CONTENTS

26 INFORMATION FOR APPROPRIATE ASSESSMENT

26.1 Introduction

This section explains the need for and provides the information necessary to carry out an Appropriate Assessment relating to the potential for the Thanet Offshore Wind Farm (Thanet) project to affect the integrity of the North East Kent European sites.

26.2 Requirement for Appropriate Assessment

The need for 'Appropriate Assessment' arises under the requirements of the EC Habitats Directive (92/43/EEC) and its implementation in the UK under the Conservation (Natural Habitats &c.) Regulations 1994. Under Regulation 48(1), Appropriate Assessment is required for a plan or project, which either alone or in combination with other plans or projects, is likely to have a significant effect on a European site and is not directly connected with the management of the site. A European site is either a Special Area of Conservation (SAC) or a Special Protection Area (SPA), where it has been agreed that it is a Site of Community Importance (SCI) under Natura 2000.

In the case of the Thanet project, the works under consideration could have a significant effect on the Thanet Coast SAC, Sandwich Bay SAC and the Thanet Coast and Sandwich Bay SPA.

Appropriate Assessment is a decision by the 'Competent Authority', in this case the Department for Trade and Industry (DTI), as to whether the proposed plan or project would have an adverse effect on the integrity of any European sites. Planning Policy Guidance Note 9 (PPG9) (Department of the Environment, 1994) defines a site's integrity as the "*coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or population of the species for which the site is classified".* An adverse effect on integrity is likely to be one that prevents the site from maintaining the same contribution to favourable status for the relevant feature(s), as it did when the site was designated.

The favourable conservation status of the site is defined through the site's conservation objectives and it is against these objectives that the effects of the Thanet project must be assessed. Regulation 48(2) requires that a person applying to carry out a plan or project, which requires Appropriate Assessment, shall provide information to the Competent Authority as may be reasonably required for the purposes of the assessment. The aim of this report is therefore to provide this information, in order that the Competent Authority can undertake the Appropriate Assessment.

26.3 Scope of the Information for Appropriate Assessment

The scope of the information for Appropriate Assessment will cover the following potential impacts on the Thanet and Sandwich Bay SPA, Thanet Coast SAC and Sandwich Bay SAC:

- Disturbance to feeding, roosting and nesting populations of Annex I and migratory bird populations;
- A change in the extent or nature of subtidal reefs and sea caves; and

- A change in the extent or nature of dune habitats listed under Annex I of the EC Habitats Directive.

The Appropriate Assessment covers the construction, operation and decommissioning phases of the Thanet project.

26.3.1 In-combination effects

Under the Habitats Directive, there is a requirement to consider the impacts of the Thanet project in-combination with other plans or projects.

26.4 UK Guidance

Habitat Regulations Guidance Note 1 (English Nature, 1997) has been used in the process of Appropriate Assessment and describes the key stages involved. These steps comprise:

- Definition of the need for Appropriate Assessment;
- Consultation with English Nature;
- Consultation with other organisations;
- Definition of the designated status of the site, the qualifying interests and its conservation objectives;
- Provision of further information;
- Consideration of the potential effects of the project on the European site;
- Assessment of the influence of any potential effects on the integrity of the European site;
- Measures proposed to avoid adverse effects; and
- Conclusion regarding the potential for the project to adversely affect the integrity of the European site.

26.5 European Sites

26.5.1 Interest features

English Nature's advice, given under Regulation 33(2) of the Conservation (Natural Habitats &c.) Regulations 1994, identifies the following species and habitats as interest features for the three European sites considered within this Appropriate Assessment:

Thanet Coast SAC

- Reefs; and
- Submerged or partially submerged sea caves.

Sandwich Bay SAC

- Fixed dunes with herbaceous vegetation (grey dunes);

- Embryonic shifting dunes, shifting dunes with marram grass Ammophila arenaria (white dunes); and
- Dunes with creeping willow Salix Arenaria.

Thanet and Sandwich Bay SPA

Internationally important populations of regularly occurring bird species listed on Annex I of the Birds Directive:

- Breeding little tern *Sterna albifrons*;
- Wintering golden plover *Pluvialis atricapilla*;
- Internationally important numbers of regularly occurring migratory species: and
- Wintering turnstone *Arenaria interpres*.

26.5.2 Conservation objectives

In addition to the above interest features, sub-features are also identified to highlight the ecologically important components of each interest feature. A sub-feature is an ecological component of the site on which the interest feature is reliant on in order to survive or persist. Under Regulation 33(2), English Nature has produced the following conservation objectives for the above interest features and associated sub-features of the North East Kent European marine site. Subject to natural change:

- Maintain the reefs in favourable condition, in particular:
  - Intertidal chalk cliff algal and lichen communities;
  - Intertidal red algal turf communities;
  - Kelp dominated communities on animal bored rock; and
  - Subtidal animal bored chalk communities.

- Maintain the submerged or partially submerged sea caves in favourable condition in particular:
  - Intertidal chalk cliff and lichen communities.

- Maintain the habitats for the internationally important populations of the regularly occurring Annex I species in favourable condition in particular:
  - Shingle shores;
  - Shallow coastal waters; and
  - Intertidal mud and sandflats.

- Maintain the habitats for the internationally important populations of the regularly occurring migratory species in favourable condition in particular:
  - Sand and shingle shores;
  - Intertidal mudflats and sandflats; and
  - Chalk shores.

European marine sites are defined under the Conservation (Natural Habitats &c.) Regulations 1994 as any part of a European site covered, continuously or intermittently, by tidal waters or any part of the sea in or adjacent to Great Britain up to the seaward limit of territorial waters. This means that the designated habitats of the Sandwich Bay SAC are not covered within this advice, as they occur above the highest astronomical tides. Objectives to maintain these features under favourable condition are found within English Nature's conservation objectives for the relevant SSSI. However, the export and onshore cable routes are such that they would not interfere with any of the dune habitats of the SAC.

26.6 Potential impacts on the interest features of the European Sites

26.6.1 Impacts during construction

The following processes have the potential to have an ecological impact during construction:

- Cable laying activities; and
- Noise and disturbance.

The wind farm site and much of the cabling would be located outside and at a distance from the boundaries of the North East Kent European Marine Sites (see **Figure 4.1a**). Therefore, any activities outside these boundaries would not affect the marine habitats that form interest features of the Thanet Coast SAC. Similarly, none of the bird species that are interest features of the Thanet Coast and Sandwich Bay SPA were observed at the wind farm site (see **Section 8, Ornithology**).

The western section of the export cable route does, however, cross subtidal and intertidal areas of the North East Kent European Marine Sites. The cable route would not cross or indirectly affect any reefs or sea cave habitats and no impact is anticipated on these interest features. A section of intertidal mudflat would be disturbed by the cable installation plough, which could cause some disturbance to any birds feeding there. The construction programme for the export cable route and landfall connection is anticipated to take 14 to 20 days and 10 days respectively and will be scheduled to take place outside the overwintering and passage period for the SPA populations of migratory waterfowl i.e. September to April (see **Section 8**).

The installation method for the cables ensures simultaneously burying and back filling, therefore there would be no change to extent of the mudflats, nor is a change in prey abundance or availability anticipated as a result of the works (see **Section 9, Marine Ecology**).

There is a small area of sandy shore between the intertidal area and the joint transition pit where the marine cable would be joined with the terrestrial cable (see **Section 2 Project Details**). This could be used as a roosting area for waders, most particularly turnstone, but the beach is fully submerged on most high tides and so is unlikely to be well utilised. The area is also not known to be a regular roost site for turnstone. Cabling outside the overwintering and passage periods would further minimise any potential impacts.

Overall, as a result of the export cable route crossing the intertidal area, a **negligible** impact is anticipated on feeding and roosting waterfowl (see **Section 8**).

The shallow coastal waters of the North East Kent Marine Site are important feeding areas for little terns. However, it is not anticipated that the construction of the export cable route would cause significant disturbance beyond the very short term or alter prey availability, such as small fish and crustaceans, for this species (see **Section 9**). As a result, a negligible impact is anticipated (see **Section 8**).

The terrestrial component of the cable route would be trenched within the confines of the A256 Sandwich Road as far as is possible. Therefore, there would be **no impact** on the designated dune systems of Sandwich Bay SAC.

26.6.2 Impacts during operation

The only likely impacts of the Thanet project during operation would result from the operation and maintenance of the wind turbines themselves. The cables would remain buried throughout the lifetime of the project and are unlikely to require any maintenance during this time. As such, none of the Annex I habitats present in either the Thanet Coast or Sandwich Bay SACs would be impacted during operation.

The operation and maintenance of the wind farm could potentially impact the interest features of the SPA if these species were present in the wind farm area. The aerial and boat based surveys did not record any turnstones, golden plover or little tern at the Thanet site (see **Section 8**). Waders would not be expected to come into contact with the Thanet site except on rare occasions during migration and little terns, for the most part, do not tend to forage further than 1.5km offshore (Cramp *et al,* 1974). **No significant impacts** on the Thanet Coast and Sandwich Bay SPA or other Kentish coast SPA bird populations are anticipated.

26.6.3 Impacts during decommissioning

The impacts on European sites from decommissioning would again be restricted to the wind farm site itself with none of the cabling being removed. Potential impacts within the wind farm would be similar to those described for the construction phase.

26.7 Implications for Integrity

Table 26.1 includes part of the favourable condition tables for the North East Kent European Marine Site, including all the sub-features that could be impacted, when the impact could occur and the level of significance this has been assigned to it as part of the Environmental Impact Assessment (EIA) and as reported in the Environmental Statement (ES).

Table 26.1 Summary of potential impacts on Favourable Condition Targets for the North East Kent European marine sites.

Sub-feature	Attribute	Target	Potential Impact	Impact During	Mitigation	Significance
Shallow coastal waters	Presence and abundance of prey species	Presence and abundance of prey species should not deviate significantly from an established baseline subject to natural change.	Reduction in availability of prey species for little tern along cable route	Construction	None required	Negligible (see **Section 9**)
	Disturbance at feeding areas	No significant reduction in numbers or displacement of birds from an established baseline subject to natural change.	Reduction in usage of shallow coastal waters around cable route	Construction	None required	Negligible (see **Section 8**)
Intertidal mudflats and sand flats	Disturbance at roosting areas	No significant reduction in numbers or displacement of birds from an established baseline subject to natural change.	Reduction in usage of intertidal mudflats by Annex 1 species and internationally important populations of migratory birds during cable laying process	Construction	Cable would be laid outside of the over-wintering period i.e. November to March.	Negligible (see **Section 8**)
Sand and shingle shores	Disturbance at roosting areas	No significant reduction in numbers or displacement of birds from an established baseline subject to natural change.	Reduction of usage of sand and shingle areas as a roosting site by internationally important populations of migratory birds	Construction	Cable installation would be short term and footprint minimised.	Negligible (see **Section 8**)

Table 26.1 shows that the potential impacts are concerned with the Thanet Coast and Sandwich Bay SPA rather than the Thanet Coast SAC or Sandwich Bay SAC interest features such as bird populations. Furthermore, none of these impacts have been assessed as being significant as part of the EIA process and therefore the issue of 'adverse effect on integrity' should not require further consideration. As noted above, no turnstone were seen during any of the bird surveys completed to date, so there can be no prediction from these surveys of any adverse effect upon the integrity of the Thanet Coast and Sandwich Bay SPA. Few wildfowl or waders, qualifying the other Kentish Coast SPAs, were encountered so the likelihood of any adverse effects there is also very low.

Both boat and aerial survey data continue to suggest a very minor importance of the Thanet site and buffer zone for SPA species wintering within other SPAs on the Kentish coast

26.8 Cumulative and in-combination effects

As discussed, the potential impacts of the Thanet project on the conservation objectives of the European sites is restricted to bird populations. The potential impacts in the context of other planned, built or consented wind farms within the Thames Estuary SEA area is discussed in **Section 8**, which concludes that the ornithological interest of the Thanet site, especially where it concerns key species like red-throated diver, is sufficiently low that it would not have a significant effect in combination with other wind farm projects.

The installation of the export cable route would cause some disturbance to the mudflats and some limited areas of sandy and shingle shoreline. There are already other activities that already cause disturbance to these areas including:

- Fishing and bait digging;
- Walkers, dog walkers and joggers; and
- Watersports e.g. sailing, jet-skiing, kite surfing and windsurfing.

Although Pegwell Bay is susceptible to potential disturbance as a result of a range of recreational activities it is not considered that the export cable installation would contribute significantly to this for the following reasons:

- Cable installation would occur outside the overwintering period and therefore avoid peak usage of the site by birds;
- Cable installation would be restricted to a very narrow corridor across the mudflats;
- Cable installation would be take place over a short duration i.e. a few days; and
- No prey species would be removed from the area as a result of cable installation.

It is not therefore considered that the cable installation would have a significant in-combination effect.

26.9 Summary

Overall, the range of potential impacts that the Thanet project could have on the European sites of Kent is limited given the distance of the wind farm from the boundary of the nearest site and the short term and reversible effect of the cable installation, which would not affect the ecological functioning of the site. The installation of the cables during the construction phase could cause some disturbance to feeding birds, however, this has been mitigated by a commitment to install the cables outside the important overwintering period.

Both boat and aerial survey data suggest a very minor importance of the Thanet site and buffer zone for SPA species wintering within SPAs on the Kentish coast.

Overall no significant impacts on the interest features of any European sites on the Kent coast have been identified and it is considered that the Thanet project, even in combination with other activities, would have **no significant effect** on any European site, nor on the integrity of any European site.