

Ocean Winds Limited- Written Evidence (ONZ0016)

Ocean Winds is a 50:50 offshore wind joint-venture, owned and created by EDPR and ENGIE in 2019. Both companies believe that offshore wind energy is becoming an essential part of the global energy transition, leading to the sector's rapid growth and increased competitiveness. That is why they have included all their existing and pipeline offshore portfolio in the new company.

ENGIE currently has over 30GW of installed renewable capacity globally with a renewable deployment rate of 4GW per year and a growth investment rate at €6bn per annum. It operates a number of onshore wind farms and one solar park within the UK as well as First Hydro, a 2GW pumped storage operation. Distributed among its three key activities (production and supply of low carbon energy, services and regeneration) Engie employs 17,000 people in the UK and Ireland.

EDP has been a leader in the energy transition for well over a decade, investing over €20bn in renewables in Europe and North and South America. As a result, it is now the world's 4th largest onshore wind player, with 20GW of installed capacity in wind, solar and hydro whilst recognising that there is much more to do. EDP's strategic plan for 2021-25 is to invest €24bn and double our wind and solar capacity by 2025. It is a bold and ambitious commitment, which presents an unprecedented acceleration of growth in renewables building on our track record as a leader in the energy transition. As part of that new plan, EDP expects to be totally coal-free by 2025 and all green by 2030 (moving production from 74% renewables as of today to 100% in 2030).

Ocean Winds has a strategic advantage and is well positioned to play a leading role in the offshore wind market. EDPR and ENGIE are combining their offshore wind assets and project pipeline in the joint venture, starting with a total of 1.5 GW under construction and 4 GW under development, with the target of reaching 5 to 7 GW of projects in operation or under construction and 5 to 10 GW under advanced development by 2025. Ocean Winds primarily targets markets in Europe, the United States and selected geographies in Asia, from where most of the growth is expected to come.

OW is a new 50:50 offshore wind joint-venture, owned and created by EDPR and ENGIE. Both companies believe that offshore wind energy is an essential part of the global energy transition, leading to the sector's rapid growth and increased competitiveness.

EDPR entered the UK market in 2010 as the lead partner developing the UK Offshore Wind Licencing Round 3 Moray Firth zone. The first project development in that zone, the 950MW Moray East Offshore Wind Farm, is now under construction and produced first power in June of this year ready for its CfD start date in 2022. In 2019 planning consent was secured for a further project in the Moray Firth zone, Moray West, which will be of a comparable size and offers the opportunity for continuity of work for the local supply chain, especially the ports in the Moray Firth from which the infrastructure will be constructed and maintained.

Both projects have been developed from Ocean Winds' Edinburgh office, first opened in 2010 by EDPR. It functions as a key hub for the company's global interests in offshore wind.

We welcome the opportunity to respond to this Call for Evidence on Ofgem and net zero.

1. What role should Ofgem play in the transition to net zero? What changes, if any, should be made to its remit, responsibilities and resources?

1.1. Ofgem's key focus is on minimising cost to consumers in the short-term and we have seen this being prioritised above all other duties in a number of recent decisions impacting renewable generation. There have been recent Ofgem decisions in which Ofgem acknowledged that renewable generation would be negatively impacted.¹ Consumer cost impact assessment should be conducted on a holistic, whole system, long term basis including consideration of net zero imperative, in order to avoid regulatory decisions having unintended consequences due to short-term focus. This would result in regulation that promotes a net zero UK energy market to develop in the most cost-efficient manner. Ofgem must consider the long-term implications of its decisions on renewable generation and the ability for the UK to meet net zero.

1.2. Ofgem has placed significant emphasis on direct consumer costs in the short term and has not considered the indirect costs. This is highlighted in the recent decision that resulted in generators paying an increased percentage of network costs. When examining

¹ "There is a risk that these changes could lead to the cancellation of some projects, including renewable generators which have been awarded CfD contracts and smaller generators which have been awarded CM contracts", Targeted charging review: minded to decision and draft impact assessment, 28 November 2018, Ofgem, paragraph 6.29.

the direct network costs consumers see a reduction, however the resultant increases to generators will be passed back to consumers through increased energy costs, including higher CfD prices.

1.3. We also consider that in some recent decisions Ofgem has not taken into account all the consumer cost impacts. Ocean Winds commissioned research that looked at the cost of uncertainty,² a cost which is widely overlooked by Ofgem when considering the impact of change in regulation. Uncertainty costs impact consumers when generators face increased cost of capital. As detailed above these costs will also be passed through to the consumer via the CfD or through increased energy prices.

1.4. As the energy market evolves to meet net zero an appropriate balance needs to be struck between facilitating large scale renewable capacity and short-term signals that promote an efficiently operating market. At present decision making prioritises short term market signals this is having unintended consumer cost consequences and is inhibiting investment in renewable generation.

2. How well does Ofgem balance environmental objectives against its responsibilities in relation to affordability for consumers?

2.1. It is currently very difficult to find any evidence of Ofgem fully considering the environmental impact of its decisions particularly when considering against affordability for consumers. In recent decisions there is also some evidence to suggest that Ofgem are not considering the full cost to consumers over an extended period.

2.2. This is evidenced in Ofgem's continued approach to network charging which incentivises generators to build close to demand, which the methodology determines is London. Decision making has focussed on short-term consumer cost and overlooked longer-term impacts which may reduce renewable deployment and/or increase the cost of renewable deployment, with consequences both for the environment and the consumer. This is happening at a time where there is an acknowledged imperative to facilitate large-scale capital investment. Multiple sources forecast that to deliver net zero over 65GW of offshore wind will be required and it could be as much as 125GW depending on the route to reach net zero.³ This will require offshore wind farms to be located around the coastline of the UK to enable this amount of capacity to be built. If the current charging

² Discussed in more detail in response to question 2.

³ 65-125GW of offshore wind stated in "The Sixth Carbon Budget – The UK's path to Net Zero", Climate Change Committee, December 2020, page 25. 65-88GW of offshore wind dependent on the scenario include in National Grid FES Scenarios' Data Work book, tab SV.23
<https://www.nationalgrideso.com/document/173806/download>

regime remains in place this could result in additional consumer costs associated with the CfD of £125m/year on average in the 2030s and £220m/year on average in the 2040s.⁴

- 2.3. Net zero will result in a significant increase in electricity demand as heat and transport electrify to reduce carbon emissions. This will result in significant upgrades being required to the UK's electricity network to enable additional power to flow throughout the country, including to allow renewable generation to connect to meet this demand. Incentivising investment into a network that is capable of meeting net zero should be a key priority including evolution planning to avoid the risk of stranded assets in the future.
- 2.4. The cost of regulatory uncertainty must also be considered in policy and regulatory decision-making, given its significant bearing on ultimate consumer cost. The significant uncertainty in network charge results in higher finance costs for developers which is ultimately passed on to consumers through higher CfD strike prices. Ocean Winds engaged NERA Economic Consultancy to quantify this uncertainty.⁵ When it considered the higher costs of finance for future wind projects resulting from network charges, it estimated an additional cost to consumers of between £122m to £391m per year by 2030. These additional costs represented the cost of the uncertainty alone.
- 2.5. The Climate Change Committee has already calculated that "a large sustained increase in investment" will be required to meet net zero with low-carbon power capacity names as one of four investment intensive areas.⁶ Regulatory certainty and the associated stability of cost of capital for these investments are key to ensuring that net zero is delivered in the most economically efficient way for the consumer.

3. How well does Ofgem fulfil its obligations to consumers? Does Ofgem take consumer views into account sufficiently, particularly those of vulnerable consumers?

- 3.1. No response

⁴ "The effect of levelling generators' grid charges on GB consumer costs relating to CfDs in a Net Zero context", Aurora Energy Research, 8 March 2021

⁵ "Quantifying the Risk of TNUoS Charge Volatility for Wind Developers", NERA Economic Consulting, 8 March 2021.

⁶ "The Sixth Carbon Budget – The UK's path to Net Zero", Climate Change Committee, December 2020, page 20.

4. What implications will the transition to net zero have for the security of the UK's energy supply? How does Ofgem currently manage issues relating to security of supply?

- 4.1. Ocean Winds worked with Aurora to undertake analysis looking at the impact of wind generation being concentrated in a limited area as a result of network charges.⁷ This identified that in such a scenario the GB power system would be much more volatile and would lead to additional system balancing costs and, in an extreme scenario, security of supply issues. These impacts have not been fully considered in the UK's current energy market design.
- 4.2. The UK has an advantage in managing these issues due to its unique geography of long windy coastlines which allow a geographically diverse mix of renewable generation. This enables a wide range of system benefits due to the uncorrelated wind conditions such as increased security of supply, limiting the impact of asset price cannibalisation, lower capacity market costs and distributing the local economic benefits of wind generation.
- 4.3. The current network charging methodology actively works to incentivise generation to build in specific locations. Recent Ofgem decisions have not considered the wider impacts of locational convergence of projects with decisions resulting in a stronger cost signal to generators to locate close to demand.

5. Is Ofgem's current system of price controls appropriate? Does it provide sufficient incentives to invest in the context of the transition to net zero?

- 5.1. No response

6. Is the current system of governance for the UK energy market appropriate to secure the transition to zero? What improvements could be made and what role should Ofgem play?

- 6.1. Ofgem must consider its governance of the UK market in the context of the net zero. It must consider the long-term nature of the net zero transition whilst at the same time acknowledging the rapid pace of change the energy market will be required to go through to meet net zero. The current regulatory environment is focused on the detecting defects and adapting regulations in order to resolve them often through a process that takes several years. As the energy market evolves the requirement for relatively fast paced change will increase. This will have to be balanced with maintaining a stable regulatory environment to encourage the

⁷ "Aurora - Impact analysis of different geographic distributions of wind generation in GB", Aurora Energy Research, 3 March 2021

investment required to meet net zero. Ofgem will need to change to become more proactive to allow investors time to understand shifts in regulation before the issue develops within the market.

7. Are Ofgem's duties and powers appropriate and sufficiently clearly defined? Do Ofgem's objectives conflict and, if so, how should any conflicts be managed?

7.1. No response

8. Is Ofgem's relationship to Government and Parliament appropriate? Are there issues related to the split of responsibilities, transparency or accountability

8.1. No response

9. How does Ofgem compare to similar bodies internationally? What lessons can be drawn from the experience of other countries or jurisdictions?

9.1. No response

10. Are there any other aspects of Ofgem's work that the Committee should consider?

10.1. No response

20 August 2021