

Outer Dowsing Offshore Wind

Habitats Regulations Assessment

Outline Biogenic Reef

Compensation Implementation and Monitoring Plan

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Acronyms & Definitions

Abbreviations / Acronyms

Abbreviation / Acronym	Description
AEoI	Adverse Effect on Integrity
ANS	Artificial Nesting Structures
BRCSG	Biogenic Reef Compensation Steering Group
BRCIMP	Biogenic Reef Compensation Implementation and Monitoring Plan
COWSC	Collaboration on Offshore Wind Strategic Compensation
Defra	Department for Environment, Food and Rural Affairs
ECC	Export Cable Corridor
ES	Environmental Statement
IDRBNR	Inner Dowsing, Race Bank and North Ridge
JNCC	Joint Nature Conservation Committee
MRF	Marine Recovery Fund
ORCP	Offshore Reactive Compensation Platform
RIAA	Report to Inform Appropriate Assessment
SAC	Special Area of Conservation

Terminology

Term	Definition
The Applicant	GT R4 Ltd. The Applicant making the application for a DCO. The Applicant is GT R4 Limited (a joint venture between Corio Generation, TotalEnergies and Gulf Energy Development (GULF)), trading as Outer Dowsing Offshore Wind. The project is being developed by Corio Generation (a wholly owned Green Investment Group portfolio company), TotalEnergies and GULF.
Array area	The area offshore within which the generating stations (including wind turbine generators (WTG) and inter array cables), offshore accommodation platforms, offshore transformer substations and associated cabling are positioned.
Compensatory Measures	Stage 3 of the Habitats Regulations Assessments (see Derogation) involves the development of compensation measures for any features which the report to inform appropriate assessment was unable to conclude no adverse effect on integrity on.
Derogation	Stage 3 of the Habitats Regulations Assessments which is triggered once it is determined that you cannot avoid adversely affecting the integrity of a designated site. Involves assessing if alternative solutions are available to achieve the same goals as the project, if there are imperative reasons of overriding public interest, and if compensatory measures will be required.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP) from

Term	Definition
	the Secretary of State (SoS) for Department for Energy Security and Net Zero (DESNZ).
Export cables	High voltage cables which transmit power from the Offshore Substations (OSS) to the Onshore Substation (OnSS) via an Offshore Reactive Compensation Platform (ORCP) if required, which may include one or more auxiliary cables (normally fibre optic cables).
Offshore Export Cable Corridor (ECC)	The Offshore Export Cable Corridor (Offshore ECC) is the area within the Order Limits within which the export cables running from the array to landfall will be situated.
Offshore Reactive Compensation Station (ORCP)	A structure attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents) housing electrical reactors and switchgear for the purpose of the efficient transfer of power in the course of HVAC transmission by providing reactive compensation
Offshore Substation (OSS)	A structure attached to the seabed by means of a foundation, with one or more decks and a helicopter platform (including bird deterrents), containing— (a) electrical equipment required to switch, transform, convert electricity generated at the wind turbine generators to a higher voltage and provide reactive power compensation; and (b) housing accommodation, storage, workshop auxiliary equipment, radar and facilities for operating, maintaining and controlling the substation or wind turbine generators
Outer Dowsing Offshore Wind (ODOW)	The Project.
The Project	Outer Dowsing Offshore Wind, an offshore wind generating station together with associated onshore and offshore infrastructure.
Strategic Compensation	Collaborative approach by developers and/or government departments to secure compensation for adverse effects on the conservation objectives of a protected marine area, where the scale of offshore wind delivery is likely to exceed the ability of developers to provide sufficient compensation on an individual project specific basis.

1 Introduction

1.1 Project Background

1. GT R4 Limited (trading as Outer Dowsing Offshore Wind) hereafter referred to as the 'Applicant', is proposing to develop Outer Dowsing Offshore Wind ('the Project'). The Project will be located approximately 54km from the Lincolnshire coastline in the southern North Sea. The Project will include both offshore and onshore infrastructure including an offshore generating station (windfarm), export cables to landfall, Offshore Reactive Compensation Platforms (ORCPs), onshore cables, connection to the electricity transmission network, ancillary and associated development and areas for the delivery of up to two Artificial Nesting Structures (ANS) and the creation and recreation of a biogenic reef (if these compensation measures are deemed to be required by the Secretary of State (SoS) (see Volume 1, Chapter 3: Project Description for full details).
2. The proposed offshore Export Cable Corridor (Offshore ECC) runs from the array area to landfall at Wolla Bank on the Lincolnshire coast, and the total export cable length is expected to be 440km (for up to four cables). The Offshore ECC has been developed through extensive route selection and evaluation work, taking into consideration environmental and engineering constraints (as presented within Chapter 4: Site Selection and Alternatives (document reference 6.1.4) of the Environmental Statement (ES)). The final route passes through the Inner Dowsing, Race Bank, and North Ridge (IDRBNR) Special Area of Conservation (SAC).
3. The Report to Inform Appropriate Assessment (RIAA) undertaken for the Project concluded that an AEoI could be ruled out alone and in-combination upon the IDRBNR SAC however, cognisant of previous decisions reached by the Secretary of State on recent offshore wind farm Development Consent Order determinations and in light of consultation comment from Natural England, the Applicant has developed potential 'without prejudice' compensation measures for this SAC in the event the Project is required to provide compensation for impacts on this SAC by the Secretary of State.

1.2 Document Overview and Purpose

4. This document sets out the outline for the Biogenic Reef Compensation Implementation and Monitoring Plan (BRCIMP) that will be developed by the Applicant, in consultation with the proposed Benthic Reef Compensation Steering Group (BRCSG), should consent for the Project be granted and compensation for reef be required. The final BRCIMP will be developed in accordance with the Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2) which provides the detailed delivery strategy supporting the potential compensation measures for reef.
5. The BRCIMP will include details, where relevant for each measure to be taken forward, of the:
 - Scale and location;
 - Design;

- Delivery Process;
- Delivery timeframe;
- Monitoring and adaptive management; and
- Reporting.

2 Background

6. This section will provide context to the BRCIMP, confirming the reason for its need, its aims and objectives, and the latest project status.

3 Consultation

7. This section will summarise all relevant consultation that has taken place through the BRCSG in the development of the BRCIMP. It will capture any key decisions, agreements, and where relevant any outstanding issues under discussion (with clarity as to the steps necessary to resolve any such matters). Ongoing engagement, for example to provide updates on monitoring, (post-discharge of the BRCIMP) will be outlined here.

4 SAC Extension

4.1 Scale and Location of Compensation

8. This section will identify the scale of compensation proposed to be provided, and how this relates to the consent decision made by the Secretary of State. This section will then also detail the specific location(s) at which the compensation will be delivered and the suitability of identified sites to deliver the compensation measure. This measure will be delivered as a solely strategic measure.
9. If the Applicant has elected to pay a contribution to the Marine Recovery Fund (“MRF”) or equivalent fund then this section shall include the sum of the contribution as agreed between the Applicant and Defra in consultation with the BRCSG.
10. If the Applicant has elected to pay a contribution to an alternative strategic system for the delivery of this measure, then this section shall include the sum of the contribution as agreed between the Applicant and the relevant stakeholder in consultation with the BRCSG.

4.2 Delivery Process

11. This section will identify the delivery process for the compensation measure and how it may be applied. The Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2) will help inform these aspects.
12. The designation process would have to be delivered by Defra in consultation with Natural England and the JNCC. This section will set out the specific elements where the Applicant will support this work, in order to assist in the timely delivery of the required compensation for the Project. A proposal of how the Applicant could contribute to this process are set out the Without Prejudice Benthic Compensation Evidence Base and Roadmap (document 7.6.3).

4.3 Delivery Timeframe

13. This section will identify the proposed timeframe for delivery and long-term delivery of the compensation.

4.4 Monitoring and Adaptive Management

14. This section will identify the monitoring procedure and adaptive management principles and processes that have been agreed with the BRCSG, including the scenarios under which adaptive management measures are required. It will be developed taking into account the evidence base that has been provided within the Without Prejudice Benthic Compensation Evidence Base and Roadmap (document 7.6.3). Following discharge of the BRCIMP, the BRCSG will be engaged in relation to implementing adaptive management if required as outlined in the Consultation section above.

4.5 Reporting

15. This section will set out the reporting requirements associated with the monitoring and adaptive management. In doing so, it will confirm the necessary objectives and timescales for the reporting.

5 Alternative Protection Methodologies

5.1 Scale and Location of Compensation

16. This section will identify the scale of compensation proposed to be provided, and how this relates to the consent decision made by the Secretary of State. This section will then also detail the specific location(s) at which the compensation will be delivered and the suitability of identified sites to deliver the compensation measure.

5.2 Delivery Process

17. This section will identify the delivery process for the compensation measure and how it may be applied. The Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2) will help inform these aspects.

18. The bylaws and agreements would have to be delivered by Defra in consultation with Natural England and the JNCC. This section will set out the specific elements where the Applicant will support this work, in order to assist in the timely delivery of the required compensation for the Project.

5.3 Delivery Timeframe

19. This section will identify the proposed timeframe for delivery and long-term delivery of the compensation.

5.4 Monitoring and Adaptive Management

20. This section will identify the monitoring procedure and adaptive management principles and processes that have been agreed with the BRCSG, including the scenarios under which adaptive management measures are required. It will be developed taking into account the evidence base that has been provided within the Without Prejudice Benthic Compensation Evidence Base and Roadmap (document 7.6.3). Following discharge of the BRCIMP, the BRCSG will be engaged in relation to implementing adaptive management if required as outlined in the Consultation section above.

5.5 Reporting

21. This section will set out the reporting requirements associated with the monitoring and adaptive management. In doing so, it will confirm the necessary objectives and timescales for the reporting.

6 Anthropogenic Pressure Removal

6.1 Marine Debris/Litter Removal

6.1.1 Scale and Location of Compensation

22. This section will identify the scale of compensation proposed to be provided, and how this relates to the consent decision made by the Secretary of State. This section will then also detail the specific location(s) at which the compensation will be delivered and the suitability of identified sites to deliver the compensation measure.

6.1.2 Delivery Process

23. This section will identify the delivery process, including nature and status of all consents and other relevant approvals that may be necessary for the compensation measure and a programme for any outstanding consents. The Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2) will help inform these aspects.

6.1.3 Delivery Timeframe

24. This section will identify the proposed timeframe for delivery and long-term delivery of the compensation.

6.1.4 Monitoring and Adaptive Management

25. This section will identify the monitoring procedure and adaptive management principles and processes that have been agreed with the BRCSG, including the scenarios under which adaptive management measures are required. It will be developed taking into account the evidence base that has been provided within the Without Prejudice Benthic Compensation Evidence Base and Roadmap (document 7.6.3). Following discharge of the BRCIMP, the BRCSG will be engaged in relation to implementing adaptive management if required as outlined in the Consultation section above.

6.1.5 Reporting

This section will set out the reporting requirements associated with the monitoring and adaptive management. In doing so, it will confirm the necessary objectives and timescales for the reporting.

6.2 Marine Debris/Litter Awareness and Engagement

6.2.1 Scale and Location of Compensation

26. This section will identify the scale of compensation proposed to be provided, and how this relates to the consent decision made by the Secretary of State. This section will then also detail the specific location(s) at which the compensation will be delivered and the suitability of identified sites to deliver the compensation measure.

6.2.2 Delivery Process

27. This section will identify the delivery process, including nature and status of all consents, commercial agreements and other relevant approvals that may be necessary for the compensation measure and a programme for any outstanding consents. The Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2) will help inform these aspects.

6.2.3 Delivery Timeframe

28. This section will identify the proposed timeframe for delivery and long-term delivery of the compensation.

6.2.4 Monitoring and Adaptive Management

29. This section will identify the monitoring procedure and adaptive management principles and processes that have been agreed with the BRCSG, including the scenarios under which adaptive management measures are required. It will be developed taking into account the evidence base that has been provided within the Without Prejudice Benthic Compensation Evidence Base and Roadmap (document 7.6.3). Following discharge of the BRCIMP, the BRCSG will be engaged in relation to implementing adaptive management if required as outlined in the Consultation section above.

6.2.5 Reporting

30. This section will set out the reporting requirements associated with the monitoring and adaptive management. In doing so, it will confirm the necessary objectives and timescales for the reporting.

7 Creation of Biogenic Reef

7.1 Option 1: Creation of Native Oyster Beds

7.1.1 Scale and Location of Compensation

31. This section will identify the scale of compensation proposed to be provided, and how this relates to the consent decision made by the Secretary of State. This section will then also detail the specific location(s) at which the compensation will be delivered and the suitability of identified sites to deliver the compensation measure.

7.1.2 Design

32. This section will identify the design for the reef proposed to be provided, including the type of cultch, source of seed and method of seeding, including any protection required (e.g. cages). The evidence base provided in support of the Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2) and engagement with the BRCSG will be important in informing the specific design aspects of the reef.

7.1.3 Delivery Process

33. This section will identify the delivery process, including nature and status of all consents, commercial agreements and other relevant approvals that may be necessary for the compensation measure and a programme for any outstanding consents. The Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2) will help inform these aspects.

7.1.4 Delivery Timeframe

34. This section will identify the proposed timeframe for delivery and long-term delivery of the compensation.

7.1.5 Monitoring and Adaptive Management

35. This section will identify the monitoring procedure and adaptive management principles and processes that have been agreed with the BRCSG, including the scenarios under which adaptive management measures are required. It will be developed taking into account the evidence base that has been provided within the Without Prejudice Benthic Compensation Evidence Base and Roadmap (document 7.6.3). Following discharge of the BRCIMP, the BRCSG will be engaged in relation to implementing adaptive management if required as outlined in the Consultation section above.

7.1.6 Reporting

This section will set out the reporting requirements associated with the monitoring and adaptive management. In doing so, it will confirm the necessary objectives and timescales for the reporting.

7.2 Option 2: Creation of Blue Mussel Beds

7.2.1 Scale and Location of Compensation

36. This section will identify the scale of compensation proposed to be provided, and how this relates to the consent decision made by the Secretary of State. This section will then also detail the specific location(s) at which the compensation will be delivered and the suitability of identified sites to deliver the compensation measure.

7.2.2 Design

37. This section will identify the design for the reef proposed to be provided, including the type of cultch, source of seed and method of seeding, including any protection required (e.g. cages). The evidence base provided in support of the Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2) and engagement with the BRCSG will be important in informing the specific design aspects of the reef.

7.2.3 Delivery Process

38. This section will identify the delivery process, including nature and status of all consents, commercial agreements and other relevant approvals that may be necessary for the compensation measure and a programme for any outstanding consents. The Without Prejudice Biogenic Reef Compensation Plan (document reference 7.6.2) will help inform these aspects.

7.2.4 Delivery Timeframe

39. This section will identify the proposed timeframe for delivery and long-term delivery of the compensation.

7.2.5 Monitoring and Adaptive Management

40. This section will identify the monitoring procedure and adaptive management principles and processes that have been agreed with the BRCSG, including the scenarios under which adaptive management measures are required. It will be developed taking into account the evidence base that has been provided within the Without Prejudice Benthic Compensation Evidence Base and Roadmap (document 7.6.3). Following discharge of the BRCIMP, the BRCSG will be engaged in relation to implementing adaptive management if required as outlined in the Consultation section above.

7.2.6 Reporting

41. This section will set out the reporting requirements associated with the monitoring and adaptive management. In doing so, it will confirm the necessary objectives and timescales for the reporting.