

# The Authority's final decision and analysis on the application for certification as unbundled by Diamond Transmission Partners Hornsea One Limited

This document explains the Authority's final decision on compliance by Diamond Transmission Partners Hornsea One Limited ('the Applicant') with the requirements of the Third Package<sup>1</sup> for transmission system operators ('TSOs') to unbundle from generation, production and supply undertakings as implemented into the domestic legislation in Great Britain ('GB').

# 1. Certification Decision

1.1. Having taken utmost account of the European Commission's (the 'Commission') opinion on our preliminary certification decision on the application for certification submitted by the Applicant, the Authority<sup>2</sup> concludes that the Applicant complies with the requirements of the ownership unbundling model as set out in GB legislation and should therefore be certified as ownership unbundled.

# 2. GB Legislation – Transposition of Directive 2009/72

2.1. In GB, the ownership unbundling requirements set out in the Electricity Directive have been transposed through the Electricity and Gas (Internal Markets) Regulations 2011 which inserted sections 10A to 10O into the Electricity Act 1989 (the 'Electricity Act'). Section 10F of the Electricity Act – 'the ownership unbundling requirement' – states that "the ownership unbundling requirement is met by an applicant for certification if in relation to each of the five tests ... – (a) the Authority thinks that it is passed, or (b) it is treated as passed by virtue of subsection (7), (9) or (9A)". In accordance with subsection 10F(9A), where one or more of the tests is not passed, we may decide to treat such tests as passed if the Authority is satisfied that there is no risk of discrimination and it would be appropriate and in line with our principal objective and general duties to do so.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> The term "Third Package" refers to: Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC ('Directive 2009/72') and Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU, OJ L 158, 14.6.2019 (collectively the 'Electricity Directive'); Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 and Regulation (EU) 2019/942 Of The European Parliament And Of The Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators (recast) (collectively the 'Electricity Regulation'; Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 of the European Parliament and of the Council of 13 July 2009 of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC ('Gas Directive'); Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 ('Gas Regulation'); and Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators.

<sup>&</sup>lt;sup>2</sup> The Gas and Electricity Markets Authority (the 'Authority'). In this document, the terms "Authority", "Ofgem", and "us" are used interchangeably.

<sup>&</sup>lt;sup>3</sup> <u>https://www.ofgem.gov.uk/system/files/docs/2017/08/certification\_open\_letter\_2017.pdf.</u>



# 3. The Applicant

3.1. Diamond Transmission Partners Hornsea One Limited is expected to become the licensed offshore transmission owner ('OFTO') for the Hornsea One offshore transmission system in early 2021.

# 4. Summary of Ofgem analysis

- 4.1. <u>First test</u>: The applicant (a) does not control a relevant producer or supplier; (b) does not have a majority shareholding in a relevant producer or supplier; and (c) will not, on or after the relevant date, exercise shareholder rights in relation to a relevant producer or supplier.
- 4.2. The Applicant has confirmed that it does not hold shares in, nor control, any other company. Furthermore, the Applicant has provided a signed undertaking that, during the term of its electricity transmission licence, it will not exercise, or cause to be exercised on its behalf, any shareholder rights in relation to a relevant producer or supplier that it might acquire during the currency of the undertaking. Therefore, the Applicant meets the requirements of the first test.
- 4.3. <u>Second Test</u>: Where the applicant is a company, partnership or other business, none of its senior officers has been, or may be, appointed by a person who (a) controls an electricity undertaking which is a relevant producer or supplier; or (b) has a majority shareholding in an electricity undertaking which is a relevant producer or supplier.
- 4.4. The Applicant has provided details of the process for appointing directors. It meets the requirements of the second test as none of its senior officers has been, or may be, appointed by a company or a person who: (a) controls an electricity undertaking which is a relevant producer or supplier; or (b) has a majority shareholding in an electricity undertaking which is a relevant producer or supplier.
- 4.5. <u>Third Test</u>: Where the applicant is a company, partnership or other business, none of its senior officers is also a senior officer of an electricity undertaking, which is a relevant producer or supplier.
- 4.6. The information provided by the Applicant confirms that none of its directors is also a senior officer of an electricity undertaking which is a relevant producer or supplier. The Applicant therefore meets the requirement of the third test.
- 4.7. <u>Fourth and Fifth Tests</u>: The applicant is not controlled by a person who (a) controls a relevant producer or supplier; or (b) has a majority shareholding in a relevant producer or supplier.
- 4.8. The Applicant is ultimately controlled by Mitsubishi Corporation ('MC') and Chubu Electric Power Co., Inc. ('Chubu'). The Applicant has provided a comprehensive account of the corporate structures of its controllers. MC and Chubu hold the following participations in the EEA which qualify as relevant producers or suppliers:



4.9. *MC* 

- The Luchterduinen Offshore Wind Farm Project ('Luchterduinen Project'): MC has a 50% share in this 129MW wind farm, located off the coast of The Netherlands;
- The Norther Offshore Wind Farm Project ('Norther Project'): MC has a 25% share in this 379MW wind farm, located off the cost of Belgium;
- A battery energy storage system project in Germany ('BESS Project'): MC has a 50% equity interest in the 48MW BESS Project. The BESS Project connects to the TenneT transmission system in Germany;
- ElectroRoute Holdings Limited ('ElectroRoute'): MC holds a 57.7% share in this Irish energy trading company that trades in electricity markets located in the EEA, including GB markets. Note, though, that ElectroRoute is not required to hold a supply licence in GB and, as such does not constitute a relevant producer or supplier for the purposes of the Electricity Act. However, we note that electricity trading can constitute 'supply' under the Electricity Directive, and so we have assessed these activities in undertaking our risk of discrimination assessment;
- The Prinses Amalia Offshore Wind Farm Project: MC has an 80% share in this 120MW wind farm off the coast of the Netherlands;
- The Delfzijl-Noord Wind Farm Project: MC has an 80% share in this 62.7MW wind farm off the coast of the Netherlands;
- The Enecogen CCGT Project: MC has a 40% indirect equity share in this 870MW CCGT plant off the coast of the Netherlands;
- The CHP MK12 Project: MC has an 80% share in this 227MW CHP plant off the coast of the Netherlands;
- The CHP LW06 combined heat and power project: MC has an 80% share in this 247MW CHP plant off the coast of the Netherlands;
- SeaMade Offshore Wind Farm Project: MC will have a 10% indirect share in this 751.5MW offshore wind farm located off the coast in Belgium. The wind farm is expected to be operational by the end of 2020;

Borssele 3 and Borssele 4 Offshore Wind Farm Projects: MC will have a 23% indirect share in this offshore wind farm, located off the coast of the Netherlands. The wind farm is expected to be operational in the first quarter of 2021. We consider that this future project is relevant to our assessment;

• OVO Energy: MC has a 20% indirect minority interest in OVO Energy (through its interests in OVO Group), based in GB;



- Eneco Energy Trade B.V. ('EET'): an energy trading company holding an electricity supply licence in GB;
- Eneco Energy Supply Netherlands: a group of energy suppliers operating under the Eneco brand with circa 3.6 million electricity and gas customers in the Netherlands;
- Eneco Energy Supply Belgium: an energy supplier with circa one million electricity and gas customers in Belgium; and
- LichtBlick: an energy supplier with circa 600,000 electricity and gas customers in Germany.

# 4.10. Chubu

- [redcated]
- 4.11. Section 10F(9)(A) of the Electricity Act provides that the Authority can use its discretion to treat one or more of the five tests as passed in certain circumstances. Further information on the factors that we consider particularly relevant in assessing the risk of discrimination and our ability to exercise discretion are detailed in our August 2017 open letter (the 'Open Letter')<sup>4</sup> and are reflected in the Commission's opinion.
- 4.12. While the Applicant's controllers do also control, and in some cases hold a majority shareholding in, relevant producers or suppliers, the Applicant has demonstrated to our satisfaction that it does not have a relationship with these relevant producers or suppliers that might lead the Applicant to discriminate in favour of those producers or suppliers. The Authority considers it appropriate to treat the fourth and fifth tests as passed in accordance with section 10F(9A) of the Electricity Act. The Applicant therefore meets the requirements of the fourth and fifth tests.

## 5. European Commission Opinion

- 5.1. The Commission's opinion is dated 10 November 2020.
- 5.2. Pursuant to Article 51 of the 2019 Electricity Regulation, Ofgem is required to take "utmost account" of the Commission's opinion in reaching its final certification decision. We summarise below how we have done so.
- 5.3. In its opinion, the Commission set out the relevant legislation. Articles 43(1)(b)(i) and 43(1)(b)(ii) of the 2019 Electricity Directive prohibit the same person or persons from directly or indirectly exercising control over a TSO or over a transmission system, and directly or indirectly exercising control or exercising any right over an undertaking performing any of the functions of generation or supply, and vice versa.

<sup>&</sup>lt;sup>4</sup> <u>https://www.ofgem.gov.uk/publications-and-updates/certification-arrangements-great-britain-following-amendments-ownership-unbundling-requirements-gas-act-1986-and-electricity-act-1989-0</u>



5.4. As background to its assessment, the Commission states,

"...the legislator intended to pursue the objective of removing any conflict of interest between, on the one hand, generators/producers and suppliers and, on the other hand, TSOs... to provide a **structural** solution to the problem that owners of electricity or gas infrastructure may use the ownership over this infrastructure... to favour their own generation or supply business." (our emphasis)

5.5. The Commission went on to note that,

"...certification of a TSO should not be refused in cases where it can be clearly demonstrated that there is **no incentive** and **ability** for a shareholder in a TSO to influence the TSO's decision making in order to favour its generation, production and/or supply interests to the detriment of other network users and therefore prohibiting person(s) from investing in a TSO would be disproportionate." (our emphasis)

5.6. The Commission raised concerns with the generation assets in the EEA held by the Applicant's shareholders, and noted,

"As regards MC, this is a considerable increase compared to the situation in 2019 reflected in the Commission Opinion of 5 December 2019 on the certification of Walney Extension Limited..."

- 5.7. The Commission also raised concern with MC's interests in electricity suppliers, including [redacted], located in GB, Eneco, located in Belgium, and Lichtblick, located in Germany. For clarity, the Applicant has illustrated that MC does not control [redacted], and the other suppliers are located outside GB, and we have therefore not assessed these activities in undertaking our risk of discrimination assessment.
- 5.8. The Commission stated that,

"...the certification of Hornsea One OFTO as an ownership unbundled TSO cannot be considered compatible with the unbundling provisions of the Electricity Directive requiring a structural separation of generation and supply interests on the one hand and transmission assets on the other hand, at least as long as MC has "any rights" in Hornsea One OFTO going beyond a purely passive minority participation."

and invited Ofgem to reconsider its assessment that Hornsea One OFTO meets the requirements for certification as ownership unbundled TSO.

#### Role in GB electricity market

5.9. The Applicant has a very limited role in the GB electricity market, namely as the owner and operator of the offshore transmission system, which transmits electricity from the



offshore wind farm to the onshore transmission system. In theory, the Applicant could limit the connected wind farm's ability to export the electricity it has generated. When operating at 100% capacity, this would be 1.2GW (noting that offshore wind farms are likely to operate at an approximate load factor of 38.6% to 47.3% of their maximum capacity).

5.10. The Applicant's controllers share control of one other transmission system (Diamond Transmission Partners Walney Extension Limited) connecting an offshore wind farm to the onshore transmission system. Again, in theory, the Applicant's controllers could also limit that connected wind farm's ability to export the electricity it has generated. This could, if each wind farm were to operate at 100% capacity, impact a maximum total generation capacity of approximately 1.85GW on the GB electricity wholesale market.

Risks and penalties as a result of anti-competitive behaviour

- 5.11. If the Applicant's controllers were to attempt to behave in manner to favour their own generation or supply interests to the detriment of other networks users, there would be significant risks in doing so, including:
  - it could only do so in circumstances of system demand shortage, and the Applicant's controllers would not be able to be sure that their actions would in fact result in a shortage on the GB transmission system; and
  - as the NETSO<sup>5</sup> manages flows on the GB transmission system so that supply matches demand, it would be impossible for the Applicant's controllers to know whether it would be their generation interests that would be despatched in the unlikely event that their actions did create a shortage on the GB transmission system.

## 5.12. In addition:

- the Applicant's OFTO licence will include a number of obligations that further limit the
  possibility that the Applicant or its controllers would discriminate in favour of any
  relevant producers or suppliers. For example, an OFTO could be penalised up to 50% of
  its revenue stream (10% per year, over a period of five years) where its transmission
  system availability falls below 98%. On average, the maximum penalty is estimated at
  between £30m to £34m over the five years.
- Ofgem scrutinises market behaviour to distinguish price spikes that reflect actual market conditions from those that could mean market abuse. Where there is evidence of this, Ofgem can take action under: the Competition Act (which provides for the possibility of a financial penalty of up to 10% of a company's annual turnover, where anti-competitive behaviour has occurred); the Transmission Constraint Licence Condition (where generators can be penalised up to 10% of their annual turnover, where market or price manipulation has occurred); and the EU regulation on energy market integrity and transparency ('REMIT').
- 5.13. Ofgem acts quickly to launch investigations where the loss of generation capacity has a significant effect on energy prices or supplies to consumers, and would take action to

<sup>&</sup>lt;sup>5</sup> NETSO is the National Electricity Transmission System Operator.



penalise any anti-competitive or manipulative behaviour identified by such an investigation. The Applicant estimates that any reduction in transmission services, in circumstances of system shortage leading to the despatch of the Applicant's controllers' generation interests, would need to last a minimum of six months for the Applicant or its controllers to gain any benefit from such behaviour.

- 5.14. We note that total demand margins (additional generating capacity available to the GB transmission system over and above expected requirements) for winter 2020/21 are approximately 4.8GW. We do not consider it likely that the removal of up to 1.85GW in generation would result in the ability of the Applicant's controllers to influence market prices by deliberately creating shortages in available generation.
- 5.15. Ofgem considers, therefore, that the possibility of circumstances where foregoing transmission income may be profitable in view of extra earnings by generators is near absent, and that the above outlined penalties and risks are deterrent enough to avoid any abuse of the system by the Applicant and/or its controllers.

#### Role in electricity markets outside GB

5.16. The Applicant's role in markets outside the GB market, including the Benelux countries where MC has a number of generation interests, is further limited as the Applicant cannot ensure that electricity traded and shared between GB and other countries (via interconnectors) is flowing in the right direction to ensure it could benefit from any differences in market price between the countries.

## Market share

- 5.17. In our Open Letter, we note that we will have particular concern about the risk of discrimination where an Applicant has a relationship with relevant producers or suppliers that have a large market share. A large market share increases the potential for any one generator to influence price.
- 5.18. We have considered whether the Applicant or its controllers have any opportunity to discriminate as a result of their share in the GB electricity generation or supply market. We note that in the Commission opinion, the Commission may have over calculated the total generation capacity held by the Applicant's controllers. We consider that the Applicant's controllers currently do not have overall market power for the reasons set out below. Ofgem will continue to monitor the generation and supply interests and related market share for any future certification applications from the Applicant's controllers.
- 5.19. Our State of the Energy Market Report 2019<sup>6</sup> notes that the wholesale electricity market in GB is moderately concentrated, with the eight largest electricity companies providing

<sup>&</sup>lt;sup>6</sup> <u>https://www.ofgem.gov.uk/system/files/docs/2019/10/2019 state of the energy market 0.pdf (paragraph 3.94 refers).</u>



72% of metered volumes in 2018.<sup>7</sup> We have estimated the Applicant's controllers' aggregate share of the GB generation market at under 3%.

- 5.20. We agree with the Commission's comment that one of the Applicant's controllers (MC's) share of the European ('EU') market has risen since we considered the Walney Extension Limited application. However, we note that MC's share remains at under 0.0002% of the total EU market, and that the total market share held by the Applicant's controllers together is lower than when we considered the Walney Extension Limited application.
- 5.21. In general, market power is more likely to be exerted in shorter timeframes (for example, individual days or hours). This is because the circumstances that often create periods of system stress are relatively transient (e.g. peaking demand, unplanned outages, variable wind output<sup>8</sup>). In shorter timeframes, only flexible generation can be used to exert market power. The majority of generation controlled by the Applicants' controllers is wind generation, which is considered to be inflexible as it is dependent on the strength of the wind at any given time. As such, it is highly unlikely that these generators could exert any market power. Given this, in practice, only one of the generation interests located in GB would be in a position to exert market power. However, the small storage capacity of that generation interest means any perceived market power would not be significant. As such, it is highly unlikely that the Applicant's controllers could in fact exert any market power to influence the GB electricity generation market or create the opportunity to discriminate.
- 5.22. Whilst it is not possible to take into account all future projects of the Applicant's controllers in assessing market power, we have considered those future projects which are sufficiently concrete, being those projects already under construction and that will become operational within the next one to two years. We estimate the Applicant's controllers' aggregate share of the GB generation market will rise to approximately 0.7% by the fourth quarter of 2021, when those future projects become operational.
- 5.23. Based on the information currently to hand surrounding the market and those future projects, we do not consider that this alters our conclusion regarding the Applicant's controllers' market power. We will, however, continue to revise this conclusion as those future projects become operational and as new information becomes available. As noted below, we confirm that a condition of this final certification decision requires the Applicant to regularly notify us of any relevant changes in circumstances that may affect its eligibility for certification (including the acquisition of future generation and supply assets), and those changes will be assessed against the market at the time of notification.

 <sup>&</sup>lt;sup>7</sup> Ofgem has had to reprioritise its work load due to the COVID -19 pandemic. As a result, we have decided to postpone the State of the Market Report for this year. See our webpage at <a href="https://www.ofgem.gov.uk/publications-and-updates/update-state-market-report-2020">https://www.ofgem.gov.uk/publications-and-updates/update-state-market-report-2020</a> for more information.
 <sup>8</sup> 'Peaking demand' refers to the highest electrical power demand; 'unplanned outage' refers to a transmission system

<sup>&</sup>lt;sup>8</sup> 'Peaking demand' refers to the highest electrical power demand; 'unplanned outage' refers to a transmission system out of service, partially or completely, due to an unanticipated failure; 'variable wind output' refers to the fact that wind power is non-dispatchable due to its fluctuating nature owing to wind speed and air density.



## Conclusion

- 5.24. As invited by the Commission, we have reconsidered our assessment that Hornsea One OFTO meets the requirements for certification as ownership unbundled TSO. Given the above, we remain satisfied that none of the Applicant's controllers (either separately or in combination) has overall market power and conclude that there is no scope for discrimination. We consider that the regulatory safeguards set out above are suitable and that neither the Applicant nor its controllers have the ability or the incentive to cause widespread issues on the transmission systems.
- 5.25. The Commission has invited Ofgem to continue monitoring this case to ensure that no new facts emerge which would justify a change in its assessment. In compliance with the GB legal framework and the Electricity Directive, we will continue to monitor whether the basis on which the Authority decided to certify the Applicant continues to apply. This includes in respect of any future generation and/or interests that may be acquired and at the start of operations of any further generation interests. Further, a condition of the final certification decision requires the Applicant to regularly notify us of any relevant changes in circumstances that may affect its eligibility for certification.

#### 6. Controller from a third country

6.1. Both MC and Chubu are incorporated and registered in Japan. As Japan is a third country for the purposes of this certification assessment and section 100 of the Electricity Act, we notified our Government on 23 April 2020 in accordance with section 10B(3) of the Electricity Act. On 4 June 2020, our Government concluded that certifying the Applicant would not put the security of electricity supplies in the UK or any other EEA states at risk. The Commission also concluded the same in its opinion.