



Able Marine Energy Park
Additional Document:
***Nationally Significant Infrastructure Project
Justification***

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Hochtief

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1 Summary

- 1.1 This note has been prepared by the project engineers Hochtief to assist the Infrastructure Planning Commission in satisfying itself that the proposed Able Marine Energy Park is a nationally significant infrastructure project.
- 1.2 For a port that is not a container port or ro-ro port to meet the nationally significant infrastructure project threshold, it must be capable of handling at least 5 million tonnes of cargo per year.

2 Background

- 2.1 The UK Port industry is vital for the health of the UK economy and this sector is the largest in Europe, as over 95% of UK imports and exports by volume and 75% by value pass through the country's ports. The top 18 ports in the UK handle over 80% of all freight entering or leaving the UK
- 2.2 The development of the offshore power sector will be adding significant demand on an annual basis for port facilities in the UK. The current estimate on the new tonnage that will be generated by commercial activity within the Round 3 leases currently described by the Crown Estates will be an additional 10 million tonnes plus the associated vessel movements and transfers of consumables which will continue to rise on an annual basis. The growth of transhipped tonnages, within Round 1 and Round 2 will also continue to impact the ports handling commitment in a positive manner as the Operation and Maintenance programme moves into operation.
- 2.3 The 318 million tonnes transhipped in the top 10 ports was achieved in 2007 and this has risen to 347 million tonnes during 2009. The top 10 ports handling an average 34.7million tonnes each during this year. As a further comment, the top 18 ports in the UK handle over 80% (277 m tonnes) of all freight entering or leaving the UK.

- 2.4 The provisional figures released by the Department for Transport are indicating an average 8% rise in activity through the UK Port Sector for 2009 which will feed into the strong demand for new facilities.
- 2.5 The current proposal for the AMEP and its new port facilities will place this facility by size in the list of the top fifteen UK ports and it will be available to compete on a strong basis for its share of a growing market.

3 Standard assessment of capacity applied to AMEP

- 3.1 Referring to Port Terminals Planning modules, the figures for a Break Bulk Terminal Module which have been widely accepted are based on a standard model of 4.05 hectares of land for storage for each 200 m of quay frontage. This module has been designed to represent the needs of an average coast break bulk terminal with moderate throughput levels for a large variety of cargoes.
- 3.2 The proposed Able Marine Energy Park has a greater availability of storage land per quay frontage.
- 3.3 The normal calculation for the tonnage of cargo that can be stored in a given area is based on 8 000 'short tons' per acre, or 17 930 metric tonnes per hectare. This means that for each 200 m of quay frontage at a standard facility, there would be storage available of $17\,930 \times 4.05 = 72\,616$ tonnes.
- 3.4 For the terminal to be economically viable it is normal to have an ability to turn its storage area over between 10 to 20 times a year, and this facility would certainly be capable of operating at those rates. This would deliver a potential tonnage varying from 726 160 to 1 452 320 metric tonnes per berth.
- 3.5 Excluding the specialist berth, AMEP will have 6 berths of 200 m each, all having a storage area that exceeds the standard area.
- 3.6 Potential tonnages for this size of port development construction, even without taking into account the increased storage land available for this project, will range from $726\,160 \times 6 = 4.36$ million metric tonnes to $1\,452\,320 \times 6 = 8.71$ million metric tonnes.
- 3.7 This facility operating at normal throughput would therefore have a notional rated Port Capacity of the average of these two figures, 6.54 million tonnes per annum. This figure comfortably exceeds the threshold of 5 million tonnes per annum at normal throughput, and its notional maximum capacity would be even higher.