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Dear Mr Norman,

Orkney transmission project: Consultation on Final Needs Case and Delivery Model

We welcome the opportunity to respond to the above consultation.

As you will be aware, Scottish Ministers have supported the development of Remote Island Wind (RIW) for many years as a means of unlocking the islands' vast renewables potential and in recognition of the wider economic, environmental and social benefits it would bring. We also believe strongly in the huge marine renewable potential around our islands, and the importance of establishing a route to market for that resource. With this in mind, we are pleased that Ofgem's minded-to position accepts, subject to specific conditions being met, the need for a transmission link to Orkney, and the importance of publishing its final decision ahead of the next Contracts for Difference allocation round in May.

I fully appreciate Ofgem's desire, in line with its remit as the industry regulator, to protect the interests of energy consumers across Great Britain, and to ensure that large transmission projects are delivered in a way that maximises consumer benefit while protecting consumers from a disproportionate level of risk. While I understand the need to impose conditions on approving the link, I believe that many of the proposed conditions and much of the underlying analysis needs to be rethought, with all due urgency given the importance of the matter, and encourage you to continue to work constructively with SSE Networks and Orkney stakeholders to develop a pragmatic way forward.

It is our view, while recognising the challenges Ofgem faces in the context of market uncertainty, that Ofgem's decision should take into account the wider context in which the energy system is evolving, and give appropriate weight to its sustainability duties. Climate change is one of the most pressing challenges of our time and a major concern for



consumers,¹ as well as a priority for both Scottish and UK Government Ministers. In its 2018 Progress Report to Parliament, the UK Committee on Climate Change asserts that the UK is “not on course to meet the legally binding fourth and fifth carbon budgets”². The vital role that the energy sector plays in addressing climate change and meeting binding targets should form a material part of the regulatory decision making process. Scotland’s island areas have a potentially significant contribution to make to decarbonising Scotland’s and the UK’s energy system, but grid constraints prevent them from achieving their potential.

As set out in Ofgem’s principal objective, Ofgem has a duty to represent and protect both existing and *future* consumers.³ I believe that this obligation means that Ofgem should review the weight it places on the benefit to consumers from developing affordable renewable energy and not focus solely on the financial cost. Delivering renewable energy often means locating generation capacity in areas like Orkney where, despite being far from major conurbations, there is a wealth of renewable potential and a competitive advantage in terms of wind regime, tidal and wave energy resources that would allow Orkney to contribute to supply for both the rest of Scotland and customers across GB. The regulatory framework should be applied in a way that enables and accounts for this, in order to harness their undoubted renewable resources.

Accessing these resources would also be hugely beneficial to local economies, and be in the wider national interest. It is likely, for example, that offshore wind sites will be considered in waters close to the Orkney Islands in forthcoming consultations to be taken forward by Crown Estate Scotland and Marine Scotland.

We are grateful for this opportunity to respond to your minded-to position, and have included specific points for you to consider in the annex to this letter. I would also like to thank you and your team for the constructive way in which Ofgem has engaged with the Scottish Government and stakeholders in Scotland on the needs case for this proposed transmission project. We look forward to continuing to have constructive conversations on this matter, as well as in regards to the needs cases for the Western Isles and Shetland Islands.

Kind regards



PAUL WHEELHOUSE

¹ BEIS Energy and Climate Change Public Attitude Tracker shows that the level of public concern about climate is increasing, as is support for renewable energy, available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/702640/Wave_25_Summary_Report.pdf

² Committee on Climate Change (June 2018), Reducing UK emissions: 2018 Progress Report to Parliament, p12 <https://www.theccc.org.uk/wp-content/uploads/2018/06/CCC-2018-Progress-Report-to-Parliament.pdf>

³ Section 3A, Electricity Act 1989, available at: <http://www.legislation.gov.uk/ukpga/1989/29/section/3A>

Annex

Orkney's marine energy potential

Orkney has a long and innovative history that demonstrates its commitment to renewable energy. In addition to wind energy projects, for which the island is well suited, a transmission link would also help to provide a route to market for other emerging renewable technologies. As the home of the European Marine Energy Centre (EMEC), a world leading test bed for marine energy, Orkney has unrivalled potential and expertise in developing wave and tidal power.

Ofgem's consultation notes that this technology is less advanced than some other renewable technologies. However, a recent Offshore Renewable Energy Catapult report suggested that tidal could compete with existing technologies by 2030 if 1GW of tidal had been successfully deployed. Whilst the technology is not yet at the point of full scale development, the OREC report suggests that the current trajectory could support delivery of key sites within the next 5-7 years. Securing a transmission link is essential in order to develop the technology and realise its full potential; failure to do so risks delaying plans for the future development of these sites and delivery of marine energy to the GB energy system.

I firmly believe that wave and tidal energy can play a key role in decarbonising the energy system, to the benefit of GB consumers. Unlike wind generation, output from tidal generators is more predictable; our Energy Strategy notes that the marine renewables sector is already capable of integrating storage, grid management and transport solutions in Scotland. These factors, along with the huge potential resource and the economic and supply chain value that its successful development could unlock, explain why the Scottish Government continues to support the sector. Wave and tidal power can provide greater system security in the future, a potential role that looks still more significant in the light of recent suspensions of investment and activity in large scale nuclear build.

Ofgem's consultation doesn't give due weight to the commitment, and investment, that both the Scottish Government and Europe continue to make in developing these technologies. The European Commission continue to support marine energy through the NER300, Horizon 2020 and OceanERA-NET co-fund programmes. Since 2003 the Scottish Government has made available more than £150 million for the development of wave and tidal energy. Our Renewable Energy Investment Fund (REIF) (now replaced by the Energy Investment Fund) has made investments in a range of wave and tidal projects in Scotland, including £23 million investment in the first phase of the MeyGen tidal array. EMEC, whose establishment was funded by both the Scottish and UK Governments among others, has also received considerable backing from the European Union, and was earlier this year awarded access to a €13 million funding programme to support the deployment of wave and tidal devices.

In our view, this should provide Ofgem with an appropriate level of comfort that marine energy remains a high priority with a realistic future contribution to make, and that this contribution should be factored in to its assessment of the needs case.

Ofgem's methodology for determining the level of generation needed

Ofgem has argued that the proposal to extend the transmission network from the mainland and into Orkney is novel in the respect that it represents a radial extension to the network

rather than a more standard network reinforcement. The consultation suggests as a result that the constraints based methodology for producing cost-benefit assessment (CBA) of a strategic wider work project may not be suitable, and factors this in when drawing its conclusion that 135 MW of generation is required to approve the link.

This is substantially higher than the 70 MW 'break-even' point which SSE Networks has proposed, and which is based on the industry standard methodology for determining whether to progress investments. To sense check its conclusions, Ofgem has developed an additional CBA which it considers to support its position.

While we recognise that the Orkney needs case is unique in some ways, we have some concerns with the robustness of Ofgem's approach in determining the 135 MW threshold. This has been selected as a mid-point between the 70 MW 'break-even' point and the 199 MW which the CBA produced by the ESO indicates is most beneficial for consumers; it has then been sense checked using Ofgem's additional CBA. We discuss our view on the break-even point and our concerns with the additional CBA below. In particular, as we discuss below, we do not believe it is appropriate to include the cost of the CfD in the additional CBA; if this was excluded, the additional CBA would support a generation threshold significantly lower than the proposed 135 MW.

We are also concerned that Ofgem is not treating these differences consistently. For example, the consultation argues that the differences may warrant a different approach to the CBA; however, Ofgem's assessment of SSE Network's Alternative Approach proposal appears to contradict the need for that flexibility of methodology.

Ofgem notes three areas where risk exists that customers will pay for underutilised cable capacity. Whilst we agree that risks exist, we do not feel that they have been robustly incorporated into the proposal that the consultation puts forward. In summary we believe that the SSE proposal uses industry best practice to show that 70 MW is the breakeven point for a 220 MW link and therefore that by providing robust evidence of at least 70 MW of generation capacity to be built will ensure that a positive benefit to GB consumers is delivered, with the opportunity for that benefit to grow as more generation capacity come forward.

Break-even versus maximising benefits for consumers

We understand the desire to maximise consumer benefit. However, it is not clear to us that Ofgem's proposal requiring 65 MW above the 70 MW break-even point is a robust and appropriate threshold to approve the link. Our view is that any capacity over and above that required to break even under standard industry assumptions represents consumer benefit.

Further to this, as noted earlier, we think that Ofgem is taking too-narrow a view of consumer benefit. Connecting Orkney to the mainland will bring a wealth of benefits beyond reduced wholesale prices and new renewable energy. These include:

- Removing a key barrier to the development of marine energy, which we fully believe can play a vital role in our future energy mix and provide much wider benefits to the Scottish and UK economies.

- Helping to ensure a just energy transition by ensuring that consumers in Orkney are afforded the same opportunity to connect small scale renewable generation as consumers elsewhere in the country.⁴
- Helping to maximise the benefit extracted from the Caithness-Moray link as a result of the high load renewable electricity that could be exported from Orkney and more readily delivered to centres of demand around the UK.

Ofgem's additional CBA

We understand that the additional CBA was used to sense check Ofgem's conclusion that 135 MW was an appropriate level of generation to be connected, rather than as a decision making tool. In order to be a credible check, the additional CBA should deliver conclusions that are as reliable as possible; we do not think that it achieves this.

In particular, we are concerned that it overstates some of the costs and understates some of the benefits. This undermines the extent to which the additional CBA corroborates Ofgem's conclusions, and could justify a lower generation threshold to justify the link. We expand on these points below:

- **Including the cost of the CfD:** we do not think it is appropriate to include the cost of the CfD in the additional CBA. The funding in the CfD pot has been allocated by UK Government as a means of incentivising renewable generation; island wind has been allowed to compete in the CfD specifically to support its development.

We don't believe that including the cost of the CfD in assessing the case for a link is justified, on the grounds that these costs are already established and will fall to consumers regardless of whether the Orkney link goes ahead. If projects on Orkney win contracts through a CfD auction they will have demonstrated that they are better value for money than the next best option ensuring that more renewable electricity can be delivered for the fixed CfD budget.

- **Excluding the carbon savings:** we question whether it is appropriate to exclude carbon savings. Our understanding is that it is standard practice to include carbon savings in policy appraisal and evaluation.⁵ New renewable development on Orkney would clearly deliver zero carbon electricity to the GB electricity system. Whilst there may be times when renewable generation in Scotland or GB is constrained to manage network constraints, the broader network development framework of economic and security planning standards means that the wider electricity system will develop appropriately to support this generation.

The UK and Scottish Governments have supported the policy of growing the amount of renewable generation connected to the electricity networks for more than a decade. This policy is aimed at incrementally reducing the carbon intensity of the generation connected to the networks. We believe that unlocking the potential of renewable

⁴ Orkney consumers have shown an above average desire to do so with 1 in 12 households currently generating electricity from renewable sources, the highest proportion anywhere in the UK. This reflects the benefit that small scale renewables can offer in Orkney which is off gas grid and where residents are largely reliant on electricity for heating.

⁵ The UK Government sets out an agreed approach to valuing carbon here: <https://www.gov.uk/government/collections/carbon-valuation--2>.

capacity located in places like Orkney, where wind regime and marine resources are strong, is critical to delivering UK and Scottish targets, and protecting the interest of future consumers in providing reliable and low carbon electricity.

- **Excluding the money generators pay in TNUoS charges:** we are not convinced that this approach is consistent with the current direction of travel proposed in Ofgem's wider regulatory reform consultations.

Under current arrangements, generation connected to the distribution network does not contribute to transmission costs to the same degree as generation connected to the transmission network. However, a core element of Ofgem's Electricity Networks Access and Forward-Looking Charging Review SCR, launched on the 18th December,⁶ will be a focused review of the design of transmission network charges for distributed generators, with an objective of aligning TNUoS charges across different sizes and types of generators, regardless of the network to which they are connected.

Whilst we appreciate that it is not possible to foresee the outcome of this SCR, we are not convinced that it is appropriate to assume that there will be no contribution from distributed generators. Given that Ofgem's current direction of travel for charging reforms appears to be towards removing the differences in charges faced by generators connected at distribution and transmission, it is reasonable to assume that small, distributed generators will pay a share of the transmission charges from which they are currently exempt.⁷

- **Excluding savings associated with securing demand on Orkney and removing the need to operate Kirkwall Power Station:** we see this as a key, tangible benefit of introducing a transmission link to Orkney, one which could provide long term savings and security of supply. If there is a gap in analysis in terms of understanding cost savings here we would hope that Ofgem would continue to work with SHE-T and stakeholders to understand this more fully, and incorporate it into the decision making process

We appreciate that developing robust estimates for some of the benefits is challenging, and that the model is highly sensitive to assumptions used; however, we do not think that this is a strong enough reason for omitting them. Getting this right is important not only in informing the appropriate generation threshold for Orkney, but also for any future application of the methodology.

Level of certainty Ofgem is seeking from developers: Conditions A and B

In order to ensure an adequate level of certainty that potential generators will progress to full commissioning and mitigate the risk of consumers funding an underutilised link, Ofgem has proposed that by December 2019 (consistent with SSE Networks' own timetable for delivery of the project by 2022) generators have either:

- Condition A: been awarded a CfD in the 2019 CfD Auction; or

⁶ https://www.ofgem.gov.uk/system/files/docs/2018/12/scr_launch_statement.pdf

⁷ For the avoidance of doubt, this statement should not be interpreted as the Scottish Government supporting this particular direction of travel for charging reforms. We will engage separately with ongoing charging reform workstreams.

- Condition B: secured planning consent and secured finance to construct.

While we agree that securing a CfD would provide sufficient certainty of a project going ahead, as acknowledged at various points in Ofgem's consultation and by its consultants, it is unlikely that any generators on Orkney will be in a position to bid in to the 2019 CfD auction. This is partly due to not meeting the requirement to have consent, but also due to the cost of the CfD bid process, and the challenge of trying to compete with offshore wind; the significant risk of being unsuccessful in the auction together with the cost of competing in it means some smaller projects may not find it financially viable and therefore may decide to investigate alternative ways of taking their projects forward.

This means that in order to demonstrate certainty generators will have to satisfy Condition B. We consider Condition B to be unreasonable, prohibitive, and disproportionate when compared to the industry standard.

You note in your consultation that only two of the potential projects in Orkney have submitted applications for consent; however, the fee for submitting planning applications in Scotland is substantial, and in the context of Orkney developers, who are generally small, local developers, it can make little sense to submit an application until Ofgem provides more clarity around the likelihood of the transmission link going ahead.

Further to this, Ofgem's minded-to position that developers must meet Condition B by December 2019 is unrealistic given the process and timelines involved in gaining planning permission. There are several stages that a potential development has to pass through before applying for planning permission, including a minimum of 1 year (but commonly 2 years) worth of bird studies. We recognise that the 2019 date was based on SSE Network's timelines for energising the network; however, when positioned alongside the requirements in Condition B, it is an impossible bar for Orkney developers to meet.

We were encouraged by Ofgem's recent engagement with developers on Orkney, and willingness to engage in discussions to find a mutually suitable position that balances the need to protect consumers with the practicalities of progressing a project. We urge Ofgem to continue to engage with developers and SSE Networks, and to better understand the steps and timeframes involved in the process, as well as the extent of the financial commitment which developers have demonstrated in bringing these projects to the stage of a planning application. This comprises both the investment required to get a project to this stage, and the level of securities that developers must post to cover their share of the liabilities.

We don't believe that Orkney developers should need to provide any commitment which is more onerous than those faced by developers on the mainland. Indeed, if this was a devolved measure, this would likely fall foul of the Islands Act 2018 in respect of its discriminatory impact on islands projects.

Proposed delivery model

Scottish Ministers have engaged with Ofgem's attempts in recent years to introduce competitive pressures to onshore transmission projects and investments.⁸ While ministers

⁸ See, for example our response to Ofgem's 2015 consultation: *"Extending competition in electricity transmission: proposed arrangements to introduce onshore tenders"*, available here: https://www.ofgem.gov.uk/sites/default/files/docs/160111_-_scottish_government_response.pdf

have expressed reservations concerning the potential for (and need to avoid) delays to key infrastructure projects arising from this approach, and the need to ensure compatibility with Scotland's distinct consenting and legal frameworks, they have supported in principle the drivers behind Ofgem's proposals.

Effective competition in the energy sector can bring benefits. These include attracting new resources to construct and operate transmission assets, and lessening reliance on a single transmission owner (TO) to deliver all reinforcements within a given territory.

The introduction of competitive tendering represents a major shift in how the GB electricity transmission is regulated and operated – but it must be designed and implemented in a manner that secures the proposed benefits while mitigating potential drawbacks and risks. Competition alone in the energy market has not always been sufficient to deliver the best outcomes for consumers, not least in rural and islands communities; Scottish Ministers believe that it must be supported by robust, rigorous and effective regulation.

We are aware of concerns on the part of key stakeholders about the potential delays to project delivery that such a model may introduce, and on the scale of benefits it would create, relative to the Strategic Wider Works approach which has delivered good outcomes for consumers.

This is a significant concern to the Scottish Government, given the likelihood that the geographical impacts of competitive tendering will be concentrated in Scotland, at least until 2021. We believe that any delay to delivery of works arising from the required introduction of onshore tenders would represent an unacceptable outcome.

Should the CPM be adopted and applied to this project to drive down costs, we would also be keen to understand how Ofgem intends to reflect the projected £12.25 million consumer savings in the CBA and in the minimum generation threshold.