

Email to:
offshore.coordination@ofgem.gov.uk



15 July 2022

Dear Cher-Rae,

Minded-to Decision and further consultation on Pathway to 2030

Scottish Renewables is the voice of Scotland's renewable energy industry. The sectors we represent deliver investment, jobs, social benefits and reduce the carbon emissions which cause climate change. Our 300 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.

Scottish Renewables welcomes the opportunity to provide our view on the proposals outlined in this consultation. In general, we believe that the minded-to decisions laid out in this consultation represent a positive step forward. **We have responded to your individual consultation questions further below, but in summary, we would like to draw your attention to the following points:**

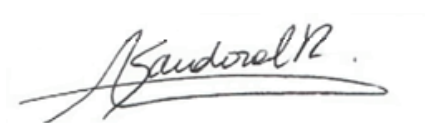
- We believe that both the generator and OFTO build model should be open to coordination. This will allow developers to take a commercial decision based on their view of the risk and deliverability.
- However, we note that coordination will be a challenge as it is unclear how generators would be directed to not solely prioritise their own assets and be incentivised to take on additional risk. We believe that coordination will be very difficult to achieve without guidance or intervention from the regulator. Therefore, we recommend that Ofgem provides the commercial frameworks developers require to enable coordination.
- We believe that the 3-5 years timescale assumed within the Impact Assessment (IA) is optimistic given current market conditions, and in particular, considering the complex designs proposed by the Holistic Network Design (HND).
- We agree with the introduction of a new Tender Entry Condition, but it is unclear what Ofgem means by economic, efficient, and coordinated. Ofgem does not intend to provide a view on what would constitute economic and efficient costs on an ex-ante basis. Therefore, we request more clarity on how the proposed infrastructure would satisfy the conditions.
- We agree with the introduction of a gateway assessment process and believe the timing of this must be developer-led.
- We believe that the current ex-post cost assessment does not work for coordination, an ex-ante process will be more efficient.
- We propose that the ESO and TOs get involved in the detailed network design that is currently under the responsibility of developers only.

6th Floor, Tara House, 46 Bath Street,
Glasgow, G2 1HG
☎ 0141 353 4980 📧 @ScotRenew
www.scottishrenewables.com

- Transmission charges are currently a significant barrier to determining overall grid costs and the present HND proposal could have a significant impact on costs depending on the decision on how it is to be paid for. This will cause significant uncertainty to developers, particularly when estimating the costs of bidding for CfDs. We understand that this is being covered by the ESO through the code governance process and by Ofgem through the TNUoS Task Force, but we would like to highlight the challenge that this will present for developers, so accelerated action would be welcome.
- We recommend that wind farms are compensated for lost revenue during outage periods (as per firm onshore connections). This would also align with Ofgem's incentive mechanisms that reward or penalise the OFTO based on availability.
- We recommend extending the Generator Commissioning Clause (GCC) to 24 months. The current timeline dictates that divestment of the transmission asset must occur within 18 months of issuance of the completion notice. This timeline creates an unfair balance of risk between generator and OFTO – creating undue commercial leverage into the hands of the OFTO and creating transactions that may force generators to accept unfavourable terms.
- We recommend that Ofgem consider supporting the development of a standardised interface agreement as a starting point for customisation and negotiation as this would accelerate the tender process, reduce transaction costs, and encourage new entrants into the OFTO tender process.
- We would advise maintaining the 98% availability target, this is currently appropriate and in line with general industry practice. If this target availability was increased, even marginally, then whole redundant systems may potentially have to be built which would significantly increase system costs.

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

Yours sincerely,



Angeles Sandoval
Policy Manager | Grid & Systems
Scottish Renewables

Question 1: Do you agree with the findings of the draft impact assessment published alongside this document?

We **believe that both the generator and OFTO build model should be open to coordination.** Currently, Ofgem accepts two pathways when delivering radially connected sites – the generator and OFTO build model. The OFTO build model does not require additional regulatory change, therefore, we believe that this pathway should also be open to coordinated grid delivery. When considering the additional commercial risks associated with coordinated solutions, third-party delivery through the OFTO build model might provide another solution to enable coordination and would allow developers to select the most appropriate route forward, and timescale, for the delivery of their grid connection.

We also note that coordination will be a challenge as it is unclear how projects will prioritise their own assets and take additional risks to coordinate with others. Under a coordinated grid scenario, developers face increased risk compared to a radial solution. Developers will be responsible for consenting, designing and delivering the grid connections for projects that are direct competitors. Developers will have to coordinate in a system that is encouraging competition, where projects are competing against each other in CfD auctions. We believe that coordination will be very difficult to achieve without guidance or intervention from the regulator.

Therefore, we recommend that Ofgem provides the commercial frameworks developers require to enable coordination. This will require considering the interaction between this minded to position and the competition law, and should include a guideline on how cooperation agreements could be structured, and how delivery and operational risks that are outside of the control of one of the developers could be mitigated.

We would encourage Ofgem to provide a selection of high-level suggested cooperation models that could be adopted by developers to deliver a coordinated grid. These could include a lead project approach or an offshore grid delivery joint venture. We also believe that Ofgem could consider creating a grid dispute resolution process that could be used where coordinated parties cannot or do not agree on the proposed way forward.

Finally, we note that further clarity is required regarding the definitions of 'Radial' and 'Non-Radial' transmission assets referenced in paragraphs 1.14-1.19 of the consultation. These definitions do not currently capture the full range of transmission assets presented within the Holistic Network Design (HND)¹. For example, the current definitions do not capture transmission assets which are providing boundary relief and do not connect directly to the transmission system owned by the transmission owner. In the case of the latter, it should not be expected that developers/ projects would deliver such assets.

Question 2: Where you disagree with the draft impact assessment, does this raise any issues with our minded-to decisions?

Regarding the timescale for changes to the industry codes and standards, the industry requests to know how the establishment of the Future System Operator (FSO) may affect this timeline. It is likely that the timescale may increase and even the code governance may change.

We have concerns regarding the construction timescales assumed within the IA. The draft IA section 5.18 and 5.23 indicates that the delivery window for the coordinated assets is assumed to be between

¹ <https://www.nationalgrideso.com/future-energy/the-pathway-2030-holistic-network-design>

3-5 years, but we believe that this timescale is optimistic given current market conditions. In particular, it would be challenging to achieve those timelines for some of the rather complex designs being proposed by the HND (e.g. multi-terminal HVDC systems, non-radial assets, etc.)

Additionally, Ofgem and BEIS are currently assessing the introduction of Locational Marginal Pricing (LMP) into the GB system. This will add significant uncertainty to developers and may cause unexpected delays.

We also note that the impact assessment has not considered the different risk profiles of transmission assets providing grid connections for offshore wind generation versus those providing wider system benefits, for example, boundary relief and offshore wind connections.

We believe that transmission providing wider system benefits could be integral to the operability of the GB transmission system (albeit offshore), and therefore system security. We also believe that the ESO and TOs would need to play a greater role in designing these solutions to ensure that they are sized to accommodate boundary flows across transmission constraints.

Overall, we note that a lowest-cost CAPEX solution designed to coordinate windfarms could look significantly different from one that provides optimal boundary relief.

We also believe that if these solutions were delivered under the developer-led OFTO regime the risk/reward profile of providing wider system security could impact the financing rates of the assets.

Question 3: Do you agree with the proposed introduction of a new Tender Entry Condition in the Tender Regulations requiring the confirmation of the offshore transmission system as economic, efficient and coordinated?

We agree with the proposal of introducing a new Tender Entry Condition. This will ensure that offshore transmission assets are approved ahead of the OFTO transfer process and will provide certainty for developers and investors.

However, it is unclear how Ofgem will assess if a proposal is economic and efficient. Paragraph 4.18 of the Consultation states that Ofgem does not intend to provide a view on what would constitute economic and efficient costs on an ex-ante basis. Therefore, we request more clarity on how the proposed infrastructure would satisfy the conditions. For example, in the scenario where the proposal differs significantly from the HND, how would this be determined in the absence of an ex-ante cost assessment process?

We also think further information is required to understand how Ofgem will assess whether a proposal is coordinated, particularly if the proposal diverges from the recommendations set out in the HND.

It is also very unclear how Ofgem will expect that projects deliver +£1bn infrastructure that they will not be using. Would that be economic, efficient, and coordinated?

Question 4: Do you agree with the introduction of the proposed gateway stage assessment process?

Yes, developers need certainty from Ofgem very early in the process.

We also strongly agree that only projects with an agreement for lease (AFL) should be considered eligible for the gateway process in line with Ofgem's view that only ScotWind, leasing round 4 and

one leasing round 3 project are eligible for the pathway to 2030 regime. We do however note that there could be Multipurpose Interconnectors (MPI) projects coordinating offshore wind and interconnectors and, in this case, the interconnector is not subject to the AFL regime, Ofgem should accommodate for MPIs as they bring similar coordination benefits to coordinated offshore wind. Additionally, MPIs could provide opportunities outside of the HND and these should not be discounted.

We agree that projects should be within the scope of the HND and note that early developer engagement in the HND process would help to ensure that the HND outcomes are deliverable and therefore more aligned to the later gateway assessment. We would like to note that if a developer brings a proposal to Ofgem that is a better option than the HND, these proposals should not be discounted.

Question 5: Do you think the information sought as part of the gateway assessment process is appropriate and proportionate? Is anything missing?

Depending on the detail requested, there is a risk that this information would simply not be available at such an early stage. E.g. “Detailed description of the proposed infrastructure” and “detailed information on the interaction between all users and prospective users of the coordinated assets, including a clear summary of the timelines for all relevant projects and a summary of engagement to date with other relevant developers/projects”.

We would welcome clarity on what detail/granularity will be requested in the gateway assessment process.

Question 6: Do you have any views on the timing of the gateway assessment process?

This must be **developer-led**. For some projects, the assessment must be done very early in the project development process as these may need to evaluate the early-stage assessment process alongside their planning applications. Other projects may need to factor this into the design freeze and procurement; therefore, the timing for these projects could be a bit later.

We believe that in the case where the coordinated design impacts the planning process (for example the consenting envelope), the developer may need approval through the gateway assessment process prior to the start of (or at the very least during) the consenting period. Therefore, we agree with Ofgem’s decision that developers should submit their gateway assessment application no less than 12 months before the final statutory planning consultation. We note that some developers may wish to submit their assessment earlier than this date, and this should not be discouraged. Generally, the assessment process should also allow for the detailed initial network design work to commence.

We note that design options might change significantly during the planning process, as stakeholder concerns are considered and mitigated – we have seen this happen in practice where developers have significantly changed the capacity of projects or adopted specific technology solutions during the consultation process. As an example, the Norfolk Zone ruled out an AC connection during the planning phase. Ofgem might need to take these considerations into account and therefore the gateway process might need to be more iterative than initially outlined.

Where coordination does not impact the planning envelope, there might be scope for a later assessment process. We would expect that developers would require a clear outcome from Ofgem to allow them to finalise their design freeze (required to enable the procurement process) as this feeds into pricing, engineering assessment and CfD bids.

We note that the gateway assessment process will add some time to the wind farm development process, therefore Ofgem should provide a clear indication of the length of the sign-off process and aim to run the whole assessment in the most efficient way possible. We agree that the robustness of the application will aid in this process.

Question 7: Is there any other information which you believe should be included in the confirmation to developers?

Overall, we think that the confirmation information and process outlined by Ofgem provide the appropriate level of comfort for developers to progress with their transmission design. However, developers would welcome the opportunity to comment on the detailed wording included in the approval letter.

In general, we still believe that – in addition to a significant cash flow impact – the project undertaking coordinated transmission development and construction could face a large cost disallowance risk for infrastructure related to the second project. Additional clarification around the treatment of cost disallowance related to anticipatory investment could reduce one of the risks associated with coordinated transmission delivery.

Overall, we question whether the ex-post cost disallowance process provides the best value to the electricity bill payer. Developers must factor in a conservative cost disallowance risk premium into their CfD bids, as opposed to the actual cost of transmission delivery which could be determined pre-CfD on an ex-ante basis. Ofgem may wish to consider an ex-ante process (prior to CfD bids) in the future, which is more aligned to onshore transmission delivery models.

Question 8: Do you think changes are required to the current process to facilitate a very late competition model for non-radial assets?

Below we set out the areas that require changes:

- Given that the very late competition model requires developers to do a detailed network design but in coordination with others, they may need support from the ESO and the relevant Transmission Owner (TO). Therefore, we propose that the ESO and TOs get involved in this process. There is a possible scenario where developers may not wish to take offshore transmission works identified in the HND as there is no incentive for them to do so.
- Transmission charges are currently a significant barrier to determining overall grid costs and the present HND proposal could have a significant impact on costs depending on how it is decided to be paid for. This will cause significant uncertainty to developers once they estimate costs prior to bidding for CfDs. We understand that this is being covered by the ESO through the code governance process and by Ofgem through the TNUoS Task Force, but we would like to highlight the challenge that this will present for developers, so accelerated action would be welcome.
- All economic and efficient investment in non-radial assets by the first generator to connect to this transmission needs to be paid for by the first OFTO. It would be unfair to make the first generator bear the risk of subsequent projects that experience delays or may not even be delivered. Vice versa, the second project should not bear the risk of issues outside of its control, these projects need to be protected from programme or quality issues. Therefore, we recommend that wind farms are compensated for lost revenue during outage periods (as per

firm onshore connections). This would also align with Ofgem's incentive mechanisms that reward or penalise the OFTO based on availability.

- Co-ordination among generators is required in the design and construction of non-radial assets to ensure that these assets are optimal for the system as a whole.
- We recommend extending the Generator Commissioning Clause (GCC) to 24 months. The current timeline dictates that divestment of the transmission asset must occur within 18 months of issuance of the completion notice. This timeline creates an unfair balance of risk between generator and OFTO – creating undue commercial leverage into the hands of the OFTO and creating transactions that may force generators to accept unfavourable terms². Therefore, we believe this timeline should be extended to 24 months.
- Interface agreements between an OFTO and generators will become more complex and will take longer to draft and agree because, among other things, more parties will be involved. We recommend that Ofgem consider supporting the development of a standardised interface agreement as a starting point for customisation and negotiation as this would accelerate the tender process, reduce transaction costs, and encourage new entrants into the OFTO tender process.
- Non-radial assets will serve multiple projects/uses and hence a failure of the asset may have multiple impacts. The magnitude of the damage which can result from a failure of the transmission assets should be reflected in the availability incentive on OFTOs. Thus, a powerful availability incentive is required to deliver economic levels of maintenance expenditure and sustained high levels of availability. This will deliver affordable and secure renewable energy.

Question 9: Do you think changes are required to the current package of OFTO obligations and incentives due to the introduction of non-radial offshore transmission assets?

We broadly agree with the current package of OFTO obligations and incentives, and we want to highlight that the current availability target of 98% mentioned in section 6.5 of the consultation is a reasonable goal. This is given the state of art AC and HVDC systems plus operational experience of submarine cable systems (where most of the predicted non-availability occurs). If this target availability was increased, even marginally, then whole redundant systems may potentially have to be built which would significantly increase system costs. We would advise that these targets are currently appropriate and in line with general industry practice.

Question 10: Do you think changes are required to other aspects of the OFTO regime, eg asset life or duration of the revenue stream

New offshore wind farms are expected to have lifetimes of over 30 years, a figure backed up by the assumptions made in the BEIS generation cost report. As such, the length of the Tender Revenue Stream (TRS) needs to be extended to at least 30 years to match this.

² OWIC, 2019. Available at: [1c0521_c95af18ace06489eaa2295e8d63e3a83.pdf \(wixlabs-pdf-dev.appspot.com\)](https://www.owic.org.uk/wp-content/uploads/2019/01/1c0521_c95af18ace06489eaa2295e8d63e3a83.pdf)

Other changes to the OFTO regime include issues around who pays for decommissioning at the end of the asset lifetime, particularly if multiple wind farms are connected to the same offshore transmission infrastructure.