

<b>Project name:</b>	Kentish Flats Offshore Wind Farm Extension
<b>Address/Location</b>	Southern side of Outer Thames Estuary off the North Kent coast, 8.6km north of Herne Bay and 9.5km north of Whitstable
<b>IPC Ref:</b>	EN010036
<b>IPC transboundary consultation process:</b>	The Infrastructure Planning (Environmental Impact Assessment) Regulations (Regulation 24)
<b>Document used for transboundary Screening:</b>	Kentish Flats Offshore Wind Farm Extension Environmental Statement (October 2011)
<b>Date</b>	11 November 2011
<b>Prepared by</b>	Rebecca Pong
<b>Approved by</b>	Sheila Twidle

<b>Screening Criteria</b>	<b>IPC Comments<sup>1</sup></b>
<b>Characteristics of the Development</b>	<p>Proposed 10-17 turbines with a max capacity of 51MW; turbine type likely to be 3 to 4MW; max turbine rotor diameter of 120m; max hub height of 85m; max tip height of 145m</p> <p>Foundation type: monopole, 6m max diameter</p> <p>1 or 2 inter-array cables, and one or two 33kV export cables</p> <p>Onshore cables expected to follow the route of the Kentish Flats cable inland to connect at Red House Farm substation at Herne Bay</p>
<b>Geographical area</b>	Distance to another EEA state is not specified in the ES.
<b>Location of Development (including land existing use)</b>	<p>Kentish Flats is located on the southern side of the Outer Thames Estuary, off the North Kent coast, approximately 8.6km north of Herne Bay and 9.5km north of Whitstable. The extension area occupies approx 7.8km<sup>2</sup> and the site boundaries adjoin the south and west sides of the existing Kentish Flats Wind farm</p> <p>The site is currently used in the following ways:</p> <ul style="list-style-type: none"> <li>• for breeding, passage and over-wintering of many Ramsar/SPA bird species</li> <li>• bird feeding ground (i.e. habitat for fish and other prey species)</li> <li>• Thames Estuary provides important spawning and nursery grounds for fish and shellfish species e.g. herring, lemon sole, dover sole, mackerel, plaice, sprat, bass, elasmobranchs (sharks, rays, skates)</li> <li>• a small number of marine mammals particularly harbour porpoise, and common (or harbour) seal in/near KFE</li> <li>• a small number of fishing vessels (commercial fishing mainly from trawling and dredging) in/near KFE area</li> <li>• navigation routes - mainly for recreational vessels (racing/sailing – small number) in the southern part of KFE and medium use cruising route passes through the west of the</li> </ul>

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	boundary (small volume)
<b>Cumulative impacts</b>	<p>The ES documents the cumulative impacts (Section 29 &amp; Table 29.2) arising with other (existing/consented/proposed) offshore wind farms including: London Array I and II; Greater Gabbard/Galloper; Gunfleet Sands I and II; Thanet; and Kentish Flats.</p> <p>The ES also considers the potential cumulative impacts arising from the installation of the Kingsnorth Carbon Capture &amp; Storage (CCS) pipeline in Thames Estuary. However, it is likely that the KFE would be completed before the commencement of the Kingsnorth CCS pipeline.</p> <p>The review of the ES indicates that there will be a negligible impact on marine mammals through cumulative impacts on prey availability from benthos disturbance, EMF impacts or disturbance to fishing effort. The cumulative impact of multiple construction periods for wind farms in the Outer Thames Estuary presents a moderate adverse impact on marine mammals.</p> <p>ES reported negligible cumulative effect in terms of displacement for most bird species. The greatest cumulative effect on red throated divers, in particular, would come from London Array. The ES reported that KFE would add very small amount to this displacement.</p> <p>Regarding the protected bird species identified in the Outer Thames Estuary SPA, available information from Natural England on the HRA indicates that the conservation objectives of the designated SPA may not be affected due to the KFE and London Array (existing and proposed) projects. If this view is maintained throughout the DCO process, then it is unlikely that there would be any significant transboundary ecological effects.</p>
<b>Carrier</b>	The impact pathways would be via water (sea) and site/species connectivity (barrier effect).
<b>Environmental Importance</b>	<p>There are a number of internationally designated ecological sites including: Thanet Coast SAC (within the KFE area); Thanet Coast and Sandwich Bay Ramsar and SPA; Foulness Ramsar and SPA, The Swale Ramsar and SPA; Medway Estuary and Marshes Ramsar and SPA; Outer Thames Estuary SPA; Thames Estuary and Marshes SPA; Margate and Long Sands cSAC.</p> <p>Draft Marine Coastal Zones (dMCZs) relevant (near) to KFE include: The Thanet Coast dMCZ; and the Swale Estuary dMCZ</p> <p>Red-throated divers, cormorant and common tern are some of the SPA bird species relevant to the KFE project.</p> <p>Marine mammals like harbour porpoise and common seals are also protected under international and national laws and are present in the study area.</p>
<b>Extent</b>	The ES and marine license requires the implementation of

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	appropriate mitigation and monitoring that will limit the extent of any potential impacts negating the possibility of transboundary impacts.
<b>Magnitude</b>	<p>The ES reports a minor adverse impact on 3 SPA bird species (red-throated diver, cormorant, common tern) due to displacement during construction and operation. The magnitude of impact is assessed to be minor adverse in view of the protected nature of the bird species.</p> <p>The ES reports that there are adverse impacts on marine mammals the magnitude of which is assessed as 'low' due to a number of factors including the small number of marine mammals, poor propagation of noise in shallow waters, small number of monopiles (max 17) and the duration of piling (lasting less than 1 month). However, given the level of protection afforded to the species involved the significance of the impact from noise &amp; vibration during piling is assessed to be moderate adverse.</p> <p>Comments available at this stage from Natural England regarding the potential impact on protected bird species (particularly red-throated divers) indicate agreement that there may not be any impact on the integrity of the Outer Thames Estuary SPA.</p>
<b>Probability</b>	<p>The ES indicates that there will be a loss of feeding ground for bird species due to displacement (temporary or otherwise) of fish and other prey species. The magnitude of impacts on marine mammals is low given the small number of marine mammals affected and the other issues identified above.</p> <p>The ES and marine license provide the necessary mitigation and monitoring measures to reduce the probability of impacts and therefore prevent the potential for any significant transboundary impact.</p>
<b>Duration</b>	The adverse effects from the proposed development will be mainly temporary and linked to the construction phase of the project. They are unlikely to lead to any significant transboundary impact.
<b>Frequency</b>	<p>The ES indicates there would be a low frequency of impact in view of the small number of marine mammals involved.</p> <p>The ES indicates that during construction the displacement impact for highly sensitive bird species would be minor adverse due to the low frequency of use of the KFE potential impact zone (within 2km of KFE)</p> <p>The ES and marine license provide the necessary mitigation and monitoring measures to reduce the frequency of impacts and therefore prevent the potential for any significant transboundary impact.</p>
<b>Reversibility</b>	The ES acknowledges that there will be a loss of marine habitat from construction of the Kentish Flats Extension and that it would be irreversible. The exact footprint of this area has not yet been

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	defined although. There will also be the need to deviate existing shipping routes. It is considered that the need to deviate any shipping routes would be reversed following decommissioning/removal of the wind farm.

### Conclusion

Under Regulation 24 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 and on the basis of the current information available from the developer, and the delivery of mitigation and monitoring required by the ES and the marine licence, the IPC is of the view that the proposed development is **not likely** to have significant effects on the environment in another EEA State.

In reaching this view the IPC has applied the precautionary approach (as explained in IPC Advice Note 12 Transboundary Impacts Consultation); and taken into account the information currently supplied by the developer.

**Action:** No further action at this stage.

**Note:** The Commission's duty under Regulation 24 of the Infrastructure Planning (EIA) Regulation 2009 continues throughout the application process.

#### Note:

1. The IPC screening of transboundary issues is based on the relevant considerations specified in Annex 4 to IPC Advice Note 12 (see attached).

## IPC Advice Note Twelve: Development with significant transboundary impacts consultation

### Annexe 4: Screening Matrix for likely significant effects on the environment of another EEA State

Criteria	Relevant considerations
Characteristics of the development	<ul style="list-style-type: none"> <li>What is the size of the development?</li> <li>Use of natural resources</li> <li>Production of waste</li> <li>Pollution and nuisances</li> <li>Risk of accidents</li> <li>Use of technologies</li> </ul>
Geographical area	What is the extent of the area of a likely impact under the jurisdiction of another country?
Location of development	<ul style="list-style-type: none"> <li>What is the existing use?</li> <li>What is the distance to another country? (Name country(ies))</li> </ul>
Cumulative impacts	Are other major developments close by?
Carrier	By what means could impacts be spread?
Environmental importance	<ul style="list-style-type: none"> <li>Are particular environmental values (eg protected areas – name them) likely to be affected?</li> <li>Capacity of the natural environment</li> <li>Wetlands, coastal zones, mountain and forest areas, nature reserves and parks, Natura 2000 sites, areas where environmental quality standards already exceeded, densely populated areas, landscapes of historical, cultural or archaeological significance</li> </ul>
Extent	What is the likely extent of the impact (geographical area and size of the affected population)
Magnitude	What will the likely magnitude of the change in relevant variables relative to the status quo, taking into account the sensitivity of the variable?
Probability	<ul style="list-style-type: none"> <li>What is the degree of probability of the impact?</li> <li>Is the impact likely to occur as a consequence of normal conditions or exceptional situations, such as accidents?</li> </ul>
Duration	<ul style="list-style-type: none"> <li>Is the impact likely to be temporary, short-term or long-term?</li> <li>Is the impact likely to relate to the construction, operation or decommissioning phase of the activity?</li> </ul>
Frequency	What is likely to be the temporal pattern of the impact?
Reversibility	Is the impact likely to be reversible or irreversible?