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RESPONSES TO THE SECOND WRITTEN QUESTIONS OF THE
EXAMINING AUTHORITY ON BEHALF OF

(1) BARROW OFFSHORE WIND LIMITED (REF: 20049974) (2) BURBO
EXTENSION LTD (REF: 20049975) (3) WALNEY EXTENSION LIMITED
(REF: 20049977) (4) MORECAMBE WIND LIMITED (REF: 20049973) (5)
WALNEY (UK) OFFSHORE WINDFARMS LIMITED (REF: 20049978) (6)
ØRSTED BURBO (UK) LIMITED (REF: 20049976) (THE "ØRSTED IPs")

IN CONNECTION WITH THE Application by Morecambe Offshore Wind
Limited for an Order Granting Development Consent for the Morecambe
Offshore Wind Farm

1. Introduction

- 1.1 This submission is provided in accordance with Deadline 5 of the examination timetable for the application by Morecambe Offshore Windfarm Limited (the “**Applicant**”) for an Order under the Planning Act 2008 (the “**Act**”) granting Development Consent for the Morecambe Offshore Windfarm Generation Assets (the “**Project**”).
- 1.2 We represent six owners of operational offshore windfarms in the East Irish Sea (as set out relevant representations RR-008, RR-014, RR-056, RR-088, RR-089, RR-093), who we refer to together as the “**Ørsted IPs**” for the purposes of this submission.
- 1.3 This document contains the Ørsted IPs’ responses to the second written questions of the examining authority (“**ExQ2**”) [PD-015] (set out in the table overleaf). The Ørsted IPs have responded to the following questions, which have been directed towards them:
 - 1.3.1 200I1;
 - 1.3.2 200I2; and
 - 1.3.3 200I3.

Shepherd & Wedderburn LLP

11.03.2025

Ørsted assets			Response
200I1.	The applicant Ørsted IPs MMO NE	<p>Effect on nearby OWFs</p> <p>The Ørsted IPs ([REP4-077], paragraph 1.22) consider that any need to obtain or vary an existing marine licence is considered business-as-usual and would not impact on decision making regarding extending the lifetime of the assets. Having regard to the recent <i>C G Fry & Son Limited vs Secretary of State for Housing, Communities and Local Government</i> [2024] EWCA Civ 730 judgment, could the Ørsted IPs, MMO, NE and the applicant respond to the proposition that any new marine licence would be likely to require a HRA to be carried out. As a result, parties are invited to comment on how certain the ExA/ SoS can be that any such consent/ approval would be forthcoming?</p>	<p>The case referred to (“CG Fry”) is not on point. The marine licensing process is not a multi-stage consenting process.</p> <p><i>CG Fry</i> related to an application to discharge conditions in a multi-stage housing development, for which outline planning permission had been obtained and for which appropriate assessment had never been carried out. In the period between outline permission being granted and the application for discharge of conditions being made, Natural England had issued a specific advice note regarding the risk of that type of development to a Ramsar site. The local authority withheld its approval, on the grounds that no appropriate assessment had been carried out of the development.</p> <p>In <i>CG Fry</i>, the Court determined that it had been appropriate for the local authority (and on appeal, the planning inspector) to require appropriate assessment be carried out in respect of the whole development, before granting the application to discharge conditions.</p> <p>The principles of this case are not relevant to the determination of marine licence applications for discrete maintenance activities.</p> <p>As outlined in the Ørsted IPs’ response to ISH3 action point 23 [REP4-077] (the “Asset Lifetime Note”) the operational elements of the assets are authorised by consents under section 36 of the Electricity Act 1989¹ and development consent orders under the Planning Act 2008.² None of these consents contain an expiry date nor a requirement to decommission at a particular date.</p> <p>The HRA process relevant to these consents is contained in the Conservation of Habitats and Species Regulations 2017 (“HRA Regulations”) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (in respect of Walney Extension) and is separate to any process relating to new or varied marine licences required for maintenance activities. New marine licences may be subject to the HRA process but that would be limited to the scope of the activities authorised</p>

¹ Relates to Burbo Bank Offshore Windfarm, Barrow Offshore Windfarm, West of Duddon Sands Offshore Windfarm.

² Relates to Burbo Extension Offshore Windfarm and Walney Extension Offshore Windfarm.

			<p>by the marine licence (i.e. maintenance activities). It would not be appropriate for consideration of the Project's effects on the Ørsted IPs' assets to be constrained on the grounds that it is possible their assets <i>may</i> be subject to the appropriate assessment process, in respect of limited maintenance activities authorised by marine licences.</p> <p>In particular, no information has been presented which would provide grounds for the Applicant or the examining authority to exclude Barrow Offshore Windfarm ("Barrow") from any consideration of the effects of the Project. The operation of Barrow is authorised by a section 36 consent (which is not time limited). Further, it is noted Barrow is not captured by the review provisions under the HRA Regulations.³</p> <p>There is a real likelihood of operational overlap between the developments, which must be properly evaluated. The Ørsted IPs' have provided clear information (in the public domain) which indicates a likelihood that Barrow will continue to operate beyond 2030. The Ørsted IPs' have also outlined a reasonable period for Barrow's incorporation in assessments would be 10 years following the earliest expected decommissioning date.</p> <p>Against that background, failure to include Barrow in the Project's cumulative impact and in-combination effects assessments would be wrong. We invite the examining authority to require the Applicant to produce updated information incorporating Barrow into the cumulative and in-combination assessments (which the applicants in the Mona and Morgan examinations have now done).</p>
20012.	Ørsted IPs	<p>Effect on nearby OWFs</p> <p>In its latest submission ([REP4-076], paragraph 2.5) the Ørsted IPs maintain that the predicted wake effects are a commercial consideration that will affect decisions about the lifetime extension of the existing Ørsted projects and therefore their future viability.</p>	<p>The Ørsted IPs have provided, at Appendix 1 to this submission, an analysis of the financial consequences ("Financial Note") of the Project's wake effects on their assets. As outlined in the Financial Note, the wake loss caused by the Project will threaten the future viability of the Ørsted IPs' assets at the point the assets become fully merchant (approximately 15-20 years after the assets commenced operations).</p>

³ Regulation HRA Regulations provide that section 36 consents can be reviewed where a new European site/European offshore marine site is designated. However, regulation 89 provides the review provisions do not apply if the asset has been constructed or become operational prior to the designation of the site (or 30 October 1994, if later). Barrow was constructed between 2005-2006, prior to the designation of any new relevant European sites/European offshore marine sites.

		<p>For the avoidance of doubt, can the Ørsted IPs confirm whether their position is that the potential wake effects identified would affect the financial viability of the existing Ørsted projects up and until their 'earliest possible decommissioning date' or that your concerns are about financial viability relating to future decisions about lifetime extensions only?</p>	<p>While the impacts of wake effect on the Ørsted IPs' assets are immediately material, at the point the assets become fully merchant and vulnerable to the energy market volatility, this effect is significantly exacerbated. At this stage, the profitability of the assets becomes highly marginal and the financial consequences of wake loss from the Project alone and cumulative with the Mona and Morgan developments will threaten the continued operation of the assets. This is outlined in detail in the Financial Note. It is noted that the level of unmitigated wake loss will need to be built into decision making regarding the lifetime of the assets at the point the DCO for the Project is granted.</p>
200I3.	Ørsted IPs	<p>Financial viability of existing Ørsted assets</p> <p>In first written question EXQ1.OOI13 the ExA asked the Ørsted IPs to provide evidence to substantiate their position that the proposed development would affect the viability of the existing Ørsted assets. The Ørsted IPs' response [REP3-109] stated that calculating the financial consequences from wake loss is complex and commercially sensitive but that Ørsted would investigate how to submit a robust assessment of the financial impact using public sources for a later submission. No such information has been provided.</p> <p>Can you provide the information requested in order to support your position that the ExA/SoS should give substantial weight to those effects as directed by paragraph 2.8.347 of NPS EN-3.</p>	<p>The Financial Note provided at Appendix 1 outlines in detail the financial consequences of the wake effects from the Project (both alone and cumulatively with the Mona and Morgan developments) on the Ørsted IPs' assets.</p> <p>As flagged above, the financial consequences are particularly pertinent at the stage each asset becomes fully merchant, and the profitability of the asset therefore becomes significantly more marginal. It is at this point the financial consequences of the Project would threaten the future viability of the assets. The Ørsted IPs consider that the impacts outlined in the Financial Note, specifically the values in Table 1 and Table 2, supports their view that this effect should be given "substantial weight" in decision making. In essence, the Ørsted IPs have calculated the lost revenue from wake effect which, on an undiscounted basis, stands at £68m and £440m for Morecambe alone and for the cumulative impact of Mona, Morgan and Morecambe respectively. For reference, the Orsted IPs have also applied a range of discount rates to the lost revenue which, depending on the rate applied, can reduce the values by more than half.</p>

APPENDIX 1 – ØRSTED RESPONSE TO EXQ1 & EXQ2

This document has been prepared by the Ørsted IPs in response to the examining authority's written questions [PD-015] in the examination of the Morecambe Offshore Windfarm Generation Assets ("**Morecambe**"). This submission forms part of the Ørsted IPs' response to questions 100I3, 200I2 and 200I3.

Using a mix of publicly available data and information submitted throughout the examinations of Morecambe along with the Morgan and Mona Offshore wind projects (together, the "**MoMoMo developments**"), the Ørsted IPs have modelled the financial consequences of the wake losses for each project. The purpose of this analysis is to provide the Examining Authority (ExA) sufficient information to quantify and understand the magnitude of the financial losses incurred by the Ørsted IPs as a result of the wake effects and the significance of those impacts across the lifetime of each asset without divulging confidential internal commercial information.

This document first explains the methodology used and then lists assumptions. It is then structured in two parts reflecting the two questions asked by the ExA. Part One answers 100I3. It provides an analysis of the overall financial impacts of wake impacts of the MoMoMo developments on the Ørsted IPs' portfolio. Part Two answers 200I3 and 200I4 and, in conjunction with Appendix 3, provides an analysis of the impacts on the assets and explains when wake impacts become particularly relevant in terms of future viability of the assets.

Methodology

At its highest level, the formula used to calculate the financial impact of the predicted wake losses at a particular project is a function of:

- (1) the Annual Electricity production *multiplied by*
- (2) the predicted wake loss (in %) *multiplied by*
- (3) electricity prices between the operational commencement date of the "waking" project and the "waked" project's decommissioning date.

Part 3 of the calculation differs depending on the type of market support the asset receives, which is either via Renewable Obligation Certificates (ROC) or Contract for Difference (CfD).

CfD Assets' revenue per MWh is based on the Contract for Difference price per MWh. When the CfD expires (see *Table 8: CfD price*) the assets become fully merchant with revenue calculated as Market Price per MWh. The following assets are currently supported by CfD: Walney Extension Offshore Windfarm (comprising Walney 3 and Walney 4) and Burbo Bank Extension Offshore Windfarm.

ROC Assets' revenue per MWh is based on the number of ROC certificates produced by the assets per MWh multiplied by the buy-out price per MWh plus the market price per MWh. When ROC certificates expire (as outlined in *Table 9: Buy-out price per ROC*), the asset becomes fully merchant with revenue calculated as market price per MWh. The following assets are currently supported by the ROC scheme: Barrow Offshore Windfarm, West of Duddon Sands Offshore Windfarm, Walney Offshore Windfarm (comprising Walney 1 and Walney 2) and Burbo Bank Offshore Wind farm.

Assets are referred by their acronyms, as set out below, throughout the rest of the document.

Barrow	BOW
West of Duddon Sands	WDS
Walney 1	WOW01
Walney 2	WOW02
Walney Extension 3	WOW03
Walney Extension 4	WOW04
Burbo Bank 1	BBW01
Burbo Bank 2 extension	BBW02

Assumptions

In order to produce this high-level analysis, the Ørsted IPs have made several reasonable assumptions designed to simplify the modelling. The scope of the analysis is limited to Morecambe and the cumulative effect of the MoMoMo developments.

The numerical assumptions referred to below are available in the form of data tables in Appendix 2.

1. Annual Production remains stable throughout the lifetime of the asset (*Table 6: Estimated Electricity production per annum (GWh)*). The Ørsted IPs' internal expectations of AEP are confidential and cannot be shared. Instead the AEP numbers are taken from the Mona submission "S_Ex_1 Technical Note: Calculation of the Net Effects on Greenhouse Gas Emissions" [AS-033.] page 16, where an average of the last 5 years of metered production from each asset is sourced from Ofgem.
2. Wake loss remains static throughout the lifetime of the asset (*Table 5: Percentage wake effect*).
3. Assets operate for an additional 10 years on top of their minimum operational lifetime (*Table 7: Decommissioning dates*)
4. Wake impacts as a result of all three MoMoMo developments, start on the 01/07/2030. In reality, the assets are aiming to be fully constructed by this date meaning the Ørsted IPs' assets will experience wake losses earlier.
5. Revenue loss is a function of Market Price, CfD and ROC and ignores auxiliary services, Renewable Energy Guarantees of Origin and other revenues.
6. CfD prices are available on the LCCC website, see hyperlinks in Table 8: CfD price .
7. ROC prices are available on the OFGEM website, see hyperlinks in Table 9: Buy-out price per ROC
8. Market prices are sourced from DESNZ's Research titled "[Prices from Energy and emissions projections: 2023 to 2050](#)" (published 17 December 2024), specifically "[Annex M: Growth assumptions and prices](#)".
9. The market prices used in this paper are based on the main projection or "reference scenario" used by DESNZ in its publication "Energy and emissions projections 2023 to 2050 (*Table 10: "Energy and emissions projections: 2023 to 2050", from DESNZ (p/kWh, 2023 prices)*)". This is referred to as the "DESNZ Reference Scenario" in this document.
10. DESNZ scenarios are expressed in 2023 Prices. In order to align with this document, prices have been adjusted to 2025 by means of adding two years' worth of inflation (*Table 11: Table 10 above converted to £/MWh and adjusted to 2025 prices*).

11. For the avoidance of any doubt, this document contains no confidential information. All price forecasts are sourced from DESNZ and are used for illustrative purposes and do not reflect Ørsted's energy market outlook.

Part One – Financial impact analysis of wake losses, response to 100I3

The analysis below illustrates the magnitude of the financial impacts of wake loss from Morecambe alone and the MoMoMo developments cumulatively, across the lifetimes of the Ørsted IPs' assets.

By 2034, all of the Ørsted IPs will be fully merchant. Morecambe wake loss will translate into an average £3m lost annal revenue for its first decade of operation. MoMoMo's cumulative wake impacts are expected to reduce the Ørsted's IPs' revenue by between £16m to £20m per annum for the same period. This level of financial impact could be sufficient to result in the ongoing operation of the assets becoming unviable.

As noted above, this analysis is based on DESNZ Reference scenario. Tables outlining the financial impacts in more detail are provided in Appendix 3.

As with any long-term financial predictions, the answer is heavily predicated on underlying assumptions. In particular, the discounting rate used to calculate the current value of the stream of wake losses that will impact the Ørsted IPs' assets. This calculation is usually referred to as a Net Present Value ("**NPV**").

Ørsted does not consider it would be appropriate to select one discount rate and has instead opted to run the NPV calculations using a range. The results of these computations are available in Table 1 and Table 2 below. Table 1 analyses Morecambe only and Table 2 analyses the cumulative impact of the MoMoMo developments. The NPV for the minimum lifetime of the asset is shown separately from the total impact NPV that includes an additional 10-year operation. It is noted that the discounting rates in the tables take into account future anticipated inflation.

In summary, based on DESNZ Reference scenario and assuming a 0.0% discount rate, it is predicted that the effects from Morecambe alone would result in a loss of up to £38 million across the minimum lifetimes of the assets, and cumulatively with the Mona and Morgan developments the predicted loss is up to £250 million. This impact is predicted to almost double if the assets continue to operate for a further 10 years.

As the discount rate increases, the NPV values reduce accordingly. For example, at a 7.5% discount rate, the NPV total impact for Morecambe alone (including a 10 year additional operating period) reduces to £27m, and £169m for the cumulative MoMoMo developments; this is lower than the £68m and £440m predicted using a 0.0% discount rate.

Table 1: Morecambe wake loss NPV impact on Ørsted IPs (inclusive and exclusive of additional 10-year operation) (£m)

	Total impact (min. lifetime + 10 years)				Minimum lifetime			
	0.0%	2.5%	5.0%	7.5%	0.0%	2.5%	5.0%	7.5%
BOW	2	2	1	1	-	-	-	-
WDS	27	20	15	11	16	13	10	8
WOW01	4	3	2	1	1	1	1	1
WOW02	3	2	2	1	2	1	1	1
WOW03	10	7	5	4	6	5	4	3
WOW04	14	10	7	5	9	7	5	4
BBW01	1	1	0	0	0	0	0	0
BBW02	7	5	3	3	4	3	2	2
Total	68	49	36	27	38	30	24	19

Table 2: cumulative wake loss NPV impact on Ørsted IPs from the MoMoMo developments (inclusive and exclusive of additional 10-year operation) (£m)

	Total impact (min. lifetime + 10 years)				Minimum lifetime			
	0.0%	2.5%	5.0%	7.5%	0.0%	2.5%	5.0%	7.5%
BOW	5	4	3	2	-	-	-	-
WDS	104	76	57	43	61	49	40	32
WOW01	25	18	13	10	9	7	6	5
WOW02	36	27	20	15	17	14	12	10
WOW03	104	73	52	38	64	50	39	31
WOW04	134	94	68	49	83	65	51	40
BBW01	3	2	2	1	0	0	0	0
BBW02	29	20	14	10	16	13	10	8
Total	440	315	229	169	250	199	158	126

Part Two – detailed analysis in response to 200I3 and 200I4

As outlined in the Ørsted IPs' response to question 200I3 above, as market support for the assets falls away and they become fully merchant, the economic margins for ongoing operation become highly marginal and assets become significantly more vulnerable.

By way of example, the financial impacts of the predicted wake loss on BOW are displayed in tables 3 (for Morecambe alone) and 4 (for the MoMoMo developments cumulatively) below. BOW (an asset with 90 MW installed capacity), will be the first asset in the Ørsted IPs' portfolio to become fully merchant in 2027. By this stage, the price of electricity generated from this asset will be £62.1/MWh (as shown in the 'Total Price' row in tables 3 and 4 below). Meanwhile, the predicted wake loss will continue at 1.37% from Morecambe alone and cumulatively from the MoMoMo developments at 3.09%. These losses translate into a financial impact of approximately £0.2m per annum from Morecambe alone and between £0.5m to £0.6m cumulatively per annum from the MoMoMo developments.

Table 3: Detailed calculations of the financial impact of wake effects on Barrow caused by Morecambe alone

BOW (2025 prices)			'29	'30	'31	'32	'33	'34	'35	'36	'37	'38	'39	'40	'41
Production	GWh		272	272	272	272	272	272	272	272	272	272	272	188	-
Wake loss	%age		-	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%	-
Compensation period			-	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	-
Lost production	GWh		-	(1.8)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(1.8)	-
ROC price	£/MWh		-	-	-	-	-	-	-	-	-	-	-	-	-
Market Price	£/MWh		57.4	47.3	41.6	47.6	52.4	55.2	60.5	62.6	66.2	72.8	72.0	73.8	-
Total Price	£/MWh		57.4	47.3	41.6	47.6	52.4	55.2	60.5	62.6	66.2	72.8	72.0	73.8	-
Financial Impact	£m		-	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)	(0.3)	(0.1)	-

Table 4: Detailed calculations of the financial impact of wake effects on Barrow cumulatively from the MoMoMo developments

BOW (2025 prices)			'29	'30	'31	'32	'33	'34	'35	'36	'37	'38	'39	'40	'41
Production	GWh		272	272	272	272	272	272	272	272	272	272	272	188	-
Wake loss	%age		-	3.09%	3.09%	3.09%	3.09%	3.09%	3.09%	3.09%	3.09%	3.09%	3.09%	3.09%	-
Compensation period			-	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	-
Lost production	GWh		-	(4.2)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(8.4)	(4.0)	-
ROC price	£/MWh		-	-	-	-	-	-	-	-	-	-	-	-	-
Market Price	£/MWh		57.4	47.3	41.6	47.6	52.4	55.2	60.5	62.6	66.2	72.8	72.0	73.8	-
Total Price	£/MWh		57.4	47.3	41.6	47.6	52.4	55.2	60.5	62.6	66.2	72.8	72.0	73.8	-
Financial Impact	£m		-	(0.2)	(0.3)	(0.4)	(0.4)	(0.5)	(0.5)	(0.5)	(0.6)	(0.6)	(0.6)	(0.3)	-

As illustrated above for BOW, at the point that market support ends, the price predicted for electricity generated at each asset will become merchant and revenues will likely drop and become volatile.

This will coincide with the assets aging and therefore potentially incurring increased operational expenditures. At this point, the profitability of the assets becomes more marginal and the Ørsted IPs will have limited options to insulate the assets from the volatility of the energy markets. While these factors have been anticipated and planned for by Ørsted, the wake effects of Morecambe alone and the MoMoMo developments could not have been. In summary, at a point where the assets have become more vulnerable, they will also experience new material financial impacts from wake loss from Morecambe (as well as the Morgan and Mona developments). The Ørsted IPs consider the financial impact of the wake loss will compound forecast financial pressures on the assets. At around this point, therefore, the viability of the assets is likely to be particularly impacted.

APPENDIX 2 – ASSUMPTIONS USED IN ANALYSIS OF FINANCIAL IMPACTS OF WAKE LOSS

Inputs used in the analysis are clearly highlighted in blue font

Table 5: Percentage wake effect

	Morecambe	Cumulative MoMoMo
BOW	1.37%	3.09%
WDS	1.01%	3.86%
WOW01	0.53%	3.78%
WOW02	0.32%	3.69%
WOW03	0.40%	4.13%
WOW04	0.56%	5.21%
BBW01	0.46%	1.63%
BBW02	0.45%	1.85%

Source: Wake Impact Assessment report ([REP3-112](#)) page 9

Table 6: Estimated Electricity production per annum (GWh)

	GWh
BOW	272.0
WDS	1,476.9
WOW01	626.4
WOW02	709.0
WOW03	1,299.0
WOW04	1,299.0
BBW01	252.0
BBW02	896.2

Source: Additional Submission to the examination of the Mona Offshore Windfarm Generation Assets (EN010121) - Accepted at the discretion of the Examining Authority - S_Ex_1 Technical Note: Calculation of the Net Effects on Greenhouse Gas Emissions ([AS-033](#)) page 16 (sourced from OFGEM)

Table 7: Decommissioning dates

	Earliest date	With additional 10 years
BOW	30/09/2030	30/09/2040
WDS	31/10/2038	31/10/2048
WOW01	31/07/2035	31/07/2045
WOW02	30/06/2036	30/06/2046
WOW03	31/05/2042	31/05/2052
WOW04	31/05/2042	31/05/2052
BBW01	31/12/2031	31/12/2041
BBW02	31/05/2041	31/05/2051

Table 8: CfD price

Asset	sources
WOW03	• Link to LCCC website
WOW04	
BBW02	• Link to LCCC website

Table 9: Buy-out price per ROC

Asset	source
BOW	• Link to Buy out prices
WDS	
WOW01	
WOW02	
BBW01	

Table 10: “Energy and emissions projections: 2023 to 2050”, from DESNZ (p/kWh, 2023 prices)

Prices sourced from “EEP - Annex M - Growth assumptions and prices” ([Link](#) to OFGEM webpage)

Using the “Reference” tab > Price – Wholesale > Electricity (baseload) > p/kWh (2023 prices), row 20

Year	p/kWh (2023 prices)	Year	p/kWh (2023 prices)	Year	p/kWh (2023 prices)
2023	9.809	2034	5.236	2045	7.728
2024	6.808	2035	5.742	2046	7.902
2025	6.861	2036	5.938	2047	7.792
2026	6.827	2037	6.284	2048	7.856
2027	6.155	2038	6.906	2049	7.844
2028	5.889	2039	6.834	2050	7.804
2029	5.450	2040	7.002	2051*	7.804
2030	4.488	2041	7.240	2052*	7.804
2031	3.944	2042	7.434	2053*	7.804
2032	4.518	2043	7.516		
2033	4.972	2044	7.696		

* table extended three years to 2053 assuming 7.80p/kWh in each year

Table 11: Table 10 above converted to £/MWh and adjusted to 2025 prices

Adjusting from “2023 prices” to “2025 price” by applying an inflationary factor of 3.3%¹ for 2024 and 2.0 %² for 2025

Year	£/MWh (2025 prices)	Year	£/MWh (2025 prices)	Year	£/MWh (2025 prices)
2023	98.09	2034	55.17	2045	81.43
2024	70.32	2035	60.50	2046	83.26
2025	72.30	2036	62.57	2047	82.10
2026	71.93	2037	66.21	2048	82.78
2027	64.85	2038	72.76	2049	82.65
2028	62.05	2039	72.01	2050	82.22
2029	57.43	2040	73.78	2051	82.22
2030	47.29	2041	76.29	2052	82.22
2031	41.55	2042	78.33	2053	82.22
2032	47.61	2043	79.20		
2033	52.38	2044	81.09		

¹ Office for National Statistics <https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/l55o/mm23>

² Bank of England inflation target [Inflation and the 2% target | Bank of England](#)

APPENDIX 3 –DETAILED CACLULATIONS OF FINANCIAL IMPACT OF WAKE EFFECT

(Based on DESNZ Reference scenario, 2025 prices)

Detailed calculations of the financial impact of **Morecambe alone** on each asset

Table 12: Summary of financial impact of Morecambe alone (£m, 2025 prices)

	BOW	WDS	WOW01	WOW02	WOW03	WOW04	BBW01	BBW02	Total
2025	-	-	-	-	-	-	-	-	-
[...]	-	-	-	-	-	-	-	-	-
2030	0.1	1.3	0.3	0.2	0.5	0.8	0.0	0.4	3.6
2031	0.2	2.6	0.2	0.4	1.1	1.5	0.0	0.8	6.8
2032	0.2	2.6	0.2	0.4	1.1	1.5	0.1	0.4	6.4
2033	0.2	2.7	0.2	0.1	0.3	0.7	0.1	0.2	4.4
2034	0.2	2.8	0.2	0.1	0.3	0.4	0.1	0.2	4.2
2035	0.2	0.9	0.2	0.1	0.3	0.4	0.1	0.2	2.5
2036	0.2	0.9	0.2	0.1	0.3	0.5	0.1	0.3	2.6
2037	0.2	1.0	0.2	0.2	0.3	0.5	0.1	0.3	2.8
2038	0.3	1.1	0.2	0.2	0.4	0.5	0.1	0.3	3.0
2039	0.3	1.1	0.2	0.2	0.4	0.5	0.1	0.3	3.0
2040	0.1	1.1	0.2	0.2	0.4	0.5	0.1	0.3	2.9
2041	-	1.1	0.3	0.2	0.4	0.6	0.1	0.3	2.9
2042	-	1.2	0.3	0.2	0.4	0.6	-	0.3	2.9
2043	-	1.2	0.3	0.2	0.4	0.6	-	0.3	2.9
2044	-	1.2	0.3	0.2	0.4	0.6	-	0.3	3.0
2045	-	1.2	0.1	0.2	0.4	0.6	-	0.3	2.8
2046	-	1.2	-	0.0	0.4	0.6	-	0.3	2.7
2047	-	1.2	-	-	0.4	0.6	-	0.3	2.6
2048	-	0.8	-	-	0.4	0.6	-	0.3	2.1
2049	-	-	-	-	0.4	0.6	-	0.3	1.4
2050	-	-	-	-	0.4	0.6	-	0.3	1.4
2051	-	-	-	-	0.4	0.6	-	0.1	1.1
2052	-	-	-	-	0.1	0.1	-	-	0.2
Min. lifetime	0.1	15.9	1.2	1.5	6.2	8.9	0.1	4.0	37.9
+10 years	2.1	11.3	2.3	1.6	3.9	5.5	0.7	3.0	30.5
Total	2.2	27.2	3.5	3.1	10.1	14.4	0.8	7.0	68.3

Detailed calculations of the financial impact of **combined MoMoMo** on each Ørsted IPs

Table 13: Summary of financial impact of combined MoMoMo (£m, 2025 prices)

	BOW	WDS	WOW01	WOW02	WOW03	WOW04	BBW01	BBW02	Total
2025	-	-	-	-	-	-	-	-	-
[...]	-	-	-	-	-	-	-	-	-
2030	0.2	5.0	2.1	2.3	5.5	7.0	0.1	1.7	23.9
2031	0.3	9.7	1.5	4.5	11.2	14.1	0.2	3.5	45.0
2032	0.4	10.1	1.1	4.6	11.2	14.1	0.2	1.5	43.2
2033	0.4	10.4	1.2	1.4	2.8	6.2	0.2	0.9	23.5
2034	0.5	10.5	1.3	1.4	3.0	3.7	0.2	0.9	21.6
2035	0.5	3.4	1.4	1.6	3.2	4.1	0.2	1.0	15.6
2036	0.5	3.6	1.5	1.6	3.4	4.2	0.3	1.0	16.1
2037	0.6	3.8	1.6	1.7	3.6	4.5	0.3	1.1	17.0
2038	0.6	4.1	1.7	1.9	3.9	4.9	0.3	1.2	18.7
2039	0.6	4.1	1.7	1.9	3.9	4.9	0.3	1.2	18.5
2040	0.3	4.2	1.7	1.9	4.0	5.0	0.3	1.2	18.7
2041	-	4.3	1.8	2.0	4.1	5.2	0.3	1.3	19.0
2042	-	4.5	1.9	2.0	4.2	5.3	-	1.3	19.2
2043	-	4.5	1.9	2.1	4.2	5.4	-	1.3	19.4
2044	-	4.6	1.9	2.1	4.4	5.5	-	1.3	19.8
2045	-	4.6	0.6	2.1	4.4	5.5	-	1.4	18.6
2046	-	4.7	-	0.6	4.5	5.6	-	1.4	16.8
2047	-	4.7	-	-	4.4	5.6	-	1.4	16.0
2048	-	2.9	-	-	4.4	5.6	-	1.4	14.3
2049	-	-	-	-	4.4	5.6	-	1.4	11.4
2050	-	-	-	-	4.4	5.6	-	1.4	11.3
2051	-	-	-	-	4.4	5.6	-	0.3	10.2
2052	-	-	-	-	0.9	1.1	-	-	2.0
Min. lifetime	0.2	60.7	8.7	17.4	63.8	83.2	0.3	16.4	250.7
+10 years	4.8	43.3	16.3	18.4	40.4	51.0	2.6	12.4	189.1
Total	5.0	103.9	25.0	35.8	104.2	134.1	2.9	28.9	439.8