage in project lifecycles, would be a welcome evolution towards a holistic approach to delivery of our national infrastructure. It is essential for this ambition to be met that there is an aligned and coordinated plan to address the major onshore transmission constraints facing new generation in Scotland.
- The transition to a new offshore grid connections regime, via the OTNR workstreams, comes at a crucial time for Scotland, as the offshore industry seeks to rapidly increase the scale and pace of deployment despite a range of commercial and consenting challenges. These reforms have the potential to introduce major risks to projects' delivery programmes.

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It is vital that momentum and confidence are maintained to meet both the 2030 wind generation target and 2030 climate target, and that change is considered in the context of project development lifecycles.

- We are concerned that interaction between the Holistic Network Design proposals and the Scottish consenting regime, which is different from that which applies in England and Wales, has not been fully considered. We also want to see the Generation Map for Scotland draw on the broadest possible range of sources, including developers, to consider potential interactions between oil and gas decarbonisation, future green hydrogen production and other coastal renewables and supporting grid projects. We also note that there is risk of misalignment between the generator map and ScotWind & INTOG results.
- It is essential that the OTNR process recognises that the spatial context in Scotland is notably different from parts of England and that onshore transmission infrastructure congestion is not a current or medium-term spatial constraint on projects. Recognising this difference and the other commercial and consenting pressures faced in particular by Scottish offshore wind projects, we feel strongly that a 'one size fits all' approach must be avoided for the PT2030 requirement. The appropriate delivery model/s can only be assessed through HND after the ScotWind outcome is clear, with deliverability of the 2030 wind targets as the overriding objective.

**In response to the questions set out in the consultation, our members have contributed significantly to the technical detail set out in the RenewableUK industry response.** Below we wish to add several comments most relevant to Scotland.

### **Early Opportunities questions**

- a. While we support the UK-wide ambitions of the Early Opportunities workstream, the number of opportunities for electrical integration of transmission assets between in-flight projects in Scottish waters is limited. This is for a number of reasons. Consented but unconstructed Scottish projects are at an advanced level of readiness and face a highly competitive CfD round in which amplified and uncertain TNUoS costs play a major role.
- b. Scottish projects are already demonstrating coordination of transmission assets where opportunities exist to do so. For instance, a cable corridor with minimal spacing between the Inch Cape and Seagreen 1a projects has been proposed to minimise seabed impacts, while SSEN's Blackhillock Substation has become a major hub for connection of onshore/offshore wind generation and HVDC interconnection. The proximity between Round 3 projects in the Firth of Forth Zone may present other early opportunities.
- c. We strongly support the need to enable anticipatory investment (AI), with a model of risk sharing between consumers and generators that recognises the commercial realities facing developers when making investment decisions and does not impede projects from advancing quickly to deployment.

- d. Specifically, we need to avoid any model that creates unworkable commercial interdependency between projects that remain competitors in CfD auctions. Any future project integration will require carefully managed socialisation of risk and a form of gateway cost assessment process by Ofgem that would formally allow projects to progress with the security that efficient costs will be recoverable.
- e. Investment ahead of need, both onshore and offshore is required to underpin the entire energy transition, which demands a rapid institutional shift to benefit consumer (lower capital costs over the long term) and societal interests (lower emissions).
- f. We also note that code reform is a major barrier to the delivery of early opportunity projects. Ringfenced resource and a bigger role in driving strategic and timely code changes should be considered by Ofgem and the ESO.
- g. Industry would also like to see greater clarity in relation to the governance process underpinning this workstream and how it interacts with PT2030. While we recognise that Ofgem, BEIS and NGENSO have been open to bilateral engagement, many projects have not received any formal feedback from these parties to provide a consolidated view on the status of a particular proposal and what actions are required of different parties to progress the proposal. In addition, timings of any crucial decisions that either projects or Ofgem, BEIS and/or NGENSO are required to make for these proposals to progress, have remained unclear.

## **Pathways to 2030 questions**

### **Holistic Network Design**

- a. We agree that Holistic Network Design has the potential to result in a more coordinated outcome, but all parties involved must have confidence in the timely delivery of the new process.
- b. It is difficult to assess whether the proposals will necessarily lead to a more economic outcome, and we would like to highlight to all stakeholders that ensuring delivery of Scotland's 11GW by 2030 target (towards the UK 40GW) in a steady pipeline over the 2020s, is essential when considering how the HND can be delivered with the best overall outcome for GB consumers in the short and long-term.
- c. Any over-engineering of the HND would cost time; bringing with it disruption to the building and maintaining of local supply chains, along with the jobs and skills this brings. The economic outcomes of the HND must consider all the objectives of the OTNR set out in Appendix 3 of the consultation, not just the cheapest way to build transmission infrastructure. Individual projects are already incentivised by commercial pressures to design an optimum transmission system, and the overall risk of project delays (with consequent impacts on CfD participation) would have a major impact on costs.
- d. We welcome the inclusion in the PT2030 proposals of projects that will come forward through the ScotWind leasing round, as it is reasonable to expect coordination opportunities to exist between projects, particularly in the North East and East plan areas in the Sectoral Marine Plan.

- e. However, we have set out some reservations below and are keen to ensure that the PT2030 proposals work favourably in a Scottish context, recognising that there are differences in both the policy drivers and regulatory regime for developers in Scotland compared to elsewhere in GB.
- f. It must be acknowledged that the impetus for the inclusion of Early Opportunities and Pathways to 2030 workstreams in the OTNR process has been driven by concerns relating to a concentration of onshore transmission infrastructure in parts of England. Coastal land is not as congested in Scotland and offshore development is likely to be more spread out around the Scottish coastline than is possible in areas such as East Anglia.
- g. Indeed, positive local support has often been seen for network infrastructure improvements, with recognition that this work is often linked to considerable local employment by the relevant TO, combined with a long history of energy development from hydro, onshore wind and oil & gas, and an understanding that North Scotland in particular is a major exporter of renewable generation.
- h. While we are alive to the potential for cumulative onshore impacts in the future in certain areas and support the aim of the Holistic Network Design to avoid this, a serious hiatus in project timescales as a result of these proposals would present a much bigger risk in terms of delayed investment and socio-economic benefits. Therefore the “deliverability” of the Holistic Network Design is crucial with the 40GW by 2030 and Scotland’s own 11GW by 2030 targets in mind.
- i. The consultation states *‘while planned reforms may result in delays in the early development steps, we envisage the new approach will speed up later development steps, including the consenting process, thus reducing the overall time for project delivery.’* This statement is lacking a recognition of the separate Scottish consenting regime, which differs significantly from the DCO process in England and is not subject to any revisions that might be made to National Policy Statements.
- j. It is hard to see how introducing a competitive process during the development stage of a project, if this cannot be run in parallel to development, (rather than post construction) will result in any overall reduction to project timescales.
- k. Lastly, we would have liked to see acknowledgment in the consultation that the role of locational TNUoS poses an interrelated risk to the Pathway to 2030 proposals set out in the consultation. The locational distribution of new renewable generation, and offshore wind in particular, has become largely pre-determined by top-down strategic planning of coordinated network build and seabed leasing, rather than individual low carbon generator decisions.
- l. Bottom-up locational TNUoS price signals for these types of generator have become redundant, and have become a source of risk and higher cost rather than a useful price signal. If unresolved, this ultimately leads to unnecessarily higher costs on customer bills and risks higher cost TNUoS regions like Scotland being unable to secure the associated benefits of renewable energy deployment.

## Onshore grid

- a. Greater anticipatory investment in the onshore transmission grid is absolutely vital for offshore deployment and to ensure earliest connection, particular in the North Scotland region.
- b. Timescales for transmission upgrades are similar in length to those for offshore projects, so the HND process must be able to update quickly following the ScotWind outcome to align with whole system planning such as the Network Options Assessment and the Scottish Government's Major Energy Projects Review. For onshore planning, engagement with the current development of National Planning Framework 4 could have benefits in terms of community engagement processes.
- c. On technology availability, we are concerned that according to the National Grid ESO Phase 1 report, the use of HVDC circuit breakers would be a necessary requirement for integrated solutions in Scotland under the PT2030 proposals. As this would not apply to projects elsewhere in the UK, this adds a major supply chain dependency and could potentially add to a competitive disadvantage already faced by Scottish projects because of locational charging and other consenting and construction risks. In addition to supply chain and technology risk, considerable grid code changes are needed, and it is unlikely that Open Governance code arrangements can deliver these across this process without ESO and Ofgem leadership on timescales.
- d. Overall, policy and regulation must reflect the significant changes that will be required to the GB transmission network to serve the long-term demands for more 100GW of offshore wind by 2050. East Coast HVDC links connecting England and Scotland, and Multi-Party Interconnectors connecting offshore wind hubs to neighbouring markets, will both present opportunities for UK leadership in HVDC technology, with particular Scottish expertise centred at the National HVDC Centre in Cumbernauld.

## Generation Map

- a. We would have liked to see consultation on a draft Generation Map itself, recognising that the Central Design Group would have to find a way to present any confidential information.
- b. We urge the Group to consider the broadest possible range of inputs to the Map, working back from long term FES and CCC generation need projections for 2045/2050 and considering Scotland's likely contribution to offshore deployment, recognising our deep-water potential for floating wind in particular.
- c. The recent draft Sectoral Marine Plan for Innovation and Targeted Oil and Gas Decarbonisation (INTOG) offers the potential for an additional 4.5GW of deployment in support of North Sea Transition Deal emissions reduction targets for 2025, 2027 and 2030. In addition, consideration should be given to what possibilities could exist to coordinate with other coastal renewable generation, such as remote island wind and tidal power, and both the domestic and international interconnectors that are in development for Scotland.
- d. A far-sighted approach at this point on our national net zero pathway can be the key enabler of a world-leading renewable energy economy.

## ScotWind requirements


- a. The consultation proposes that ScotWind projects will be required to coordinate through the HND process, driving connections to meet the 2030 offshore wind target. Note that the revised National Policy Statement (NPS) regime does not apply in Scotland. Therefore, if NGESO issue connection offers to ScotWind projects for coordination/integrated connections, based on the HND, these will need to be able to be consented under the Scottish rules.
- b. Furthermore, we believe that the existing radial model is likely to continue to be best suited to several projects that are in relative spatial isolation from other developments. This could potentially extend to projects clusters that are all owned by a single developer. In general, we believe that the developer would retain the option to choose between Generator Build or a third-party model.
- c. Scottish projects face a range of consenting and construction risks, including considerable bird constraints under the Sectoral Marine Plan and more challenging construction conditions (weather, water depth). In addition, the majority of the ScotWind sites are likely to require floating foundations either entirely or in part, meaning developers will be dealing with a significantly less mature technology than for fixed-bottom sites.
- d. Considering these points, and those made above in relation to the lack of pressure on coastal development, we would like to request that no decision is made on the requirement for ScotWind bidders to coordinate until the ScotWind outcome is clear, and the delivery model/s that are most appropriate for potentially quite different projects (floating/hybrid/clusters/phased) can be assessed, with the overall aim of securing the 2030 wind target and contributing significantly to the 2045 net zero trajectory of projects.

## Multi-Purpose Interconnectors (MPIs)

- a. We note that MPIs could provide an opportunity to meet both the 40GW of offshore wind and the 18GW of interconnection targets, whilst bringing forward coordinated grid solutions. Therefore, we support continued work on the appropriate MPI commercial models.

Scottish Renewables would be keen to engage further with this agenda and would be happy to discuss our response in more detail.

Yours sincerely,



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