Project name:	Able Marine Energy Park
Address/Location:	Killingholme, Humberside
Planning Inspectorate	TR030001
Ref:	
Transboundary	Stage 1
consultation process:	
Document used for	Able UK Marine Energy Park (AMEP): South Humber Bank
transboundary	(December 2011)
Screening:	Environmental Statement (TR030001/APP/14b)
	Habitat Regulations Assessment Report (TR030001/APP/15)
	Cherry Cobb Sands Compensation Site Second interim report on
	detailed modelling (August 2012)
Date	16/08/2012
Prepared by	DP/LA
Approved by	ST

The key project components would comprise:

- A new 24hr quay with a frontage of 1279m in length to be located close to the western edge of the existing dredged channel that provides access into the Humber Sea Terminal (HST).
- Capital dredging/backfilling works to enable vessel access to the operational quay, and allow turning area and berthing alongside its length over a commercially viable tidal range.
- Industrial areas to accommodate new factory units and external storage related to the manufacture of marine energy generators and related items.
- 'Compensation site' comprising: new intertidal habitat at Cherry Cobb Sands, and recontoured land to produce wet grassland at Old Little Humber Farm.

Characteristics of the Development

- Onsite ecological mitigation area measuring approximately 48ha, majority of the area will be managed as wet grassland to provide feeding and roosting habitat for over-wintering birds.
- A new pumping station to allow surface water drainage from Killingholme Marshes drainage system to discharge into the Humber Estuary at all tidal states.
- Related access (rail and highways), drainage (surface water and foul water), and landscaping works.

The ES anticipates a construction programme of minimum 2 years for the marine works. Construction activities will include predominantly piling, and other activities like earthmoving, erection of buildings/site infrastructure. Ground raising will be carried out in parallel with the construction of the factory units. Approximately 2 million m³ of imported fill will be required to raise levels on existing terrestrial areas. Imported fill material is expected to arrive either via the Port of Immingham or from a UK quarry.

During operation, the quay and factory units will be used for the manufacture/assembly of marine energy components, including those for offshore wind, tidal and wave energy generation and for installation vessels. As part of this it will receive and export raw materials and

	components that are procured from overseas or from other coastal	
	locations within the UK.	
Geographical area	Extent of the area of a likely impact under the jurisdiction of another EEA State is not provided in the ES.	
Location of Development (including existing use)	The site is located on the south bank of Humber Estuary in the north east of England. Existing industrial development lies to the west, south and east including the Humber Sea Terminal, ABP Immingham Port, Total Oil Refinery and Conoco Philips CHP plant. The current uses of the site include an existing consent for port related storage (approx 122.4 ha), land with temporary consent as a laydown area during the construction of a biomass fuelled power station, arable land (100.3 ha), an intertidal area (31.5ha), and subtidal area (13.5ha). The approximate distance to another EEA State has not been provided in the ES.	
Cumulative impacts	The ES identifies potential for cumulative impacts with other projects, including: • Donna Nook Managed Realignment Scheme • Maintenance Dredging	
	Maintenance DredgingImmingham Oil Terminal Approach Channel Deepening	
	Hull Container Terminal	
	Grimsby Ro-Ro Scheme	
	Hull Riverside Bulk Terminal	
	Glass wool manufacturing plant	
	Bioethanol Plants	
	Heron Renewable Energy Plant	
	Bio Power / Fuel	
	Europarc	
	Industrial Park	
	IGCC Power Station	
	Tidal Stream Generator	
	Energy from Waste facility	
	Humber Gateway Wind Farm and onshore connection	
	Biomass power station	
Carrier	Disturbance, displacement and habitat loss to land and water	
	Disturbance and displacement to air	
Environmental Importance	Commercial Fisheries: The fish assemblage is made up of estuarine, freshwater, marine and migratory species. Commercial species routinely recorded in the Humber Estuary include Whiting, Sprat, Common/Dover Sole and Flounder. Less common are Cod, Saithe, Pollack, Dab, Plaice and Eel. A number of migratory fish species of particular conservation importance are found within the Humber Estuary, including: Atlantic	

Salmon (UK BAP Species; Humber Estuary LBAP species), Brown trout (Humber Estuary LBAP species), Twaite shad (SAP and BAP species; Listed on Annexes II and V of the Habitats Directive), European Eel (Humber Estuary LBAP species) and Smelt (Humber Estuary LBAP species). Commercial shellfish populations include Brown Shrimp, Lobster, Brown Crab, Cockles, Mussels and Whelk. The Estuary is an important spawning and nursery ground for Common/Lemon Sole, Herring, Flounder, Plaice and Sprat. Areas particularly important for salmon migration are far upstream from AMEP site in the estuary's tributaries: the Rivers Ouse, Ure, Wharfe and Derwent. The Humber Estuary acts as an important migration route for both river lamprey and sea lamprey between coastal waters and their spawning areas.

<u>Commercial & Recreational Vessels:</u> The site is adjacent to an area with high levels of shipping activity, the Humber Estuary accounted for 15% of total UK port freight handling in 2010. Boat and yacht clubs are also present, together with a ferry terminal (Queen Elizabeth dock in Hull).

Marine Mammals: Notable species of marine mammals within the Humber Estuary include: Harbour Porpoise (UK BAP species and listed on Annexes II and V of the Habitats Directive), Grey Seal (Listed on Annexes II and V of the Habitats Directive protected under Schedule 5 of the Wildlife and Countryside Act 1981) and Common/Harbour Seal (UK BAP species and listed on Annexes II and V of the Habitats Directive).

<u>Designated Sites</u>: The Humber Estuary is part of the Natura 2000 network of sites. It is also designated as SSSI, Special Area of Conservation (SAC), Special Protection Area (SPA), and Ramsar site. North Killingholme Haven SSSI is also part of the Humber Estuary SPA/Ramsar site.

<u>Birds:</u> The Humber Estuary SPA supports a variety of Annex I species of European importance under the Birds Directive (breeding birds, over wintering, on passage). It also supports migratory birds of European importance for over wintering and on passage (further detail on supported species is provided within the ES at Table 11.2).

The Killingholme Marshes Foreshore is important for estuarine bird species, especially for Black-Tailed Godwit (supporting up to two thirds of the Humber SPA passage population). Internationally important numbers of Black-tailed Godwits are present on the intertidal zone throughout August and October driven by the location of the preferred roost site at North Killingholme Haven Pits, located adjacent to the AMEP site. The majority of Black-tailed Godwit wintering in England originated from Iceland.

<u>Commercial Fisheries:</u> The ES identifies that the current fishing effort is much diminished from historical levels and has shifted to fisheries in the North Sea, although the number of commercial vessels is small.

Extent

Commercial & Recreational Vessels: All commercial shipping channels in the Humber Estuary are governed by a Traffic Separation Scheme. The likely origins/destinations of vessels to/from the area are not stated in the ES. The ES states that the existing vessel traffic levels in the immediate vicinity of the proposed development are relatively low and it is expected that additional traffic and associated local risk can be

managed as part of a Safety Management System in accordance with the Port Marine Safety Code.

<u>Marine Mammals:</u> The ES states that impacts to marine mammals resulting from the proposed development are not anticipated to be significant. The reasons stated include the distances at which auditory damage in marine mammals can occur, the level of exposure likely to be experienced and the relative abundance of available feeding grounds.

<u>Designated Sites:</u> The only European Site which has been screened into the HRA is the Humber Estuary. The HRA Report identifies that no other European Sites will be affected by the proposed development due to the distance from the proposed development to the nearest European sites.

<u>Birds:</u> The ES does not consider the potential impacts on bird species in another EEA state.

Commercial Fisheries: The area surrounding the proposed development is not of importance to commercial fishing activities. For the majority of fish species, the ES suggests that there would not be any significant adverse effect resulting from the proposed development. The exception to this would be the loss of nursery areas for juvenile fish which would experience a significant adverse effect, although the small gain in intertidal area on both sides of the quay may compensate part of this loss. The estimated number of adult fish potentially lost as a result of loss of nursery area is not quantified.

<u>Commercial & Recreational Vessels:</u> The ES indicates that existing vessel traffic levels in the immediate vicinity of the proposed development is relatively low and that it is expected that additional traffic and associated local risk can be managed as part of a Safety Management System in accordance with the Port Marine Safety Code.

Magnitude

Marine Mammals: The ES states that adverse impacts to marine mammals resulting from the proposed development are not anticipated to be significant. The reasons stated within the ES relate to the distances at which auditory damage in marine mammals can occur, the level of exposure likely to be experienced and the availability of alternative feeding grounds. Mitigation methods are also proposed to reduce the potential for significant adverse effects.

<u>Designated Sites:</u> The ES does not provide information on designated sites in other EEA States.

<u>Birds:</u> The ES indicates that there will be significant impacts on bird species within the Humber Estuary SPA/SAC/SSSI/Ramsar site as result of the proposed development, including the reclamation of part of the Humber Estuary for construction of the new deep water quay, resulting in a direct and indirect loss of 55.5 ha of the Humber Estuary European Marine Site designated as an SAC, Ramsar Site and SSSI (a net loss of 61.3 ha of SPA habitat due to the additional functional loss of 6 ha).

With the overall loss of 38 ha of this intertidal area (conservation objectives for the site require no net loss of habitat), it is likely that there could be significant impacts on Black-tailed Godwit species which would have to find alternative feeding and roost sites due to the loss of

adjacent feeding resources on Killingholme Marshes Foreshore.

<u>Commercial Fisheries:</u> The probability of impacts occurring to the commercial fishery industry as a result of the proposed development is high as a result of loss of nursery area habitat for juvenile fish species, although the level of commercial fishing is low.

<u>Commercial & Recreational Vessels:</u> The probability of impacts occurring on commercial and recreational vessels is high during both construction and operation.

<u>Marine Mammals:</u> The probability of impacts occurring on marine mammals is medium particularly during the construction stage due to noise and vibration but also during operation as a result of loss of habitat and additional disturbance from increased vessel movements.

<u>Designated Sites:</u> The probability of impacts occurring on the identified UK designated sites is high due to the direct and indirect loss of 55.5 ha of the Humber Estuary European Marine Site designated as an SAC, Ramsar Site and SSSI.

Probability

<u>Birds:</u> Compensatory habitat has been identified by the developer at two sites; Cherry Cobb Sands and Old Little Humber Farm, to provide suitable foraging and roost sites for bird species within the Humber Estuary SPA/SAC/SSSI/Ramsar site, including Black-tailed Godwit. If the compensatory measures identified will not be suitable in compensating for the residual significant impact of the development, then there is a high probability of impacts on Black-tailed Godwit during both construction and operation due to displacement, disturbance and habitat loss.

The Developer has subsequently amended the proposed compensatory habitat at Cherry Cobbs Sands from a single 100ha managed realignment site with a single 250m breach, to the proposed development of half of the site into three Regulated Tidal Exchange (RTE) sites where the inflows and outflows of water are controlled to only permit shallow flooding. The other half of the site will be inundated through the breach and form an open managed realignment. This is expected to assist in achieving the key objective of delivering 41 ha of sustainable mudflat, as the three separate RTE areas of around 16 ha are proposed to provide more than 41 ha of sustainable mudflat along with an area of mudflat within the remainder of the managed realignment site.

Duration

<u>Commercial Fisheries</u>: The duration of impacts occurring on commercial fisheries is long term given the increase in vessel movements. The largest impacts are likely to occur during construction phase - approximately 2 years duration. There will be permanent impacts due to the loss of nursery area habitat for juvenile fish species and additional disturbance from increased vessel movements.

<u>Commercial & Recreational Vessels:</u> The duration of impacts occurring on commercial and recreational vessels is long term given the increase in vessel movement. The largest impacts are likely to occur during construction phase - approximately 2 years duration.

Marine Mammals: The duration of impacts occurring on marine mammals is likely to be limited to the construction phase approximately 2 years duration. Whilst there will be permanent local impact on the hydrology and sedimentary regimes, the operational impacts are unlikely to differ significantly from the existing situation.

<u>Designated Sites:</u> The duration of impacts occurring on UK designated sites are permanent, if the compensatory measures identified are not effective.

<u>Birds:</u> If the compensatory measures identified are not effective, then the duration of the impacts will be permanent during the construction and operation phases of the development.

<u>Commercial Fisheries</u>: Impacts to commercial fisheries are likely to be constant due to the loss of nursery area habitat for juvenile fish species.

<u>Commercial & Recreational Vessels</u>: Impacts to commercial and recreational vessels will be intermittent during construction and constant during operation following proposed changes to Safety Management System in accordance with the Port Marine Safety Code.

Frequency

<u>Marine Mammals:</u> Impacts on marine mammals will be intermittent during construction and continuous due to direct loss of habitat during operation.

<u>Designated Sites:</u> The frequency of impact occurring on UK designated sites will be continuous, if the compensatory measures identified are not effective.

<u>Birds:</u> Potential impacts likely to be intermittent based on natural patterns of use/migration during construction, operation and decommissioning.

<u>Commercial Fisheries:</u> The loss of nursery area habitat for juvenile fish species will be irreversible. Intermittent impacts associated with increased vessel movements are reversible.

<u>Commercial & Recreational Vessels</u>: The impacts on commercial and recreational vessels would likely be reversible following decommissioning of the site.

Reversibility

<u>Marine Mammals</u>: Impacts on marine mammals would be irreversible due to loss of suitable marine habitat.

<u>Designated Sites:</u> The impacts occurring on UK designated sites would be irreversible, if the compensatory measures identified are not effective.

<u>Birds:</u> The reversibility of impacts during construction and operation, including displacement and disturbance, will depend on the sensitivity of the avian species. If the compensatory measures identified prove unsuitable in compensating for the residual significant impact, then the effects due to habitat loss will be irreversible.

Under Regulation 24 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) (the EIA Regulations) and on the basis of the current information available from the Developer, the Secretary of State is of the view that the proposed development **is likely** to have a significant effect on the environment in another EEA State.

In reaching this view the Secretary of State has applied the precautionary approach (as explained in the Planning Inspectorate's Advice Note 12 Transboundary Impacts Consultation); and taken into account the information currently supplied by the Developer.

Action:

Transboundary issues notification under Regulation 24 of the EIA Regulations is required. Country to be notified: Iceland

Note: The Secretary of State's duty under Regulation 24 of the EIA Regulations continues throughout the application process.

Note:

1. The Secretary of State's screening of transboundary issues is based on the relevant considerations specified in Annex 4 to Planning Inspectorate Advice Note 12 available on the Planning Inspectorate's website at http://infrastructure.planningportal.gov.uk/legislation-and-advice/advice-notes/