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Introduction

1. This document provides an overall summary of the applicant's case. However the applicant relies upon the totality of the evidence and representations submitted on its behalf both in writing and at the issue specific hearings before the Panel of the Examining Authority. This summary includes 4 Annexes as listed below:

Annex A Letters of Support

Annex B Programme of Compensation works


Annex C Report on Coal & Biomass

Annex D Summary of Negotiations with the Harbour Master

2. Pursuant to section 104(7) of the Planning Act 2008 the Secretary of State is required to consider whether the adverse impact of the proposed development would outweigh its benefits. Accordingly, consent can only be refused if it can be demonstrated that the adverse benefits clearly outweigh the benefits. Were the matter to be balanced consent must also be granted.
3. In order to assist the decision-making process, the applicant sets out below in summary both the benefits of the proposed development and the adverse impacts which have been identified by the interested parties, as well as the ways in which the applicant's proposals will address those impacts.
4. In short, the present case is an example where rather than the adverse impacts outweighing the benefits, the benefits of the Able Marine Energy Park ("AMEP") far outweigh any adverse impacts.

Benefits of AMEP

5. A number of important benefits will flow from the AMEP development.
6. The objectives of the development and the imperative reasons of overriding public interest justifying the development are set out, principally, in Chapters 7 and 8 of the shadow Habitats Regulation Assessment Report (sHRA), dated December 2011.
7. The need for the project is set out in Chapter 5 of the Environmental Statement, In addition to the benefits brought by the development there is an 'urgent need' for renewable energy infrastructure as stated in the Renewable Energy National Policy Statement and supported by the Ports National Policy Statement which this proposal delivers.
8. The beneficial effects which will result from the proposed development include (see paragraph 7.2.1 of the sHRA) the:
 - i) Decarbonisation of the means of electricity production;
 - ii) Provision of secure energy supplies for the UK;
 - iii) Improvement in competitiveness through creating jobs and growth in a sector in which European business is a global leader;

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- iv) Provision of facilities for the manufacture of large scale offshore energy components;
- v) Contribution to 'rebalancing' the UK economy by enabling the development of a significant manufacturing cluster, which will have a beneficial impact on the competitiveness of the European offshore wind industry; and
- vi) Regeneration of the Humber Estuary sub-region, an economically deprived area of the UK.

Decarbonising the means of electricity production

9. World production of energy needs to be decarbonised in order to avoid the adverse impacts of climate change. Climate change is the first global environmental challenge that mankind has knowingly faced; it is regarded as one of the most serious threats facing the world's environment, economy and society (DEFRA, 2006). Accordingly, International Treaties, European and national legislation compel the UK Government to make an urgent transition to a low carbon economy.
10. The impact of climate change is to potentially threaten the basic elements of life for people around the world – access to water, food, health and use of land and the environment generally. One of the ways in which this would occur would be through rises in sea levels, inundating coastal areas around the world. Accordingly, the UK Government is a signatory to International commitments on climate change and European and national legislation has been developed that provides a statutory framework for the reduction of greenhouse gas emissions over the next few decades.
11. In July 2009, the Government issued, 'The UK Low Carbon Transition Plan', (DECC, 2009) setting out a strategy to tackle climate change, maintain secure energy supplies and to maximise economic opportunities in the emerging renewable energy sector.

Providing secure energy supplies for the UK


12. Energy is the lifeblood of society. Whilst the development of renewable energy has been mainly driven by concerns over climate change, a new issue is emerging – the role of renewables in contributing to security of energy supplies. This is being driven by global shortages of oil supplies and increased oil demand from the developing economies (particularly China), depletion of national offshore gas reserves (particularly in the UK) and political actions by the world's largest gas supplier – Russia. Securing energy supplies from indigenous sources is imperative for long-term economic stability within the UK.
13. The Overarching Energy National Policy Statement, EN-1, states that the need for low carbon electricity generating infrastructure is now 'urgent', and that 59 GW of new electricity generating capacity should be planned for by 2025.
14. According to 'Communication from the Commission to the European Council and the European Parliament: An Energy Policy for Europe' (EC, 2007), Europe is becoming increasingly dependent on imported hydrocarbons, and in the 'Communication from the Commission to the European Parliament, The Council, The European Economic

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and Social Committee and The Committee of the Regions: Energy 2020 A Strategy for sustainable and secure energy' (EC, 2010), the EC states that *"the wellbeing of our people, industry and economy depends on safe, secure, sustainable and affordable energy"*.


Improvement in competitiveness through creating jobs and growth in a sector in which European business is a global leader

15. Europe must develop large capacity offshore wind turbines to make the delivery of sufficient offshore wind turbine capacity feasible and to reduce the environmental impacts associated with manufacturing, deployment and maintenance. Such turbines have to be manufactured at portside locations due to their size.
16. In 2008 the British Wind Energy Association commissioned Bain and Company to report on the potential development options in relation to wind energy. Their report, *'Employment Opportunities and Challenges in the Context of Rapid Industry Growth'*, assessed three possible scenarios:
 - The static case This scenario assumes failure to achieve leadership in offshore development and the absence of manufacturing within the UK that would lead to significant imports and limited exports. By 2020, this scenario would lead to wind capacity of 22 GW, cumulative investment of £19 billion and 23 000 jobs. Design and manufacturing would remain at its current level, i.e. covering 15% of the UK market for offshore turbines.
 - Solid Progress This scenario assumes clear political support for wind energy, market leadership in offshore development, the UK becoming self-supplying, and achieving a limited degree of export in knowledge-related activities such as technical consulting and offshore operations. By 2020, this scenario would lead to wind capacity of 27 GW. This scenario would generate cumulative investment of £26 billion and 36 000 jobs. Design and manufacturing would cover 35% of the UK's offshore turbine market along with a limited amount of export.
 - The Dynamic case This scenario, assumes strong political support and recognition of the UK as the global centre of expertise in offshore development with the development of manufacturing clusters that allow the UK to become self-supplying and a significant exporter of both knowledge and components. This scenario would generate a cumulative investment of £39 billion and generate 57 000 jobs. Design and manufacturing would cover 70% of the UK market for offshore turbines and would be exporting a similar volume to continental Europe.
17. The clear conclusion of the analysis by Bain and Company is that manufacturing clusters that enable the efficient production of offshore components are an essential element of a thriving offshore wind industry. Examples of such clustering are already emerging at Bremerhaven and Cuxhaven in Germany.

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Provision of facilities for the manufacture of large-scale offshore energy components

18. The UK needs to increase its manufacturing base and, where practicable to do so, target investment in areas of relative deprivation to reduce social imbalance between regions. The transition from a fossil fuel economy to a low carbon one, offers substantial new employment opportunities in the manufacturing sector and the potential for significant socio-economic benefit to the UK.
19. AMEP is, by any measure, a large site - circa 368 ha (911 acres) - and is part of the Able Humber Port (AHP) which itself extends to 1,062 ha (2,624 acres). AMEP will have circa 1,200m of new deep-water quays and uniquely will provide the space and facilities for a truly integrated manufacturing cluster serving multiple OEMs (the major manufacturers of windfarms) and their supply chain(s).
20. The combination of the scale and location (central to major North Sea Wind Farms) of AMEP provides a singular opportunity (certainly in UK and probably in European terms) to establish a large and integrated industry cluster.
21. Whilst the UK, even prior to Round 3, already has the largest number of installed Offshore Wind Turbines none of the principal components have been manufactured within the UK. To address this imbalance and, in part, to address the current and likely ongoing levels of subsidy that support the sector, the UK needs to have the appropriate (and in the case of AMEP, bespoke) facilities to attract inward investors. Only the best facilities will enable the maximum economic development opportunities - in terms of job and wealth creation - and the much needed associated opportunities for indigenous businesses
22. DECC has tasked the Developers of Round 3 Wind Farms to seek to ensure that the projects have a minimum UK content of 50%. This is much more likely to be achieved through the co-location of OEMs and their suppliers which in turn significantly reduces logistics costs, as well as the risks, in importing some (or all) components.
23. The key challenge facing the emerging Offshore Wind sector is indeed to reduce cost. DECC has set a target to reduce the cost per megawatt hour to £100 from an estimated £150 and again a multi-user facility/cluster is best placed to make significant cost reductions in this regard. Indeed Energy Minister John Hayes speaking at the All Party Parliamentary Yorkshire and Northern Lincolnshire Group (21st November 12) highlighted these targets and the very clear message that, 'scale drives down cost'.
24. The applicant attaches at Annex A letters sent in support of its Round 3 application from RWE (a major Round 3 wind farm developer); SMartwind (a consortium of Siemens, Hochtief, Mainstream Power and Dong); TATA Steel (the operator of one of the largest steel mills in Europe, at Scunthorpe, and a major supplier of steel to the marine energy sector) and STRABAG (one of Europe's largest construction companies). Each of them expresses strong endorsement of the AMEP development.
25. RWE states

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"Aside of its location AMEP's scale offers the unique opportunity to facilitate a number of investments from wind turbine OEMs and their supply chain. This exciting opportunity for a cluster to form on the UK East Coast will help increase collaboration within the industry and provide much welcomed opportunities for the sector to mitigate costs and risks."

26. SMartWind endorsed AMEP in the following way:


"Your visionary port development is crucial to the offshore wind sector for a number of reasons. It provides much needed additional quay capacity in the heart of the UK East Coast presenting a unique opportunity to facilitate a truly integrated UK offshore wind cluster. This development is of an unprecedented scale providing the large areas of land that the sector requires for the manufacture, storage and assembly of next generation offshore wind turbines and foundations."

AMEP will be an exceptional ports facility, designed bespoke for the offshore wind sector. Its size offers the opportunity for tier one suppliers to be located alongside OEMs and allowing the sector to become more competitive on number of fronts, playing a vital role in achieving cost reductions and increasing UK content. Its location makes it effective as a deployment port for some of the major European wind farms allowing maximum utilisation of next generation installation vessels."

AMEP's development will provide a more competitive dynamic to the Humber Estuary and the sector as a whole. Independent research commissioned by Mainstream Renewable Power has quantified a significant boost to UK gross domestic product from offshore wind by 2020 and the creation of close to 100,000 jobs - sites like AMEP are required to help capture this benefit."

Rebalancing the UK economy by enabling the development of a significant manufacturing cluster

27. The concept of a "rebalanced" economy has become central to the debate on how the UK can emerge from recession and generate sustainable growth. One major imbalance is considered to be the level of manufacturing in the UK compared to other industrialised countries.
28. In the UK, manufacturing has declined rapidly in recent decades, falling from 29% of the UK output in 1979 to 13% of output in 2007 (NESTA, 2010). Another imbalance is that between the economic outputs of different parts of the UK.
29. The wind energy industry has its origins in Denmark although Germany has also provided a solid onshore wind market throughout the past 15 years. This has led to the current dominance of German and Danish companies in the offshore wind energy supply chain, with the result that 80%-90% of the historic capital value in UK offshore wind farm projects has been based on imported goods and services and the economic benefits to the UK have been very limited (Garrad Hassan, 2010).
30. The total cost for installing the Crown Estate's 32.2 GW, Round 3 project is variously estimated to be around £80-100 billion. Accordingly, the UK Government's offshore wind energy programme will give rise to the largest construction project ever undertaken. However, to succeed, it requires urgent and significant investment in new manufacturing facilities and port infrastructure. This investment must be market led, and for the UK to benefit significantly from private

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sector investment in new manufacturing facilities, it must provide suitable development sites.

31. Independent reports evidence the significant opportunity for the UK to build a manufacturing base for offshore renewables. For example, Renewable UK has estimated that 22 factories will be required for turbines, foundations and cable manufacturing alone (Douglas Westwood, 2010). In an earlier report they estimated that the sector could generate up to 45 000 jobs by 2020 (Bain and Company, 2008). Elsewhere the Carbon Trust has estimated that,

'offshore wind will provide the UK with up to 70,000 jobs and £8bn in annual revenues delivered with a proactive UK Government manufacturing strategy'

32. This level of socio-economic benefit will not be realised unless the UK provides port sites suitable for manufacturing OWTs. Without such development sites, employment benefits from the offshore sector will be limited to assembly, installation and operation and maintenance.
33. The past two decades have seen a widening of regional differences in economic growth and job creation in the UK. London and the South East have experienced robust growth, benefiting from the concentration of business and financial services in those areas, whilst the north of England, Northern Ireland and Wales have all lagged behind. This creates economic and social issues that consecutive governments have attempted to rectify. In the short term, regional disparities are likely to become accentuated as heavy public spending cuts hit all regions of the UK in the next few years.
34. The Applicant is in the beneficial position of having assembled a significant landmass adjacent to deep water on the South Humber bank. In order to implement the proposed development, it will only be necessary to acquire 2.14% (see plan no: AME-08145A) of the land area of the AMEP development through compulsory acquisition (15.54% including the river bed). It was the disparate land ownership of the area, which prevented the development of the South Humber bank for many years.
35. As Neil Etherington, the Group Development Director of Able UK explained (in the hearing on 11 September 2012)

"We have the good...or the fortunate circumstances, some might say, of having a significant land mass on the South Humber bank and that will afford the development of this meaningfully integrated cluster: not of a single user, of a single nacelle manufacturer, but of multiple users, of multiple types, not just making nacelles, which is the core function on the top of the turbine, but the manufacture of towers, the manufacture of blades and also the manufacture of foundations. [...]"
36. It is no exaggeration to state that AMEP is a genuinely singular opportunity - no other UK location has the potential to attract the critical mass of activity and, from a single site, deliver unique economies of scale and direct economic impacts.
37. North Lincolnshire Council, in its summary of the hearing of 22 October 2012, explained

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"The South Humber Bank provides the unique opportunity for the UK to provide a fully integrated cluster thereby reducing costs massively for the industry at a time when it needs to scale down costs. The site provides an industry logistics solution to offshore wind challenge."

38. One of the difficulties for development at the Humber Estuary has been the disparate nature of land holdings. Able has managed (over 12 years) to assemble a significant amount of land for the achievement of this project with only a limited need for the exercise of compulsory purchase powers. This is an additional compelling reason in favour of this proposal.

Regeneration of the Humber Estuary sub-region, an economically deprived area of the UK

39. Between 2007 and 2013, the EC has recognised parts of North Lincolnshire and North East Lincolnshire as sufficiently deprived to be eligible for state aid.
40. There is a manifest need to address deprivation in the Humber sub-region by promoting investment in the area.
41. The employment impact of the AMEP development at the site will be 4,100 FTE jobs. The net additional local impact is 3,740 FTE jobs, taking into account deadweight, leakage, displacement and indirect and induced multiplier effects. The UK-wide cumulative net additional impact is 10,600 FTE jobs.
42. These jobs will generate significant net additional GVA in the local economy – estimated (on a conservative basis) at £210 million, and in the national economy – estimated at £602.5 million.
43. Both North Lincolnshire Council and North East Lincolnshire Council fully endorse the AMEP project. In its summary of the oral hearing of 22 October 2012, North Lincolnshire explained:

"The Government's £100 billion Round 3 Offshore Wind Programme and the Able Marine Energy Park proposal provide a once in a lifetime opportunity for the Humber Sub Region and North Lincolnshire particularly. North Lincolnshire was entirely an agricultural area of 329 square miles until 160 years ago when local landowners found ironstone and Scunthorpe and the engineering and manufacturing industry was born. 160 years later we now have a brand new opportunity to create a rebirth of local manufacturing and engineering to create a rebirth of local manufacturing and engineering to create brand new jobs as well as to underpin and support current manufacturing facilities based around steel and engineering."

The Able Marine Energy Park provides an opportunity to create over 4,000 new jobs based on engineering and manufacturing and together with a further 5,300 jobs on the Able Logistics Park can increase the local workforce by more than 10%. Indeed the last time that the north of England faced an opportunity to create more than 5,000 jobs in a single area was when in 1984 Nissan took the decision to relocate to Sunderland to create 10,000 jobs. In the middle of the worst recession in living memory this is spectacular in terms of the economic and social Impact, not just for North Lincolnshire but for the whole of the Humber and indeed beyond the UK."

The scale of opportunity is clearly recognised by Government. As recently as Friday 19 October Government announced its Round 3 programme for Regional Growth Fund and awarded £30 million to the Humber Local Enterprise Partnership, of which £10 million was ring fenced for the South Humber Bank developments in renewable. Furthermore the Government announced a round of Enterprise Zones in 2011. These were to be scales per site to a maximum of 150 hectares and between 100 – 150 hectares. However, in North Lincolnshire and on the Able Marine Energy Park land more than 248 hectares out of the 320 have been designated as an Enterprise Zone. This is the largest single Enterprise Zone in the country, almost double the size of the next largest. Again, this is Government's recognition of this vast scale of jobs that can be created in the area from the Able Marine Energy Park. Of the 248 hectares 223 hectares is allocated for Enhanced Capital Allowances for 100% tax allowance on plant and machinery. 25 hectares will support this supply chain by giving rate relief for five years.

[...]


The South Humber Bank provides the unique opportunity for the UK to provide a fully integrated cluster thereby reducing costs massively for the industry at a time when it needs to scale down costs. The site provides an industry logistics solution to offshore wind challenge.

The Humber therefore provides the opportunity for the UK to provide a brand new offshore wind industry located here. The importance of the site is that unless one or two super clusters like the South Humber Bank are developed in the UK then the opportunity to attract the tens of thousands of manufacturing jobs will be lost to the nation and instead we will see manufacturers stay on the other side of the North Sea and merely create a few thousand installation and assembly jobs.

It is not only the provision of the new jobs in North Lincolnshire that the Able Marine Energy Park project will support. North Lincolnshire is heavily dependent on manufacturing and engineering. Of the 70,000 or 80,000 economically active people in North Lincolnshire more than 14,300 work in engineering and manufacturing. This is 21% of the total workforce compared to an 8.8% average for the UK. More than 32% of the North and North East Lincolnshire's GVA is from engineering and manufacturing - worth £1.76 billion.

The largest private sector company in Northern Lincolnshire is TATA Steel who currently employ over 4,000 people with a further 1,500 employed within its local supply chain. Last year TATA Steel Scunthorpe reduced its workforce by over 1,200 people and there is real concern that without new orders in the UK that the industry itself could face further difficulties. TATA Steel are fully aware of the massive opportunities that the offshore wind energy sector provides particularly in the production of tower manufacturing. We believe that the Able Marine Energy Park will not only create the 5,000 new jobs in engineering but it will also underpin and safeguard TATA Steel Scunthorpe's economic future going forward and that of more than 200 engineering and manufacturing companies that also exist within Northern Lincolnshire.

North Lincolnshire's Economic Development Strategy is a transformational one based upon making a fundamental shift in its economy based upon the offshore industry. Its entire economic strategy is predicated upon the development of the South Humber Bank. Indeed the proposal to create 10,000 jobs on the South

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Humber Bank is also the basis and the catalyst for regenerating the town of Scunthorpe 20 miles away and there are ambitious plans to create one of the largest housing projects mixed use schemes in the north of England with a project called the Lincolnshire Lakes. A 2,000 hectares site where a series of villages around brand new waterside settings will be created. The council have a private investor who is backing this scheme and will start as early as 2015 to create a new business park, new leisure facilities and a new waterside setting that will transform the image of the area and put Scunthorpe upon a new economic trajectory. This cannot happen unless the jobs are created upon the South Humber Bank. This strategy has been endorsed and approved by the Government's planning inspector in 2011 through the North Lincolnshire Local Development Framework Core Strategy which was approved in June 2011.

[...]

The Humber Local Enterprise Partnership stands square behind the development of the Able Marine Energy Park as it recognises that the AMEP will be the centre for the offshore wind energy given its sheer scale and size with over 320 hectares. Other key sites will be the Green Port in Hull at around 80 hectares and potentially one or two more Greenfield sites on the north bank, but the jewel in the crown will be the AMEP development.


[...]

The economic impact of the AMEP is simply 'transformational' and game-changing.

The AMEP will also be the catalyst for the development of the Lincolnshire Lakes project – a transformational scheme to create a brand new waterside setting for the town of Scunthorpe and a mixed use scheme of 6,000 new homes, a 60 acre business park and leisure facilities. The Lincolnshire Lakes project seeks to place Scunthorpe on a new economic trajectory and transform its image and economy for the 21st century. The project was fully endorsed by Government's Inspectorate following a public examination into the North Lincolnshire Local Development Framework Core Strategy adopted 2011. The project is financially supported by an international investment company (Lucent) and an Area Action Plan setting out development options will be published in November before moving to adoption by the end of 2013. The project will start as early as 2014 but it is entirely predicated on the development of the Able Marine Energy Park. Lincolnshire Lakes will create thousands of construction jobs for years to come. The Lincolnshire Lakes will also provide the catalyst for diversifying its economy and creating a more balanced economy with the emergence of service sectors and less reliance upon manufacturing.

North Lincolnshire's entire economic and regeneration strategy is based upon the transformational development of the South Humber Bank that comprises the Able Marine Energy Park and Able Logistics Park projects."

44. At the hearing into Local Impact Reports (22 October 2012) the Panel questioned North Lincolnshire's Head of Community Development, Marcus Walker, about the consequences for North Lincolnshire if the AMEP development did not go ahead:

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Robert Upton: *Alright, Mr Walker, let's look at the dystrophic side for all this. Supposing the Secretary of State, for whatever reason, does not feel able to give consent to this proposal, does North Lincolnshire Council have a Plan B or what?*

Marcus Walker: *No.*

[pause]

Marcus Walker: *I came into this post five years ago, and was challenged to actually create transformational developments as opposed to the kind of betting and bobbing which has happened too long in the Humber. So in doing so, all the effort has been focused upon that single transformational project and there are not too many Plan B transformational projects across the country right now. This is the single one."*

45. At the open hearing on 6 September Mr Dakin, MP, Mr Vickers MP and Lord Haskins Chairman of the Humber LEP all expressed their strong support for the AMEP proposal. Mr Vickers described it the proposal as "a major boost for the local and regional economy". In his summary of the case Lord Haskins explained:
- *Government support through the creation of Enterprise Link on the Able land*
 - *A big setback to the Humber economy if the Able development does not materialise"*


46. Mr Dakin, in his summary, said

"This planning application is for a significant development that has the potential to reignite the area's industrial heritage and spearhead the renaissance in manufacturing (particularly heavy engineering) that UK plc needs. Such manufacturers need to be operating near deep water. The Humber is the widest estuary on the East Coast and we need to unlock the full potential of this national asset if we as a region, and as a country are to prosper. The Humber is ideally situated to give the off shore wind industry the ideal circumstances for success.

I believe AMEP has the potential to absorb previous / future job losses and thereby prevent 'generational' unemployment impacts in the Scunthorpe area. TATA clearly see themselves as part of a potential offshore wind cluster on the Humber and they fully understand that AMEP's success would provide market proximity for them making them more competitive as a supplier and allowing them to further prosper. TATA Scunthorpe's new investment in the 'wind turbine tower plate facility' was a decision made (and potentially sanctioned on that basis) that certainly reinforces that the South Humber Bank as a great location to service the offshore wind market from. TATA are a pivotal factor with regards to 'UK content' and a principal reason as to why the offshore wind sectors demand is closing in on the Humber."

Conclusion on benefits of AMEP

47. There has been no challenge to the applicant's case that imperative reasons of overriding public interest justify the AMEP proposal, nor could there be. This matter was on the agenda for the first set of hearings in September, and was considered on 11 September 2012 (in the third session of that day). None of the interested parties raised any questions or doubts about the benefits of the development identified by the applicant. The only representations made about IROPI at all at that

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hearings were from Associated British Ports, the applicant's commercial rival, and were limited to exploring whether there were any alternative solutions (a quite separate consideration under the Habitats Directive).

48. The benefits, which the AMEP project will bring, are undisputed. Fundamentally, the project will deliver socio-economic benefits to the UK generally and the Humber Estuary sub-region in particular by enabling the growth of the emerging renewable sector. It will also have beneficial consequences of primary importance for the environment by enabling Europe's necessary transition to low carbon energy production (paragraph 8.1.5 sHRA).

Adverse impacts


49. The interested parties through the examination process have identified various adverse impacts of the AMEP development. The applicant sets out below the adverse impacts, which have been identified, as well as the manner in which it proposes to deal with those impacts in order to minimise their effect.

Damage to the North Killingholme foreshore

50. It is accepted by the applicant that the quay constructed as part of the AMEP development will have a significant effect on the intertidal habitat on North Killingholme foreshore. There will be a direct and permanent loss of 31.5ha of mudflat and 13.5ha of estuarine habitat on the southern side of the Humber Estuary as a result of the AMEP development. However it should be noted that some of this foreshore will be lost in any event regardless of the carrying out of this project (see below)

Measures to offset the harm

51. In order to address this damage, the applicant has proposed a comprehensive package of compensatory measures, which will ensure that the overall coherence of Natura 2000 is protected.
52. Over the course of the examination period the compensation proposals have been amended in order to ensure that the package delivered will be the most effective scheme possible in replacing the ecological function lost at North Killingholme foreshore and protecting the Natura 2000 network.
53. The compensation scheme offered by the applicant comprises the following elements:
- a) A managed RTE scheme at Cherry Cobb Sands, to provide replacement mudflat habitat that is sustainable in the long term and will provide a feeding area for birds.
 - b) Overcompensation by way of a wet grassland site totalling 38.5 ha at Cherry Cobb Sands, adjoining the RTE, which includes 25ha of wet grassland and a wet roost site for Black-tailed godwit (BTG within 5ha of open water). As the mudflat will take time to reach optimal functionality, this element is offered as overcompensation.


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- c) Further overcompensation by way of a further area of wet grassland at East Halton Marshes. This element of the package is offered as further overcompensation, only to the extent that it is considered necessary by the Secretary of State. The applicant considers that ecological function lost at North Killingholme foreshore will be compensated for adequately without this site, but as it is able to offer the additional compensation in this way, it does so to the extent that the Secretary of State considers it necessary.
54. The managed RTE site is offered on a permanent basis and the overcompensation and further overcompensation is offered for so long as it is required. When the mudflat is fully functional and supporting at least the desired number of birds in the long term the grassland could be returned to agricultural use.

Amendment to the compensation package

55. While the applicant has been criticised, principally by ABP, for amending its compensation proposals, in fact the amendments to the proposals have been improvements directly as a result of the examination process, and that the making of an environmental assessment is a dynamic process which does not end with the production of an Environmental Statement (*R (on the application of Burkett) v Hammersmith and Fulham LBC* [2003] EWHC 1031; [2004] ELR 30). It is important to note that these amendments have been to the compensation package not to the quay facility and associated development. Far from being unlawful the outcome is a beneficial consequence of the NSIP consultation and examination process and EIA process.
56. The wet grassland at Cherry Cobb Sands does not form part of the project for which development consent is sought, and in any event, a change in the proposed compensatory measures does not change the project so as to require a revised environmental statement (*Humber Sea Terminals v Secretary of State* [2005] EWHC 1289; [2006] Env.L.R.4 at [52]).
57. It is to be recalled that before the application was submitted to the Infrastructure Planning Commission, Natural England wrote to the applicant with regard to its original compensation proposal comprising managed realignment site and an area of wet grassland at Old Little Humber Farm (both of which were subsequently discredited, and dropped by the applicant) on 11 November 2011, stating:

"Thank you for the information you sent through on 2 November regarding the amended proposal for a 100ha managed realignment site at Cherry Cobb Sands. We have reviewed this information and advise that the compensation ratios set out in the Black and Veatch letter – that is the creation of mudflat habitat to loss at a 2:1 ratio – does appear adequate in order to meet the test of maintaining and enhancing the overall coherence of the Natura 2000 network when it is considered alongside the commitment to also provide a 1:1 ratio for the loss of estuary habitat. I confirm therefore, that the assurances given in the Black and Veatch letter has given Natural England sufficient confidence that the managed realignment site is capable of delivering the required amount of compensation for the designated site habitat destroyed and/or damaged by the AMEP development" (emphasis added)

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58. Before this application was accepted by the Infrastructure Planning Commission, Natural England wrote to both the applicant and the IPC on 5 January 2012, confirming its position on the previous compensation package:

"Natural England's advice is based on the information provided to it by Able on 2 November including a letter of support from consultants Black & Veatch (also dated 2 November) concerning proposals for a 100ha managed realignment site at Cherry Cobb Sands.

Natural England's advice is that the compensation ratios of 2:1 (creation : loss) for intertidal mudflat and 1:1 for estuary habitat as set out in Black & Veatch's letter together with their professional assurances that the creation of sustainable mudflat habitat is achievable does appear adequate to meet the test of maintaining and enhancing the overall coherence of the Natura 2000 network.


In addition, Able have recognised in their HRA dated 4 July 2011 and in their report 'AMEP Compensation Site on North Bank of Humber' dated September 2011 that the development will also lead to the loss of important feeding habitat for SPA and Ramsar waterbirds and have proposed the creation of an area of wet grassland habitat that will provide feeding habitat for these birds.

Given these assurances and proposals Natural England can confirm for the IPC its view that the proposed managed realignment site of 100ha with the supporting area of wet grassland should be capable of delivering the required amount of compensation for the designated site habitat which will be destroyed and/or damaged by the proposed development."

59. It was on the basis of this advice from Natural England that the applicant submitted the AMEP application to the IPC supported by detailed engineering and ecological reports. It subsequently became apparent that there were various difficulties with the compensation package and an alternative proposal was put forward. The managed realignment at Cherry Cobb Sands was replaced with a managed regulated tidal exchange (RTE) at Cherry Cobb Sands; the wet grassland at Old Little Humber Farm was replaced by a wet grassland site at Cherry Cobb Sands, which included a wet roost site for black-tailed godwit (BTG). The removal of Old Little Humber Farm from the AMEP proposals addresses the concerns raised by National Grid and E.ON Climate and Renewables about gas pipelines and the proposed electric cables at that site.
60. Both the RSBP and Natural England considered this revised proposal was an improvement to the compensation package in that the replacement wet grassland roosting and feeding site would be much closer to the estuary and also adjacent to the replacement mudflat, where the BTG would feed.

Adequacy of consultation on the revised compensation package


61. Two statutory bodies (the Environment Agency and Marine Maritime Organisation) suggested, at the hearing on 13 November 2012 that they had not been consulted adequately in relation to the revised compensation proposals. There was no suggestion that insufficient information had been provided: the complaint was rather that there had not been sufficient time to address in detail the revised compensation proposals.

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62. Natural England made it clear in the hearing on 13 November 2012 (session 1) that it was satisfied with the adequacy of the consultation on the revised compensation package.
63. It should be noted that the wet grassland at Cherry Cobb Sands does not form part of the project for which development consent is sought. The applicant has submitted a separate planning application to the East Riding of Yorkshire Council for that development, which was validated on 26 October 2012. A decision on that application is expected in January 2013. That application will itself be subject to consultation.
64. Notwithstanding that, the applicant consulted fully on the entirety of the revised compensation package, following the requirements of Regulation 17 of the EIA Regulations. Details of the proposals were advertised on 4 and 11 October 2011, providing an opportunity for all interested parties to comment. The applicant made supplementary material available on 12 October 2012, setting out the details of the revised compensation package (and including details of in-combination effects, which the Environment Agency, the MMO and Natural England has asked be included). Interested parties had until 9 November 2012 to comment on the material and further hearings were held on 12 and 13 November 2012 to enable interested parties to comment on the proposals, and the enable the Examining Authority to assess them in detail.
65. Paragraphs 96 – 108 of the applicant's summary of the hearings of 12 and 13 November 2012 sets out its case on the adequacy of consultation in more detail, and Annex A to that summary contains a brief summary of the applicant's correspondence with the three statutory bodies: the EA, MMO and NE.
66. In summary, the applicant considers the fact that regulatory bodies may feel their resources are limited and the time scales imposed by the Planning Act puts pressure on their ability to respond, does not mean that the process was legally unfair or the consultation inadequate. The applicant has fully complied with the requirements of the Planning Act by providing full responses whenever requested, and within the specified time limits.
67. Moreover, by the close of the last hearing days of the examination a week later there was no matter which either body claimed a need for further time to consider. Neither body made any application or request for an extension of time. It is to be noted that although fully aware of the application neither body has supported ABP's request for an extension of the examination period.


Effectiveness of the compensation

68. In relation to the effectiveness of the compensation package in replacing the ecological function lost at North Killingholme foreshore and protecting the coherence of the Natura 2000 network, the applicant's case is set out in detail in the additional information provided on 12 October 2012 (at Ex28.3) and in its summary of the hearings of 12 and 13 November 2012.
69. The applicant will initially provide mudflat at a 2:1 ratio for that being lost directly and indirectly, making 88 hectares, plus estuarine habitat at a 1:1 ratio, making a total of 101.5 hectares. In common with other schemes on the Humber, the applicant is aware that the majority of the part of the compensation site that is

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managed realignment will gradually convert to saltmarsh, but unlike other schemes, its managed RTE scheme will ensure that the remainder does not fall below 60 hectares of mudflat resource. Feeding across this RTE mudflat resource would be available over at least 45 hectares on any tide (save for during short periods of management activity in the period April to June when it will be little used, which would reduce the area available for feeding to 30 hectares per tide for about 20 days out of the year).

70. In addition to the mudflat provision, the applicant will provide a c38ha site, which is adjacent to the RTE scheme. It will include a 5ha open water area with two islands and 26ha of wet grassland. The open water area with islands will offer a suitable roost site. The wet grassland will offer an additional foraging resource and will be available at all stages of the tide. The wet grassland will be appropriately managed and irrigated in late summer and autumn to maximise its potential as a feeding resource.
71. In assessing the compensation package, it is relevant to note that even without the AMEP development, there is expected to be a reduction in the foreshore at North Killingholme Marshes over time. Paragraph 28 of the applicant's summary of the hearings of 12 and 13 November explains that the recent historical data reviewed in Ex8.9 (HR Wallingford) shows, beyond any doubt at all, that the North Killingholme foreshore is undergoing long term changes and that the rate at which material is accumulating shows no sign of reducing. The on-going conversion of mudflat to saltmarsh in this area will continue resulting in continued loss of mudflat resource.
72. While the applicant is not providing any less replacement habitat because the original mudflat habitat will be reduced by passage of time, the fact that the existing habitats will otherwise be materially decreased is material to the degree of confidence required for the compensation package. This gives more confidence that sufficient replacement habitat is being provided.
73. Details regarding the operation of the RTE are set out in the applicant's summary of the November hearings (paragraphs 48 – 57).
74. The replacement mudflat at Cherry Cobb Sands will provide comparable food resource for birds to that lost at North Killingholme foreshore. The applicant will target a minimum ash free dry weight (AFDW) of 4 grams per square metre, as below that level, populations of black-tailed godwit are likely to reduce, but its primary objective will be 5.4 grams AFDW per square metre of *Hediste diversicolor* and *Macoma balthica* combined, which is the amount shown to be available at North Killingholme Marshes in May.
75. The targets of biomass at this stage are considered to be indicative and based on the NKM May results. This will be augmented with the results of the pre-construction survey which will provide biomass and abundance targets according to the autumn peak in abundance and biomass of the key prey resources, namely *Hediste diversicolor* and *Macoma balthica*.
76. The commitment to a preconstruction survey at Cherry Cobb Sands and North Killingholme Marshes is in recognition of the likely variation in abundance and biomass that is likely to be seen. The historical data from CCS presented within the EMMPs are 10 years old, and whilst supplementary literature has been provided indicating that 2003/2004 surveys of CCS found high numbers of individuals per


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metre squared and biomass of ~16 grams (AFDW) per metre squared the applicant recognises that these figures need to be confirmed to provide contemporaneous targets.


77. The numbers of *Hediste diversicolor* and *Macoma balthica* at NKM in May appear (extrapolating the figure based on recorded seasonal increases in the Humber) representative of a good, but not exceptional, community. This is evidenced by multiplying the number of *Macoma balthica* found in May by 3.5; the 3.5x increase is based on seasonal surveys of the Humber conducted by Mortimer et al (1999). A seasonal increase in *Hediste* is less easy to define as it varies greatly between sites, between years and even within the space of 10m. Using the NKM *Macoma* data (398 individuals m⁻²), increasing it by 3.5x to account for the autumn increase (1393 individuals m⁻²), and comparing it to the mean abundance of *Macoma balthica* for the Humber as defined by Fujii in 2007 (1358 individuals m⁻²) it is possible to see that the numbers of individual *Macoma balthica* bivalves at North Killingholme Marshes represent the average density of individuals for the Humber.
78. It is emphasised that given the difficulty in accounting for potential increases in *Hediste diversicolor* and the purely indicative nature of the suggested increases in abundance which suggests NKM is average in terms of density of *Macoma balthica* a baseline survey conducted in the appropriate season is required to confirm the abundance and biomass targets.
79. Mr Hatton's evidence was that birds may respond to habitat loss in a variety of ways, including feeding more intensively at the remainder of the existing sites on the Humber, or feeding for longer, or feeding at other sites. The provision of a new secure roost site close to invertebrate rich mudflats such as those at Cherry Cobb Sands would provide an opportunity for birds to exploit alternative resources without incurring increased energy demands.

Timing of compensation

80. Both Natural England and the RSPB raised concerns about the timing of the compensation package. It is the applicant's case that proposed timescale for delivery of the AMEP project and the compensatory measures will ensure that the coherence of the Natura 2000 network is protected.
81. The applicant tabled, at the Issue Specific Hearing held on 13 November, a programme detailing the timing of the compensation works (the ISH programme). This programme is included in Annex B. The applicant has submitted alternative programmes in response to a Rule 17 request for further information, but any delay to the programme will inevitably increase the risk to project delivery and the attendant benefits to be gained.
82. In accordance with the ISH programme, the components of the compensation, overcompensation and further overcompensation package will be developed at the following times:
 - a) The further overcompensation site at East Halton has already been taken out of commercial use and has been seeded.
 - b) Within 2 months of the DCO consent, the wet grassland site will be developed as well as the new wet roost.

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- c) within 5 months of the DCO consent, the MR/RTE scheme will be commenced, 7 months before the start of the marine construction works.
83. The time for the wet roost at Cherry Cobb Sands to become functional is based on it filling over winter from rain, but this could be accelerated if the applicant sought and received an abstraction licence to fill it from Keyingham Drain (30,000 m³ of water is needed). The wet roost will be functional in advance of any marine works starting, to provide an alternative roost to North Killingholme Haven Pits, should the black-tailed godwits abandon that roost because a major part of the feeding grounds on North Killingholme Marshes are lost or disturbed. Once functional, the wet roost would provide a platform from which black-tailed godwits can very efficiently exploit the rich feeding grounds on the north bank of the estuary.
84. In this respect, it is noted that the increase in BTG numbers during the 1990's (before which time they were virtually absent) was characterised by large flocks at Saltend on the north bank, where a maximum count of 725 was recorded in 1997. At that time, the black-tailed godwits were also using North Killingholme Haven Pits as a high tide roost (English Nature Research Report 547, pg 194), moving back and forth across the estuary to feed. There is therefore no certainty that the BTG will actually abandon their North Killingholme Haven Pits (NKHP) roost simply because they partially lose the benefit of an immediately adjacent feeding resource. The BTG would also have the benefit of access to the further overcompensation land provided on the south side of the Humber. This site is also attractive to other species and would assist in providing additional provision both for BTG and other species who might be seeking food on the north shore. Accordingly, the provision of an alternative roost is precautionary but addresses a particular uncertainty in respect of the effects of the project on NKHP.
85. The applicant's case is that the Cherry Cobb Sands grassland will take 2-4 years to develop full functionality, based on the Van Eekeren report. It is important to note that the site is to be developed as damp grassland (i.e. not flooded) that can be probed by BTGs seeking buried invertebrates. The Van Eekeren report demonstrated that c.50g/m² earthworm biomass can be achieved two years after conversion of arable to grassland. This level of earthworm biomass is comparable to natural wet grasslands. The report is based on work in Belgium (the researchers are Dutch). The study site is less than 250 miles from Cherry Cobb Sands and the climate, altitude and soils at the study site are similar. The type of grassland in the study is normal, agricultural grassland, which included clover (a type of legume). The proposed CCS grassland will be similar or better than the study grassland in that it will be damp but unflooded and contain a greater diversity of plant species, including legumes. The results of the Van Eekeren report are therefore applicable to the Cherry Cobb Sands Wet Grassland Site and two to four years is a robust estimate of time taken for the grassland to become functional.
86. The draft legal agreement (EX28.3: Part 10) constrains the commencement of the quay works such that the applicant must use reasonable endeavours to ensure that the existing flood defence forming part of the MR/RTE site at Cherry Cobb Sands is breached within 15 months of the start of the Quay works. This is to ensure that the time lag between habitat loss and the development of the functionality of the compensation site is limited.
87. The development of the RTE site will take 22 months, which includes for a winter period of settlement/consolidation of the new flood defences before the breach and

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for the establishment of a vegetated sward over the defences, as required by the EA. This means that the breach takes place 27 months after the granting of the DCO (5 months mobilisation plus 22 months construction). Given the voluntary constraint that quay works may not commence within 15 months of the planned breaching of the RTE site, then quay works can only start 12 months after the granting of the DCO at the earliest.


88. The RTE scheme will be fully functional by December 2018. Clearly there will be a time lag between any harm to the Natura 2000 site and the replacement mudflats at Cherry Cobb Sands achieving full functionality.
89. The permissibility of time lags is acknowledged by guidance produced both by the European Commission and by DEFRA, in relation to Article 6(4) of the Habitats Directive. This is dealt with in detail in the applicant's summary of the hearings of 12 and 13 November (paragraphs 123 – 149).
90. The 2012 European Commission guidance on article 6(4) deals with the timing of compensation in paragraph 1.5.6, where it explains:

"Timing the compensatory measures demands a case-by-case approach, where the schedule adopted must ensure the continuity of the ecological processes essential for maintaining the biological structure and function that contribute to the overall coherence of the Natura 2000 network. This requires a tight coordination between the implementation of the plan or project and the implementation of the measures, and relies on issues such as the time required for habitats to develop and/or for species populations to recover or establish in a given area. In addition, other factors and processes must also be considered:

- *A site must not be irreversibly affected before compensation is in place.*
- *The result of compensation should be effective at the time the damage occurs on the site concerned. **Under certain circumstances where this can not be fully achieved, overcompensation would be required for the interim losses.***
- ***Time lags might only be admissible when it is ascertained that they would not compromise the objective of 'no net losses' to the overall coherence of the Natura 2000 network.***
- *Time lags must not be permitted, for example, if they lead to population losses for any species protected in the site under Annex II of Directive 92/43/EEC or Annex I of Directive 79/409/EEC, requiring particular attention when it entails priority species.*
- *It may be possible to scale down in time compensatory measures according to whether the significant effects would presumably arise in the short, medium or long term." (Emphasis added)*

91. At paragraph 1.4.3 the 2012 guidance on Art.6(4) says:

"as a general principle, a site should not be irreversibly affected by a project before compensation is indeed in place. However, there may be situations where it will not be possible to fill this condition. For example, the recreation of a forest habitat would take many years to ensure the same functions as an original one negatively affected by a project. Therefore, best efforts should be made to assure compensation is in place beforehand and in the case this is not fully achievable,

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the competent authorities should consider extra compensation for the interim losses that would occur in the meantime."

92. The DEFRA guidance issued for consultation in August 2012 explains (paragraphs 24 and 25) that

*"Compensation must be secured before damage occurs. This includes ensuring all legal, technical and financial arrangements are in place. **Compensation measures should normally be delivered before the adverse effect on the European site occurs, as this reduces the chance of harming the network of sites and also ensures there is no loss during the period before the compensatory measures are implemented.***


***In certain situations damage to European sites may necessarily occur before the compensatory measures are fully functioning.** There may also be circumstances where the compensatory measures will take a long time to become fully-functioning (e.g. re-creation of woodland). **In such circumstances it may be acceptable to put in place measures which do not provide a complete functioning habitat before losses occur, provided undertakings have been made that the measures will in time provide such a habitat and additional compensation is provided to account for this. Such cases require careful consideration by the competent authority in liaison with statutory conservation bodies.**" (Emphasis added).*

93. Both the Commission and the DEFRA guidance envisage circumstances in which time lags will be permitted between the damage to a site occurring and the compensatory measures becoming effective. While compensation measures should 'normally' be delivered before damage to the site occurs, it is recognised that this will not always be possible. In those circumstances the guidance suggests that over-compensation should be provided.
94. Over-compensation is not provided to ensure that there is no time lag, but precisely because there is a time lag. Simultaneity is not always necessary to ensure that the coherence of the Natura 2000 network is maintained. References to 'recovery' of species recognises that there may be interim losses. The guidance documents recognise that there will be circumstances in which the coherence of Natura 2000 will not be impaired by there being a time lapse between the loss of habitat and its replacement.
95. The overall target duty is to ensure that the coherence of the Natura 2000 network is maintained following the functioning of the compensation package. This means that the impact upon the coherence of the network should not be irreversible. This does not mean that there should not be an irreversible impact at the particular project site in question before the compensation reaches full functionality – otherwise no time lag could ever be allowed, when it was patently operating in several cases in the UK (such as Immingham Outer Harbour and Bathside Bay).
96. The effect of the AMEP development will not damage the overall coherence of the Natura 2000 network. The applicant's case of the interpretation and application of the phrase 'overall coherence of Natura 2000' is set out in detail in its response (submitted on 23 November 2012) to the rule 17 request of 15 November 2012.

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97. The statement in the DEFRA guidance that "*Compensation measures should normally be delivered before the adverse effect on the European site occurs, as this reduces the chance of harming the network of sites*" recognises that the adverse effect on a European site is not the same as harm to the network of sites, which is what the Secretary of State must ensure is protected. An adverse effect on a particular site will not necessarily harm the network of sites, because it can be addressed through compensation.
98. The applicant considers that the duty which Article 6(4) places on the Secretary of State is to ensure that there is no irreversible damage to the Natura 2000 network: thereby ensuring that its coherence is protected. Natura 2000 would be irreversibly damaged if its overall coherence could not be maintained once the compensation was in place and fully functional. If a particular site was damaged and its ecological functions could never be replaced, the effect of this would be that the overall coherence of Natura 2000 would be damaged. Similarly, if, as a result of damage to a particular site, population losses occur from which the population cannot recover, this would irreversibly harm the coherence of Natura 2000.
99. However, damage to one particular site will not necessarily damage the coherence of the Natura 2000 network, provided the ecological functions of that site are replaced so that there is no irreversible harm to the network as a whole. This explains why the guidance documents accept that interim losses and time lags may be permissible in certain circumstances. If the Secretary of State's duty involved ensuring that no individual site was irreversibly damaged before compensation was fully functional, no time lag or interim losses would ever be permissible.
100. The compensation package will mean there is no irreversible harm to the overall coherence of the Natura 2000 network. A substantial amount of engineering expertise has been focused on developing sustainable compensatory habitat: far more technical effort that would normally be expected at this stage of a project, so providing greater technical certainty as to the outcome.
101. Furthermore, the compensation provided at the outset overcompensates by providing an alternative wet roost and a substantial area (26ha) of wet grassland which will be managed so as to maximise its value as a foraging resource: this habitat is over and above the 'like for like' compensation of mudflat which is provided at a multiple of 2:1 for compensation: loss.
102. Any interim population losses in the Humber Estuary SPA caused in the short term by the loss of North Killingholme foreshore will be reversible, and will not therefore, harm the overall coherence of the Natura 2000 network.
103. The world population of Icelandic black-tailed godwits continues to increase after a brief period of stability from 2005/06-2008/09 (Holt et al, 2012. Water birds in the UK 2010/11: The Wetland Bird Survey). The flyway population estimate was revised upwards by 30% in 2012, with these trends being attributed partly to improved breeding success. The bird has a typical lifespan of 18 years (the longevity record is over 23 years). The possibility that the SPA cannot absorb displaced birds in the interim appears, in broad overview, remote. But if the SPA does not have such spare capacity, any short term impact is fully expected to be reversible.

EMMP

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104. Pursuant to Requirement 17(1) of Schedule 11 of the draft DCO, the authorised development cannot commence until an Environmental Monitoring and Management Plan has been agreed with Natural England. That Plan will set out the ways in which the compensation scheme will be monitored and managed, including the triggers for further action if targets are not being met and any remedial measures which may prove necessary.

Conclusion on compensation

105. The adverse impact caused by the damage to mudflat at North Killingholme foreshore will be more than adequately addressed through the compensation package provided by the applicant, so that there will be no harm to the overall coherence of the Natura 2000 network (the detailed meaning of which is addressed in the applicant's answers to the rule 17 questions to be submitted before the deadline 24 November 2012) .

Compulsory acquisition

106. Various parties raised concerns over the powers of compulsory acquisition, which the applicant seeks through the DCO. Their particular concerns are set out below, after a general introduction to the compulsory acquisition case (set out in more detail in the applicant's summary of the compulsory acquisition hearings on 16 and 17 October 2012).

107. Section 122 of the Planning Act 2008 provides that

"(1) An order granting development consent may include provision authorising the compulsory acquisition of land only if the Secretary of State is satisfied that the conditions in subsections (2) and (3) are met.


(2) The condition is that the land –

- (a) is required for the development to which the development consent relates,*
- (b) is required to facilitate or is incidental to that development, or*
- (c) is replacement land which is to be given in exchange for the order land under section 131 or 132.*

(3) The condition is that there is a compelling case in the public interest for the land to be acquired compulsorily."

108. Land can only be acquired compulsorily if it is required for the development and there is a compelling case in the public interest for the land to be so acquired. Any adverse impact, which the compulsory acquisition may have on a particular landowner, must be set against the compelling case in the public interest, which justifies its acquisition. The adverse impacts identified by the various parties must be considered in that context.

109. It must also be borne in mind that the imperative reasons of overriding public interest, which justify the AMEP development, are not in dispute. It is the applicant's submission that those imperative reasons for which this development is required also constitute a compelling case in the public interest justifying the compulsory acquisition of the land required in order for the AMEP proposal to be delivered.

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110. The need for all forms of electricity generation is expressed in the Overarching Energy. National Policy Statement EN-1 as 'urgent' and the UK also has an obligation to ensure that 15% of all energy consumption – not just electricity – is from renewable sources by 2020. The AMEP project will provide one of the most significant contributions to the realisation of offshore marine energy in the UK and this is clearly in the public interest. Given the urgency of electricity generation and the renewable energy targets set out in the UK's Renewable Energy Action Plan (2010), the applicant submits that there is a compelling case in the public interest for the project as a whole. The size of AMEP is one of its most significant benefits – 'big is beautiful', to quote John Fitzgerald (Port Director, ABP Immingham and Grimsby) – and this will help to provide the critical mass that will help not only to fulfil the UK government's renewable energy ambitions but also to encourage the development of a cluster of renewable energy-related industry on Humberside and the employment opportunities that would bring.


111. The acquisition of each plot identified in the Book of Reference is more than just "convenient" or "desirable" to the applicant: it is reasonably necessary or required in the circumstances of the case to enable the development to proceed in its current form and within the proposed timescale and to retain its appeal to clients and potential clients, with all the public benefits that this will bring.

ABP Triangle

112. The applicant seeks to acquire a c.5 hectare triangle of land in the ownership of ABP (Parcels 03020, 03021, 03022 and 03023) for part of the onshore manufacturing, assembly and storage components and parts for offshore marine energy infrastructure that form part of the AMEP project, specifically for external storage behind the quays, the siting of a pumping station and associated drainage ditches and for quay access, as shown on the indicative master plan submitted with the application.


113. The triangle site is required to enable a cohesive site configuration on the scale proposed, with full access along the length of the quay to and from the onshore land. The scale of the development is necessary to address the scale of the need by the offshore wind sector as set out in national and European policy. If the triangle site were to be omitted, and the frontage left undeveloped to provide for the possibility of ABP developing the site in future, the quay would have to be reduced to two-thirds of its length and the scale of the terrestrial development and flexibility of accessibility to the quay would also reduce significantly. Furthermore, the balance of the needs for the offshore energy sector would have to be provided elsewhere, at another port, and this would result in a more fragmented industry based at less optimal locations which would have less chance of being realised and lose the availability to develop the large cluster park.

114. ABP claims (through the Port Director for the Port of Immingham and Grimsby, Mr John Fitzgerald) that it intends to develop the triangle site partly as a replacement site for the Immingham Gas Jetty that would be displaced by ABP's proposed Humber International Terminal third berth (HIT 3) project, and also for a liquid bulks operator. This project would be thwarted if the AMEP quay were built (even if the triangle land was not acquired).

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115. John Fitzgerald asserted that the need for HIT 3 would primarily be driven by demand from the electricity generating industry for biomass. He said that HIT 3 was likely to handle 3 – 4 million tonnes of biomass per year.
116. ABP relied, in support of its assertions as to the use of the triangle site, on its Master Plan for the Port of Immingham, which was said to have received Board approval on 11 October 2012 and thereby replaced the Consultation Draft Master Plan (CDMP) issued in 2010.
117. It is relevant to note that save for inclusion in a the Consultation Draft Master Plan and then the final Master Plan, the triangle has seen no meaningful activity or investment in the last 45 years, during which it has been owned by ABP (and its predecessors) and, so far as the applicant is aware, no planning applications, or applications for Harbour Revision Orders have been submitted in this time.
118. Even after the CDMP was published in 2010, no further action appears to have been taken with regard to the Plan until, just five days before the compulsory acquisition hearings, the ABP Board finally got round to approving a final version. At the compulsory acquisition hearings, a number of obvious errors in the fMP were pointed out to John Fitzgerald (such as references to superseded planning policy statements, PPS9 and PPS25; references to planning documents that did not exist, such as the North East Lincolnshire Core Strategy which was abandoned in June 2012; references to cancelled projects, such as the Heron Renewable Energy Plant; and the absence of any allocation of land for mitigation despite the obvious need to identify mitigation, expressed in the Department for Transport '*Guidance on the Preparation of Port Master Plans*' (2008)). In light of those errors and omissions, John Fitzgerald confirmed that ABP had planned to publish the fMP in a few months' time, but had '*hurried it through*'¹ as a result of the AMEP application.
119. The Port Master Plan, having been moribund for so long, has rapidly been re-written (with a far greater emphasis on biomass, the immediate need for a western deepwater jetty on the triangle site – a project potentially envisaged in 2030 in the draft Master Plan, and a suggested need for the Killingholme Loop railway line) with an obvious view solely to hinder the AMEP project. It is, beyond question, a purely commercial document (not subject to strategic environmental assessment), hurried through at the last minute by a commercial rival in order to frustrate this application. It does not represent a document to which any weight can credibly be given, and should not be taken to genuinely reflect any firm commitment to develop this triangle of land which has lain undeveloped, in ABP's hands, for over forty years.
120. Furthermore, the fMP shows that ABP plan to import 10 million tonnes of biomass per annum by 2030: a significant increase on that predicted in the DCMP, which only forecast 7.5 million tonnes per annum. On a simple pro rata basis, therefore, two further quays of the scale of HIT 3 would be required for the balance of 6 – 7 million tonnes of biomass which (on the basis of John Fitzgerald's evidence as to its capacity) HIT3 would not be able to handle. This is not credible as all of the existing quays will be needed for coal and iron ore imports that ABP also plan to increase over the timescale of the Master Plan.

¹ Morning of 17 October 2012

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121. In any event, the fMP is demonstrably inconsistent with current Government policy in relation to bioenergy, as set out in 'UK Bioenergy Strategy', (DECC, 2012), which states:

"new dedicated biomass will have a limited role as part of a wider energy mix, focusing on cost effective deployment and carbon abatement opportunities."

122. In practice this will mean focusing on co-firing of existing coal fired plants, with support being limited to a small number of new small-dedicated biomass plants. The mix of bulks anticipated in the future should show reduced coal imports as biomass imports increase in order to increase co-firing (of biomass and coal) at existing generating stations. The fMP, however, simply shows large increases in all fuel commodities.

123. In terms of the need for biomass, it is increasingly obvious that there is no 'urgent' need for HIT 3 at all. On the basis of Mr Fitzgerald's own evidence at the compulsory acquisition hearings, HIT 1 and HIT 2 are currently operating at 70% of their capacity, while Drax's Heron Renewable Energy Plant within the port estate has been cancelled. The other principal basis of need, the Centrica Glanford Brigg Biomass project, was also cancelled on 24 October 2012. This renders ABP's proposals for HIT 3 as speculative at best. Of course, the need for the Western Deepwater Jetty on the triangle site only arises if the HIT 3 project is implemented.

124. The applicant considers that the proposed increase in both coal and biomass through the Port of Immingham is wholly unrealistic, for reasons which are elaborated upon in the attached report – 'Coal and Biomass – Infrastructure Implications. The South Humber Bank – a Reality Check' (November 2012) (Annex C).

125. Bespoke biomass fuelled power stations are now less favoured by the Regulatory/Subsidy regime and are also attracting extensive opprobrium from an increasing number of environmental groups.


126. A significant number of projects – including two by Drax, two by Centrica and one by Dong – have all been cancelled.

127. Currently the combined output of the five largest bespoke and operational biomass power stations is only 196MW and all have local non-imported feedstock.

128. Of the nine larger consented (Section 36) bespoke biomass power stations (>49MW) none are currently operational, three are now cancelled, three are now on hold and only three are still considered to be 'live'. Of those that are still considered live two have only a total potential output of 118MW.

129. Given the above the most likely requirement for imported biomass will be for the co-firing of existing coal fired power stations.


130. There is plainly a compelling case in the public interest for the AMEP project, and the ABP triangle of land forms an integral part of the project. The benefits of the AMEP project are not outweighed by any adverse impact in depriving ABP of that land.

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Network Rail Infrastructure Ltd

131. The applicant seeks the compulsory acquisition of parcels 03013, 03014, 04004, 04024, 04025, 05023 (part), 05024, 05025, 05026, 05027, 05028, currently owned by Network Rail. The railway land bisects the Order land, and the applicant seeks powers of compulsory acquisition over the railway land to prevent approximately 205ha of land being deprived of direct access to the quay.
132. The Killingholme 2 Branch Line (KIL2), which bisects the AMEP site, runs from the northern boundary of ABP Immingham, through the AMEP site, through the Humber Sea Terminal (HST, now C.RO) and into the Able Logistics Park, where the line terminates.
133. The existing line has not seen a commercial train movement since 2007 and has seen little traffic in the previous 20 years.
134. In a letter to the Examining Authority of 19 November 2012, the applicant set out certain amendments to the Book of Reference, in relation to Network Rail land². The overall effect of the amendments would be to reduce the scope of the powers of acquisition sought by the applicant over Network Rail's land. Rather than include full acquisition of the railway, the alternative proposal involves the compulsory creation of four new easements across the railway as level crossings, replacing four existing level crossings of various types. Although the applicant continues to promote full acquisition of the railway as preferred and necessary for the development, this would be a fall-back position for the Secretary of State to adopt should he consider that the adverse impact of full acquisition is too great. This would have an impact on the viability of the project but would not make it unviable.
135. The applicant continues to seek a mutually acceptable solution, which will enable it to gain the necessary access over the railway land without recourse to compulsory purchase powers. Most recently, it has written to Network Rail to suggest an alternative solution. Instead of granting a lease over the railway land (with the associated stipulations on which Network Rail has insisted but the applicant has been unable to agree) the applicant has proposed that Network Rail grant 4 new easements across the railway. Three of these would be up to 20 metres wide for light vehicles and non-vehicular traffic and one will be up to 40 metres wide for larger slow-moving vehicles. This would allow Network Rail to retain possession of the railway land whilst also allowing the applicant the access it needs over the railway.
136. The applicant had not received a response from Network Rail to this latest proposal by the end of the examination period (24 November 2012). In the absence of agreement from Network Rail, the applicant notified the Examining Authority of its proposal to amend the scope of the compulsory purchase powers over the railway land to closely reflect the proposal made to Network Rail. The applicant's alternative proposal was to substitute powers of compulsory acquisition over all interests in the railway land with the lesser power to acquire new easements over sections of the railway, which would provide the applicant with the access required.


² Note that there had already been certain amendments made to the Book of Reference during the compulsory acquisition hearings on 16 and 17 October 2012.

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137. The applicant has sought to reach reasonable agreement with Network Rail as regards the grant of a lease, which would have provided the access it needs over the railway land. Had such agreement been possible, the applicant intended to request amendments to its development consent application in order to remove the railway land from the scope of the compulsory purchase powers being sought.
138. However, as the applicant explained in the hearing of 16 October 2012, two alternatives solutions have been proposed by Network Rail in connection with the planned grant of a lease to the applicant. Neither alternative is considered by the applicant to constitute a reasonable solution for the reasons the applicant has already explained (see paragraphs 31 to 59 of the applicant's summary of its case at the hearing of 16 October 2012).
139. The position therefore remains that the applicant must seek CPO of the land in order to ensure that the objections raised by Network rail are overcome. However, if contrary to the applicant's principal submissions, the Secretary of State considers that granting the applicant merely the easements rights to cross the railway is sufficient in order to allow the project to go ahead unimpeded then the Secretary of State is entitled to grant CPO of easement rights only.

Killingholme Loop

140. Network Rail now objects to any crossing that might impinge on the future operation of the railway if it was ever developed to permit a significant intensification of use. The potential development that would lead to such an intensification of use is known as the Killingholme Loop, although in its answer to Question 65 of the first set of Examiner's questions Network Rail acknowledged that proposals for the Killingholme Loop had 'been discounted for the current time'.
141. From an overarching strategic point of view, and over the last 20 years or so, a concept known as the 'Killingholme Loop' – of which the KIL2 line would form an early element – has been the subject of extensive study and review. If constructed it would create a loop in which the main line entering Immingham Port from the west would circulate back on to the main line, via AMEP, HST and ALP, ultimately rejoining the same main line from Goxhill on reconstructed track.
142. The Budget costs in 2009 ranged from £35m to £54m and in January 2009 ABP, NR and local stakeholders concluded that the development was not viable.
143. In any event the proposed scheme would face a variety of other significant challenges including:-
- a) The need to acquire new land to affect the new chord at the point at which it joins the main line (see plan in Appendix 4).
 - b) The 'existing' route is overgrown and has become an interesting habitat for a variety of wildlife, flora and fauna (see photographs in Appendix 5).
 - c) The route passes through the Killingholme Haven Pits - a site of special scientific interest (SSSI).
 - d) The development of the Loop would require a full Environmental Impact Report and complex/rigorous incombination deliberations which would have to

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be measured on the assumption that the AMEP development will be operational by the time KIL2 is restored.

144. Whilst North Lincolnshire Council had originally supported the Killingholme Loop that position was only to aid the development of the land that is now being developed for AMEP. As a consequence, that support has been withdrawn.
145. In its summary of the hearing of 22 October 2012, North Lincolnshire Council explained, in relation to the Killingholme Loop:

"North Lincolnshire Council stated in the Local Impact Report that it will continue to support the Killingholme Rail Loop scheme 'in negotiation with South Humber Bank industrial users and Network Rail' (page 17).


The Killingholme Loop proposal was developed by North Lincolnshire Council, a South Humber Bank developers group and Network Rail. The loop study predated the AMEP and was primarily aimed at providing rail access to the site now the subject of the AMEP and the neighbouring Able Logistics Park and commenced in 2009. The improved connectivity to the Port of Immingham was in the council's view an ancillary benefit of the Killingholme Loop. In 2009 Network Rail confirmed to the South Humber Bank Developers Group that the costs of the Loop proposal had risen from circa £19 million to between £40 and £54 million. Network Rail confirmed that it had circa £6 million of funding to support the project and that the remainder of the funding would need to be borne by the private sector. On the basis that there was no private sector support for this proposal the scheme was left in abeyance.

North Lincolnshire Council is firmly of the belief that the Killingholme Loop is not required to support the South Humber Bank development given that the entire area is now the subject of the AMEP and Able Logistics Park. For this reason North Lincolnshire Council put forward a recommendation agreed by the LEP South Bank Sub Board and agreed by the Humber LEP that the proposal be deleted from its list of rail priorities.

The council also considers that its requirement to support Port of Immingham for enhanced access is flawed and that other solutions are available that are more cost effective and deliverable that preclude the need for access via the AMEP site.

The council also wish to make it known that both its two biomass projects, namely Drax Heron £600 million 300 MW proposal at Port of Immingham and the Centrica 137 MW proposal Brigg have both been abandoned. The abandonment of these projects in the wake of Government subsidies for this industry together with the anticipated fall in demand for coal through the port of Immingham no longer justify the need for the Killingholme Loop in the council's view."

146. Of further relevance is that the proposed route of the Killingholme Loop is not safeguarded within North Lincolnshire Council's Local Plan. That is significant because in order to safeguard the route in a development plan it would be necessary to conclude that there is a realistic possibility of the route coming forward without the plan period. The reason why the planning system requires this is so that "safeguarded" rail routes such as the Killingholme loop with little prospect of coming forward do not impede other development proposals. If Network Rail had wished to give the Killingholme Loop protected safeguarded status for the


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purpose development control (and thus something that Network Rail might have relied upon in the present proceedings) they should have promoted it through the development plan process, or else objected to the local planning authority's failure to include it as a safeguarded route within the plan.

147. The applicant considers that the Killingholme Loop is extremely unlikely to come forward and that its proposed crossings of the railway land can be safely managed.
148. In promoting the scheme ABLE had (in January 2011) reached an in-principle agreement with Network Rail (NR) to purchase the track (at NR suggestion) on the basis that ABLE retain the Connection Agreement for Humber Sea Terminal (now C.RO).
149. It was agreed at the time that this would be the best option and that it would provide operational flexibility for both the size and location of level crossings and cover the need for drains and services to pass under the railway.
150. At no time in those discussions did NR mention the potential of reopening the Killingholme Loop - in fact NR confirmed that the option was no longer required - hence their willingness to sell.
151. One of NR's conditions was that ABLE would purchase all of the line from the northern exit point at Immingham Port through to the main line at Goxhill. ABLE confirmed that this was acceptable.
152. In October 2011, and with what represented a fundamental shift in their position, NR withdrew the potential sale for apparent 'operational reasons' - most likely as a direct consequence of ABP's determination to protect their dominant position on the Humber. ABP's stance and actions were described (at the AMEP Planning Hearing 6th September 2012) by the elected Leader of North Lincolnshire as an act of '...naked self-interest and protectionism'.
153. It is to be noted that no clear funding plans have been submitted demonstrating a committed funding programme for a Killingholme Loop still less a timescale when it is said to be achieved or indeed likely. The Examiner is invited to place little or no weight upon the current status of that scheme.
154. Furthermore, the applicant has proposed that Network Rail give the applicant two years' notice that it has secured funding for the Loop, whereupon the applicant will provide an alternative route or give up level crossings in order to facilitate the Killingholme Loop scheme. Any adverse impact caused by the AMEP development in relation to the proposed Killingholme Loop is therefore extremely limited.


Safety case

155. Network Rail has stated in its written representation that it opposes the construction of level crossings as it is contrary to the Office of Rail Regulation's 'clear message that the rail industry is seeking to close level crossings across the Network', (paragraph 4.1 of Network Rail's Written Representations). The applicant submitted the ORR's policy on level crossings at Appendix 6.1 of the applicant's responses to the Second Set of Examiners Questions. That ORR policy actually states that rail companies should, '(t)ake all reasonable opportunities to remove or replace existing level crossings or make them safer'. It also states that, '(e)xcept in

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exceptional circumstances, there should be no new level crossings on any railway', so clearly it does not preclude the creation of any new level crossing.

156. In order to address any safety concerns, the applicant has adopted Network Rail's suggestions to manage the site with gates. This would prevent any trains accessing the site whilst the crossings were in use. Equally, site operations across the line would cease, allowing trains through at the agreed times.
157. The Applicant is in discussions with C.RO and C.GEN and is confident of being able to reach agreement with them with regard to agreeing timeslots to ensure minimum disruption to both parties.
158. To ensure safety and that no plant, machinery, traffic or personnel had access to the lines when a train was using the AMEP line, the track would be fully enclosed with the east and west of the line being fenced off with gates at the crossing points. A system would be installed in which the gates enabling trains onto the site would be automatically disabled and closed until such a time that the gates for the crossings on the site were closed and the line was clear of any obstruction or personnel.
159. As shown in Network Rail's written representation (on the 200th page) up to nine existing private level crossings cross the Order land (and are shown superimposed on the applicant's indicative master plan at Annex 2), although some of these have fallen out of use. The applicant seeks four private level crossings in its application. The site would be managed as a private secure industrial site with fences and gates to ensure at no time will persons or traffic have access on the railway line when trains are in operation, and gates to ensure that trains would also be unable to cross the Order land when the crossings were being used. This would make the Order land section of the railway much safer than the sections to the south and north where there are ungated and unsignalled public level crossings accessible by the general public.
160. The application site is a unique national asset: its large size, flat topography, deep water access and proximity to Round 3 development offshore wind energy sites, and suitable mid-North Sea location for future sites combine to make it the optimum choice for its intended purpose as explained in Chapters 5 and 6 of the Environmental Statement. Whilst connection to the rail network is also an advantage, if access across the track were unreasonably restricted then a large area of the site would have restricted use as access to the quay would need to be via bridges. The applicant considers that the current status of the line (no trains for seven years and little use for 20 years) and prospects for the line (a new loop whose current status is 'discounted', no firm plans for use of the line by C.RO, and plans for use by C.GEN dependent on a successful Planning Act application for a coal power station and the development of carbon capture and storage facilities) and the AMEP need to move exceptionally heavy goods (some weighing over a thousand tonnes) from their place of manufacture to the proposed quay represent 'exceptional circumstances'. The particular characteristics of this case is that:
 - a) there would be no public access;
 - b) the line would be fenced to prevent unauthorised access;
 - c) the discrete crossings would be solely used by trained personnel;
 - d) trains would be very slow running; and

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- e) there would be clear sight lines for both train drivers and level crossing users (the track is straight and shrubs would be cut back).

161. National Rail confirmed at the hearing that there was no specific policy requiring the closure of a certain number of level crossings before any other crossings could be made over railway lines. Nor had there been any risk assessment of this particular site which suggested that for safety reasons the four existing level crossings would have to be closed before one new crossing could be opened. Nor had there been any change in risk between 7 September 2012 and 15 October 2012 which justified Network Rail's change in position from requiring the closure of one existing level crossing to requiring the closure of four level crossings. There was no safety case to suggest that what the applicant proposed was unsafe in road or rail safety terms. Network Rail conceded in questions put by the applicant at the hearing that it has no safety case in support of its case.


162. In relation to the safety of level crossings on industrial sites the applicant referred to the evidence of David Reid in which he had drawn a distinction between level crossings on industrial sites and those in public areas. David Reid's evidence to the Panel had been that

"The majority of level crossings and certainly the majority of those that cause accidents are publicly used level crossings, where they are almost always referred to as 'railway accidents', they're almost always a result of people disobeying the road traffic laws and regulations. Most of them are caused by members of the public, be they drivers or pedestrians ignoring warning signs or, indeed, stop lights. In the case of an industrial level crossing there are two differences; one, slow moving speeds for both the site road traffic and the rail traffic and there's also a familiarity of the site operatives with the fact that there's a railway there and there's a crossing there and the lack of familiarity on the public road that does not exist. So there's a difference between public level crossings, where the bulk of the accidents take place, and industrial site level crossings."

163. National Rail appear to view this application as an opportunity to improve the current safety position of the railway. While the applicant is committed to ensuring the safe operation of the railway and any crossings over it, it considers that there is no safety case for requiring the closure of four level crossings, when Network Rail was previously content to accept the closure of only one level crossing. Mike Stancliffe, of Network Rail, explained to the Panel that

"There seems to be no reason not to make the railway a safer place by implementing an agreement to put in this crossing that will be used by heavy plant, and there seems no reason not to make the railway safer by getting rid of other crossings I that location."

164. This is not the correct approach. If National Rail is to object on safety grounds it must make out a case as to why what is proposed is materially unsafe in particular when compared to other similar crossing whether they be those used by ABP, C/RO or anyone else. Moreover this approach also neglects to take into account the fact that the proposal to permit only one level crossing would not allow AMEP to operate to its full capability and would not fully realise the nationally-recognised benefits that the project would bring. The proposal is particularly unreasonable having regard to the current use of the line. The issue cannot be safety: Mr Upton put in terms the proposition that if one level crossing could be safely constructed, then

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why should further level crossings with the same safety arrangements not also be constructed. It was telling that Mr Upton's question received no proper or coherent response from Network Rail. The answer being that there is none.

165. The indicative masterplan submitted with the application shows four level crossings; two of these are proposed to be for exceptionally heavy loads and this is the minimum that the applicant considers necessary for the project to have adequate flexibility. Whilst the applicant agreed that heavy duty bridges over the railway were feasible, these would be very large structures – up to 9 hectares each – thus reducing the availability of land for the urgently-needed development of marine energy infrastructure. Therefore, in the absence of agreement on reasonable terms that the railway can be crossed by four level crossings, a major part of the Order land is effectively severed from the quay by the railway and the applicant requires powers of compulsory acquisition in order to facilitate the crossing of the railway line.
166. In the absence of any evidence of an adverse impact on the safety of the railway line as a result of the AMEP development, the Secretary of State is invited to attach very little weight to the adverse impact identified by Network Rail.


C.RO and C.GEN

167. Both C.RO and C.GEN raised concerns about their ability to use the railway line, should the AMEP development go ahead. In order to respond to their concerns, the applicant has agreed that it will allow those with existing rights to use the railway to continue to do so, and that it will not cause unreasonable interference with that use. These commitments are contained in paragraphs 60 and 61 of Schedule 9 to the DCO.
168. In relation to C.GEN the applicant has agreed to allow it to continue to use the railway for up to five trains per day (the number given as a maximum in C.GEN's preliminary environmental information for its project), and that it will not cause unreasonable interference with its use. These commitments are contained within paragraphs 48 and 49 of Schedule 9 to the DCO.
169. In light of its commitment to respect the existing use of the railway line by C.RO and C.GEN, the AMEP development will not cause any adverse impact to their operations.

Crown Estate

170. The applicant has entered into an option to acquire the compensation land from the Crown Estate.
171. The applicant has entered into a tenancy of the wet grassland site.
172. The Crown Estate is content to allow the compulsory acquisition of the foreshore land provided that once obtained the existing 19th century lease it is renegotiated in modern terms with TCE. The applicant is happy to do this.
173. As a result of this commitment, there will be no adverse impact to the Crown Estate caused by the AMEP development.

Bethany Jayne

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174. Bethany Jayne expressed concerns about the applicant's acquisition of Station Road, and the impact this would have on its use of the road. In order to address this concern the applicant has reached agreement with Bethany Jayne on protective provisions to ensure it retains access along that route. This commitment is contained in paragraph 9 of Schedule 8 to the DCO.
175. In light of these protective provisions, there will be no adverse impact on Bethany Jayne through the applicant's acquisition of Station Road.

Humber Harbour Master

176. The applicant must obtain ownership of the land where its quay will be situated, whether through acquiring part of the harbour master's lease from the Crown, or by subletting the land from the Harbour Master.
177. The applicant requires these parcels for its quay, the central part of its project. Without the quay there is no project. If there is a compelling case in the public interest for the project as a whole then there is such a case for acquiring the land where the quay will be situated.
178. As a result of the Humber Harbour Master's concern about the compulsory acquisition of the foreshore lease, the applicant accepted the Harbour Master's offer to sublet this land rather than acquiring it compulsorily from him. The harbour master agreed to supply the applicant with a draft lease but following numerous delays, which the harbour master accepted (at the compulsory acquisition hearings) was entirely on his side, caused by his obligation to employ ABP's property division to negotiate the lease. In fact ABP failed to respond to a request from the applicant to negotiate and the draft lease was only supplied late in October, not by the Harbour Master but by ABP.
179. Certain fundamental questions remain about the terms of that proposed lease which means that Able must seek a CPO.
180. The applicant requires these parcels for its quay, the central part of its project. Without the quay there is no project. If there is a compelling case in the public interest for the project as a whole then there is such a case for acquiring the land where the quay will be situated.
181. Details of correspondence with the Harbour Master are contained in Annex D.

National Grid, E.ON, Centrica and Anglian Water

182. The application contains powers to extinguish the rights of five statutory undertakers who have the right to install etc. apparatus in the Order land: Network Rail, National Grid, E.ON, Centrica and Anglian Water. The applicant does not intend to remove any apparatus
183. Article 41 of the Order now states that compulsory acquisition of statutory undertakers' rights can only be exercised if it is necessary for the purpose of carrying out the development, in order to mirror the test before the Secretary of State and thus ensure that the extinguishment can only take place on that condition.

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184. E.ON, Centrica and Anglian Water raised concerns about the effect of the powers of compulsory acquisition on their respective intake and outfalls. Centrica's concerns also extended to the effect of the compulsory acquisition powers on its use of a private road and both Centrica and Anglian Water were concerned about the impact on their condensate pipelines. These will not be moved or affected by the project.
185. The applicant has addressed these concerns by agreeing not to remove or divert the existing infrastructure. The applicant has agreed with E.ON, Centrica and Anglian Water that it will not acquire the existing legal rights until agreed new rights are in place, provided they do not unreasonably withhold agreement (this will be subject to arbitration). These protective provisions are contained within paragraph 74, 79 and 88 of Schedule 9 to the DCO.
186. National Grid was concerned about pylon and electric lines crossing the land. The applicant has therefore agreed not to remove or divert the existing infrastructure and has agreed not to acquire the legal rights until agreed new rights are in place, provided National Grid does not unreasonable withhold agreement (subject to an arbitration clause). These protective provisions are contained in paragraph 70 of Schedule 9 to the DCO.


Travel Plans

187. The applicant has amended the requirements of the DCO to prohibit the commencement of the development until a construction travel plan and a travel plan have been submitted to, and approved by, the relevant planning authority. This requirement is contained in paragraph 25 of Schedule 11 to the DCO.

Increased traffic

Royal Mail

188. Royal Mail raised concerns about the potential adverse impact on its operations caused by increased traffic at Junction N, the Pelham Road/A1173 junction associated with the AMEP development. In particular it was concerned about the effect this would have on its deliveries to its Immingham Delivery Office.
189. Royal Mail has stated, in its written representations, that deliveries will occur at:
- 05.35 Monday to Saturday; and at
 - 06.30 and 07.45 Tuesday to Saturday.
190. Peak staff vehicle movements to the Immingham Delivery Office will occur between the hours of 06.00 to 08.00 and 14.00 to 16.00.
191. AMEP peak traffic movements are associated with the day-shift (09.00 – 17.00) and will not, therefore, coincide with deliveries or staff movements to and from the Immingham Delivery Office.
192. Royal Mail confirmed at the hearing of 22 October 2012 that it would be willing to accept the proposed amendments to the Pelham Road/A1173 junction (as shown in Annex 5 to the applicant's written summary of the hearing of 22 October 2012),

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subject to the findings of a Stage 1 Road Safety Audit which the applicant has agreed to undertake.

193. The applicant has executed a unilateral undertaking whereby it will fund works to the junction if this proves necessary. There is therefore no need to include further protective provisions in the DCO.
194. As any adverse impact on Royal Mail's operations has been addressed by the applicant, it is not a matter to be taken into account in weighing the adverse impacts of the AMEP development against its benefits.


ABP

195. ABP's witness, Simon Tucker, confirmed at the hearing on 22 October 2012 that his principal concern was that the traffic growth implied from the Port of Immingham Master Plan had not been included as committed development in the traffic assessment. As a result, ABP considers that the impacts of the AMEP development on the Port of Immingham had been underestimated.
196. The applicant's response (set out in detail in the summary of the hearing of 22 October 2012) is that the premise that Mr Tucker worked upon, namely that there is substantial committed growth to the Port of Immingham, is incorrect. He assumed that ABP has permitted development rights for all the projects identified in the fMP, whereas it is beyond doubt that they do not have PD rights for most of them.
197. While ABP seeks to use the fMP as a means of reserving capacity on the road network, that is not the correct approach. Department for Transport Guidance on the preparation of Port Master Plans makes it clear that Port Master Plans should, *inter alia*, be used to identify the adverse environmental impacts that might arise in the duration of the Port Master plan, and then identify the mitigation measures that the Port will need to implement.
198. The applicant has agreed appropriate mitigation with NLC, NELC and HA, all the relevant highway authorities. It considers that it is for ABP to mitigate its own future developments, and any failure of the applicant to provide mitigation for ABP's potential future developments should not be treated as an adverse impact of the AMEP development.

Dredging

C.RO

199. C.RO, in its written summary of the draft DCO hearing of 12 July 2012 (dated 23 July 2012) raised concerns regarding dredging (and navigation – which is dealt with below). In particular, it considered that the draft DCO did not reflect the fact that there was an overlap between the approach channels, and thus marine licenses, of AMEP and C.RO Ports Killingholme (see paragraph 8.1 of its summary).
200. In order to address those concerns, the applicant has agreed with C.RO that each party will pay its own dredging costs. The applicant has agreed with C.RO the vast majority of a number of protective provisions in order to avoid any interference with its port operations at C.RO Ports Killingholme.

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201. There will be no adverse impacts to C.RO's operations as a result of the AMEP development.

Humber Harbour Master

202. The Humber Harbour Master raised concerns about dredging.

203. In order to address those concerns the applicant has provided protective provisions, which require the Harbour Master's approval for any tidal works. These are included in paragraph 3 of Schedule 8 to the DCO.

Siltation

E.ON and Centrica

204. Both E.ON and Centrica expressed concerns that the proposed quay would interfere with the sedimentary regime of the Humber Estuary and would result in increased levels of silt being deposited close to the cooling inlet and outfall (see Centrica's written summary of the draft DCO hearings of 12 July 2012, dated 23 July 2012).
205. Centrica considered that increased levels of sedimentation could potentially enter the power station's cooling water systems, thereby reducing the efficiency of the power station.
206. To address these concerns the applicant has included, in paragraph 34 of Schedule 11 to the DCO, a protective provision which prevents any development taking place until a scheme for the monitoring of sedimentation along the lines of and in front of the Centrica and E.ON cooling intakes has been submitted to, and approved by, the MMO, in consultation with the Environment Agency, Centrica and E.ON.

Humber Work Boats


207. To address concerns raised by Humber Work Boats about siltation in its area of operation, the applicant has offered to pay for any additional dredging required as a result of the AMEP development. In addition the draft Marine EMMP includes extensive monitoring of the foreshore and sub-tidal levels.

OPA, APT

208. The above parties are concerned about siltation at the South Killingholme Oil Jetty. The applicant has offered either to either dredge or fund the clearance of any siltation arising from AMEP or to fund walkways to the dolphins that would mean that continued access to the jetty was secured in the event of a siltation problem.

Stone Creek Boat Club

209. The evidence presented in the ES shows that there is unlikely to be any increase in siltation of Stone creek Channel. Which provides access to leisure craft that berth within Stone Creek. Notwithstanding this, paragraph 37 of Schedule 11 of the draft DCO provides for a scheme of monitoring in consultation with Stone creek Boat Club.

	<p style="text-align: center;">OVERALL SUMMARY OF CASE ABLE MARINE ENERGY PARK TR030001</p>	<p style="text-align: center;">Date: 23-Nov-2012</p>
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Navigation

210. The application was supported by a navigation risk assessment and the results of a series of navigation simulation exercises undertaken in the presence of the Humber Harbour Master. Subject to appropriate management procedures being in place, the Harbour Master expressed himself satisfied and has raised no concerns regarding any increased safety risk to vessels as a consequence of the development

Flood defences

211. Separate agreements have been substantially agreed with the Environment Agency for the construction and maintenance of new flood defences on the north and south bank of the river. A further agreement detailing monitoring arrangement is also substantially agreed. The applicant has also substantially agreed arrangements for salmon compensation in addition to the mitigation included through the piling restrictions. The applicant had expected to be able to provide these agreements to the examiners however the EA had no resources available to complete them on Friday but we understand the EA will provide them to the examiners with a statement confirming that they expect them to be completed and supplied to the secretary of state.


Oil pipelines

OPA and Phillips 66

212. Both OPA and Phillips 66 have raised concerns about access to oil pipelines. However, the applicant will not interfere with their existing ability to access the pipeline, which is outside the scope of compulsory purchase powers (see the description in parcel 02005 in the Book of Reference).
213. Phillips 66's concerns also covered its ability to develop land adjacent to Mitigation Area A. Mitigation Area A will cause no adverse impact to Phillips 66 because it has been designed with a 150m buffer in order to allow the adjacent development to take place.

Conclusion


214. It is plain that the benefits of the Able Marine Energy Park outweigh any adverse impacts caused by the development.
215. While there will be interim damage to the integrity of a European site at North Killingholme foreshore, the overall coherence of the Natura 2000 network will be protected through the robust compensation package offered by the applicant with indeed a realistic potential that the conservation objectives of the site along with the coherence of the Natura 2000 network will in fact be materially enhanced as a result of the over compensation which accompanies this development. The provision of overcompensation at Cherry Cobb Sands wet grassland and the potential for further overcompensation at East Halton Marshes adequately addresses the time lag between the damage to North Killingholme foreshore and the full functionality of the mudflats at the managed RTE site. A substantial amount of engineering expertise has been focused on developing sustainable compensatory habitat, and a comprehensive Environmental Monitoring and Management Plan, which will be agreed with Natural England before the development can commence,

	<p style="text-align: center;">OVERALL SUMMARY OF CASE ABLE MARINE ENERGY PARK TR030001</p>	<p style="text-align: center;">Date: 23-Nov-2012</p>
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will ensure that adaptive management can be employed to ensure the success of the compensatory measures. The Secretary of State can be confident to the requisite degree that, in allowing this development to proceed, he will comply with his duty under Article 6(4) of the Habitats Directive to ensure that the overall coherence of Natura 2000 is protected.

216. To enable the AMEP development to proceed powers of compulsory acquisition are required. The applicant has explored all reasonable alternatives to the exercise of such powers, and has amassed the vast majority of the land required for this development without the powers of compulsion. The proposed interference with the rights of those with interests in the land to be acquired is for a legitimate purpose and is necessary and proportionate. There is a clear and compelling case in the public interest for this development to proceed, and it can only proceed in its current form, through the exercise of powers of compulsory acquisition in accordance with the requirements of the European Convention of Human Rights (esp. article 8 and article 1 to the first protocol).
217. The applicant through protective provisions in the DCO or through agreements has addressed the vast majority of the adverse impacts identified through the examination process with the various parties.
218. Set against the remaining adverse impacts, are the formidable benefits this development will bring. Not only will AMEP create over 4,000 jobs in a region of extreme economic deprivation but, it will contribute towards the overarching European and UK policy of developing sustainable and secure energy supplies. The EC recognises that "***the wellbeing of our people, industry and economy depends on safe, secure, sustainable and affordable energy***"³ AMEP has a vital role to play in providing the safe, secure, sustainable and affordable energy upon which that wellbeing depends.

³ 'Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions: Energy 2020 A Strategy for sustainable and secure energy' (EC, 2010).

	<p>OVERALL SUMMARY OF CASE ABLE MARINE ENERGY PARK TR030001</p>	<p>Date: 23-Nov-2012</p>
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ANNEX A

Letters of Support

Triton Knoll Offshore Wind Farm
tritonknoll@npower-renewables.com

11 June 2012

Dear Whom It May Concern

Able Marine Energy Park (AMEP) South Humber Bank

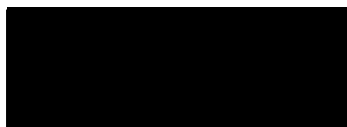
As an offshore wind developer we very much welcome the AMEP development. For the industry to meet its targets, additional ports capacity with suitable space for manufacturing, storage and assembly are required on the East Coast of the UK.

Aside of its location AMEPs scale offers the unique opportunity to facilitate a number of investments from wind turbine OEMs and their supply chain. This exciting opportunity for a cluster to form On the UK East Coast will help increase collaboration within the industry and provide much welcomed opportunities for the sector to mitigate costs and risks.

AMEP provides a very efficient base for the storage, assembly and deployment of offshore wind turbines. The planned quays in the heart of the UK offshore wind farm zones will allow for the maximum utilisation of next generation installation vessels.

AMEPs development will play a crucial role as the sector moves towards reducing its costs and increasing the volume of UK local content. We fully support AMEPs development and think it will be a critical port for the European offshore wind sector.

Yours faithfully



Jacob Hain
Triton Knoll Project Manager

RWE npower renewables
Auckland House,
Lydiard Fields,
Great Western Way,
Swindon,
Wiltshire
SN5 8ZT

I www.npower-renewables.com
Registered office:
RWE npower renewables Limited
Auckland House,
Lydiard Fields,
Great Western Way,
Swindon,
Wiltshire
SN5 8ZT

Delivering a New Energy8th June 20120

To Whom It May Concern

RE: Able Marine Energy Park South Humber Bank

On behalf of SMart Wind Limited, I write in support of your development. SMart Wind Ltd. is a 50/50 joint venture between Mainstream Renewable Power and Siemens Project Ventures GmbH and as such is the only supply-chain-led consortium solution to large-scale far-offshore. In January 2010, [REDACTED] secured the exclusive development rights to The Crown Estate's Hornsea (Zone 4) covering an areas of almost 5,000km² in the North Sea offshore the Humber Estuary and from which the company aspires to deliver 4GW of electricity by 2020, enough to meet approximately 4% of all electricity demand in the UK and power approximately 3 million homes.

This is just one project within a 15GW Mainstream portfolio of global renewable energy developments and most recently Danish group, DONG Energy, acquired 1/3 of the first two projects in the Hornsea Zone, called Heron Wind and Njord, each approximately 500MW in size. As part of the acquisition, DONG also secured options over the second two projects in the Hornsea Zone too, recently named Optimus Wind & Breesea through SMart Wind's four-year SMart Futures Schools' engagement programme, delivered in collaboration with Humberside Engineering Training Association (HETA). It is worthy of note that, to date, DONG Energy has constructed more offshore wind farms than any other company in the world.

Your visionary port development is crucial to the offshore wind sector for a number of reasons. It provides much needed additional quay capacity in the heart of the UK East Coast presenting a unique opportunity to facilitate a truly integrated UK offshore wind cluster. This development is of an unprecedented scale providing the large areas of land that the sector requires for the manufacture, storage and assembly of next generation offshore wind turbines and foundations.

AMEP will be an exceptional ports facility, designed bespoke for the offshore wind sector. Its size offers the opportunity for tier one suppliers to be located alongside OEMs and allowing the sector to become more competitive on number of fronts, playing a vital role in achieving cost reductions and increasing UK content. Its location makes it effective as a deployment port for some of the major European wind farms allowing maximum utilisation of next generation installation vessels.

AMEPs development will provide a more competitive dynamic to the Humber Estuary and the sector as a whole. Independent research commissioned by Mainstream Renewable Power has quantified a significant boost to UK gross domestic product from offshore wind by 2020 and the creation of close to 100,000 jobs - sites like AMEP are required to help capture this benefit.



SMart Wind Limited is a joint venture
between Mainstream Renewable Power
and Siemens Project Ventures GmbH

Delivering a New Energy

We believe that AMEP is a project that will unlock significant, sustainable economic growth assisting the offshore wind sector to overcome a number of challenges and the UK to potentially become a European export market for next generation offshore wind turbines.

In the meantime we wish you the best of fortune with your application and look forward to working with you in the near future.

Yours faithfully,



Steve Clarke
UK Content Manager



Steve Clarke
UK Content Manager

Mainstream Renewable Power	Tel: +44 (0)207 776 5500
11th Floor	Mob: +44 (0)7500 603597
140 London Wall	Email: steve.clarke@mainstreamrp.com
London EC2Y 5DN	Skype: steve.clarke.mainstream
UK	www.mainstreamrp.com



SMart Wind Limited
11th Floor, 140 London Wall
London, EC2Y 5DN
United Kingdom

Steve Clarke
UK Content Manager

Office: +44 (0)207 776 5520
Mobile: +44 (0)7500 603597
E-mail: steve.clarke@mainstreamrp.com
Skype: [steve.clarke.mainstream](https://www.skype.com/user/steve.clarke.mainstream)

STRABAG Offshore Wind GmbH · Segelckestraße 45–47 · 27472 Cuxhaven

STRABAG

STRABAG
Offshore Wind GmbH

To Whom It May Concern

Your reference
Your letter
Our reference neu

Robert Foyle
Phone +353 1 842 7888
Fax +353 1 842 3821
Mobile +
robert.foyle@strabag.com

Document reference number (DokZ)
STRABAG Ref L

Date 12th June 2012

Able Marine Energy Park (AMEP) South Humber Bank

STRABAG has been in discussion with Able for over 18 months regarding our planned facility to serial-manufacture and deploy Gravity Based Foundations (GBF) for the offshore wind sector.

As we move towards providing innovative solutions to the offshore wind industry we expect UK ports to do the same. AMEPs rare ability to provide effective quays for the deployment of fully assembled turbine and foundations makes it a site of particular interest for STRABAG. This development shall be future proofed to provide the right infrastructure and facilitate future innovation from the sector.

Our GBF design has a base of 40m X 40m and can be up to 65m in height, 200m with Turbine and Blades weighing in excess of 6,000t. To industrialise the manufacture of these large areas of land near deep water would be required.

In order to meet UK Renewable Energy targets more 'suitable' ports need to be developed. When we were looking at UK ports facilities we identified a lack of suitable locations and developments. Recent start of development of a € multi million serial production facility at Cuxhaven in Germany demonstrates our commitment to the sector and, given a sufficient pipeline of Round 3 Projects, we are considering to develop a similar facility in UK on AMEP potentially creating hundreds of jobs for the Humber Region.

Yours sincerely

Sent Electronically By E Mail without Signature

Robert Foyle
Civil Engineer
Representative for UK & Ireland



TO WHOM IT MAY CONCERN

11 June 2012

Letter of Support - RGF Round 3

Able Marine Energy Park (AMEP) South Humber Bank

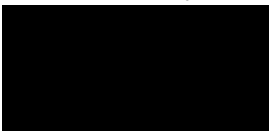
Tata Steel supports the AMEP development and recognises the pivotal role it can play in attracting an integrated offshore wind supply chain to the UK.

Tata Steel has been in regular discussion with Able and its future tenants for a number of years. Our Scunthorpe facility has direct rail link to the AMEP site allowing the efficient supply of steel plate for use in the offshore wind tower manufacturing facilities located on AMEP. Furthermore, our Hartlepool tubes facility (supplying steel to the offshore wind turbine foundation manufacturers) is situated directly behind Able Seaton Port allowing supply of steel to the quays at AMEP.

Tata Steel has a strategic interest in securing more business from the offshore wind sector and this becomes easier to do if the sector is located here in the UK, manufacturing components that require our steel. The AMEP development further enhances the Humber's offer and provides a great opportunity for the UK to attract a truly integrated offshore wind cluster.

As the sector strives to reduce its costs and increased UK content levels it is necessary to provide the right facilities for the offshore wind turbine manufacturers to locate. This requires deep sea heavy-duty quays and large areas of land for the manufacture, storage, assembly and deployment of offshore wind turbines. AMEP not only aims to provide all of these requirements but does so within a location that is well suited to enable Tata Steel to further enhance its competitiveness to this industry.

Yours faithfully




Russell Codling
Marketing Manager, Energy & Power

TATA STEEL

Energy & Power

PO Box 101 Weldon Road Corby Northants NN17 5UA United Kingdom
T: +44 (0)1536 402121 T: +44 (0)1536 404828 (direct) F: +44 (0)1536 404004 russell.codling@tatasteel.com


Tata Steel UK Limited Registered Office 30 Millbank London SW1P 4WY Registered in England No. 2280000

	<p>OVERALL SUMMARY OF CASE ABLE MARINE ENERGY PARK TR030001</p>	<p>Date: 23-Nov-2012</p>
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ANNEX B

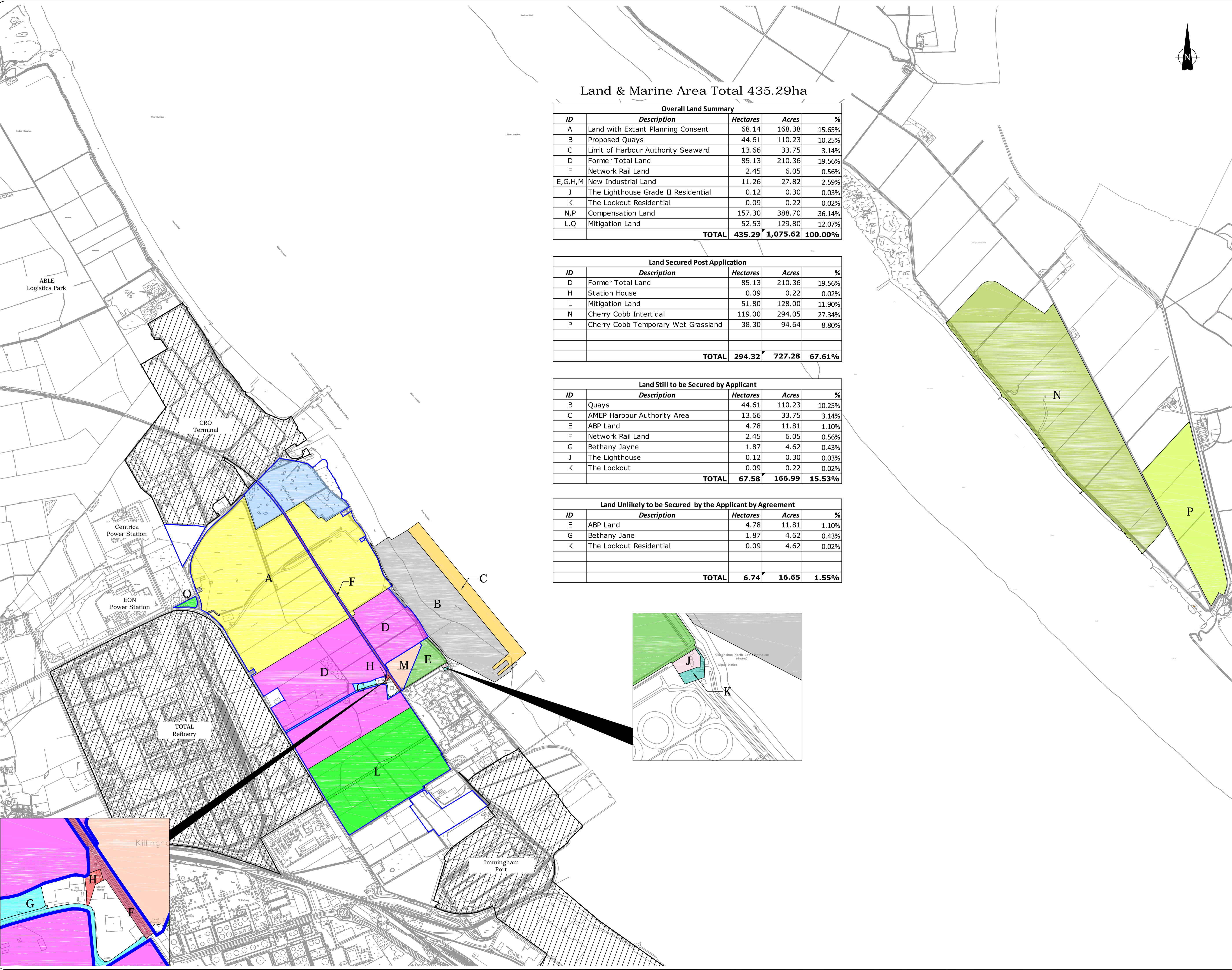
Programme of Compensation works



	<p>OVERALL SUMMARY OF CASE ABLE MARINE ENERGY PARK TR030001</p>	<p>Date: 23-Nov-2012</p>
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ATTACHMENT

CPO LAND PLAN
No: AME-08145A



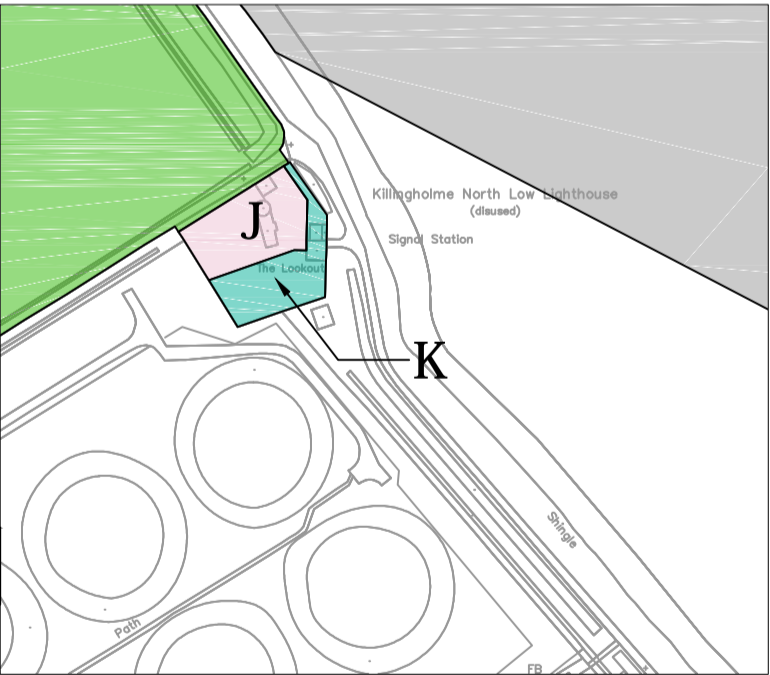
Land & Marine Area Total 435.29ha

Overall Land Summary				
ID	Description	Hectares	Acres	%
A	Land with Extant Planning Consent	68.14	168.38	15.65%
B	Proposed Quays	44.61	110.23	10.25%
C	Limit of Harbour Authority Seaward	13.66	33.75	3.14%
D	Former Total Land	85.13	210.36	19.56%
F	Network Rail Land	2.45	6.05	0.56%
E,G,H,M	New Industrial Land	11.26	27.82	2.59%
J	The Lighthouse Grade II Residential	0.12	0.30	0.03%
K	The Lookout Residential	0.09	0.22	0.02%
N,P	Compensation Land	157.30	388.70	36.14%
L,Q	Mitigation Land	52.53	129.80	12.07%
TOTAL		435.29	1,075.62	100.00%

Land Secured Post Application				
ID	Description	Hectares	Acres	%
D	Former Total Land	85.13	210.36	19.56%
H	Station House	0.09	0.22	0.02%
L	Mitigation Land	51.80	128.00	11.90%
N	Cherry Cobb Intertidal	119.00	294.05	27.34%
P	Cherry Cobb Temporary Wet Grassland	38.30	94.64	8.80%
TOTAL		294.32	727.28	67.61%

Land Still to be Secured by Applicant				
ID	Description	Hectares	Acres	%
B	Quays	44.61	110.23	10.25%
C	AMEP Harbour Authority Area	13.66	33.75	3.14%
E	ABP Land	4.78	11.81	1.10%
F	Network Rail Land	2.45	6.05	0.56%
G	Bethany Jayne	1.87	4.62	0.43%
J	The Lighthouse	0.12	0.30	0.03%
K	The Lookout	0.09	0.22	0.02%
TOTAL		67.58	166.99	15.53%

Land Unlikely to be Secured by the Applicant by Agreement				
ID	Description	Hectares	Acres	%
E	ABP Land	4.78	11.81	1.10%
G	Bethany Jane	1.87	4.62	0.43%
K	The Lookout Residential	0.09	4.62	0.02%
TOTAL		6.74	16.65	1.55%



KEY		
	Estates Boundary	
	AHPL Land with extant planning consent for port related storage	68.14ha
	Proposed Quay	44.61ha
	Limited of Harbour Authority Area seaward of the quay	13.66ha
	Former Total Land	85.13ha
	ABP Land	4.78ha
	Network Rail Land	2.45ha
	Bethany Jayne	1.87ha
	Station House Residential Dwelling	0.09ha
	The Lighthouse Grade II Residential Dwelling	0.12ha
	The Lookout	0.09ha
	Mitigation Area	51.80ha
	AHPL Owned	4.13ha
	Cherry Cobb Intertidal	119.00ha
	Cherry Cobb Temp. Wet Grassland	38.30ha
	Existing Mitigation	0.73ha
TOTAL		435.29ha

A	19/10/12	Preliminary Issue	RK	No	PMS
Rev	Date	Comments	Drw	Chk	App



able UK Ltd

able House

Billingham

Tyneside

TS8 1PX

United Kingdom

Tel : +44(0)1642 800080


Fax : +44(0)1642 855555

info@ableuk.com

www.ableuk.com

Project:	ABLE Marine Energy Park
Client:	ABLE Humber Ports Ltd
Title:	Land Assembly Progress Report Ver. 2

PRELIMINARY			
Scale:	Drawn	Checked	Approved
1:12,500@A1	R Keir	N Etherington	PMS
Date:	19/10/2012	19/10/2012	19/10/2012
Drawing No.	AME - 08145	Revision:	A

	<p>OVERALL SUMMARY OF CASE ABLE MARINE ENERGY PARK TR030001</p>	<p>Date: 23-Nov-2012</p>
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ANNEX C

Report on Coal & Biomass



**COAL AND BIOMASS – INFRASTRUCTURE IMPLICATIONS
THE SOUTH HUMBER BANK
A REALITY CHECK**


**Able Marine Energy Park
Able Humber Port, Killingholme, North Lincolnshire DN40 3DZ**

November 2012



Able Humber Ports Ltd
c/o Able House
Billingham Reach Industrial Estate
Haverton Hill Road
Billingham
Teesside TS23 1PX

Tel: 01642-806080 Fax: 01642-655655


	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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APPENDIX 4	Plan: Killingholme HIT – Goxhill Proposed Chord
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APPENDIX 7	Rail Gate Locations: Plan No. AHP-01147B
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	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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1. **REPORT OBJECTIVE**


This document is provided to summarise the position regarding the apparent implications for infrastructure generated by a perceived (but wholly unrealistic) increase in demand for both Coal and Biomass imports through Immingham. Indeed this assumption of growth appears to conveniently form a principal basis of ABP's objections to the AMEP development which in turn has generated a so-called 'need' for both a new Western Deep Water Jetty and the reinstatement of the Killingholme Railway Loop.

2. **INTRODUCTION**

- 2.1. Able Humber Ports Ltd (ABLE) is developing AMEP as a multi-user port facility specifically concentrating on manufacturing, assembly and installation of structures for offshore energy with the predominant focus on the offshore wind sector.
- 2.2. The offshore wind industry is embarking upon a period of unprecedented large-scale industrial development driven primarily in the UK and by the singular opportunity, facilitated by The Crown Estate, for 'Round 3' wind farms.
- 2.3. Round 3 comprises nine individual wind farms that will initially generate over 36 gigawatt (GW) of electricity around the coast of the UK.
- 2.4. Based upon an average of 6 megawatt (MW) per turbine this would equate to over 6,000 turbines; 67% (over 4,000) are within 12 hours sailing time from AMEP.
- 2.5. The development of offshore wind turbines is in its relative infancy with the majority of turbines installed offshore to date being modified versions of those deployed onshore.
- 2.6. The major manufacturers of wind turbines (OEMs) are currently engaged in finalising the design and testing of these next generation wind turbines.
- 2.7. The largest of the next generation turbines is currently 6MW (Siemens) and 7MW (Vestas) however designs and test facilities are in preparation for turbines with a generating capacity up to 20MW (see press articles Appendix 1).
- 2.8. In addition to the much larger turbines, the sector is developing new methods of handling and installing turbines with the ultimate aim of installing completed commissioned turbines in a single operation. This will require larger cranes and handling equipment as well as specialist vessels but the significant benefit will be in reducing work offshore, significantly reducing costs, whilst at the same time increasing safety.


	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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- 2.9. The international companies currently involved in the development of offshore wind turbines include, but are not limited to, the following:-
- Alstom
 - Areva
 - China Shipping Industries
 - Dongfang Electric
 - Doosan
 - Enecon
 - Gamesa
 - GE Wind
 - Goldwind
 - Guodian United Power Technology Co Ltd
 - Hyundai
 - Mitsubishi
 - REpower
 - Samsung
 - Shanghai Electrics
 - Siemens
 - Sinovel
 - Suzlon
 - Toshiba
 - United Power
 - Vestas
 - Xiangtan Electrical Manufacturing
- 2.10. The majority of the above have significant balance sheet strength across a variety of disciplines and are seeking to become major international players in the burgeoning offshore wind sector. They are also expecting key members of their supply chain to locate alongside them to ensure economies of scale and to achieve greater manufacturing efficiencies (see article at Appendix 2).
- 2.11. It is important to note that the sector remains in an embryonic and evolving state. Its precise requirements (and products) are, in part, still in the design stage and the nature of the extensive enquiries that are being handled are in a state of flux. As a consequence, the responses from any port developer have to be flexible enough to react to those evolving needs.

	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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3. **ABLE MARINE ENERGY PARK**

- 3.1. AMEP is, by any measure, a large site - circa 368 ha (911 acres) - and is part of the Able Humber Port (AHP) which itself extends to 1,062 ha (2,624 acres). AMEP will have circa 1,200m of new deep-water quays and uniquely will provide the space and facilities for a truly integrated manufacturing cluster serving multiple OEMs and their supply chain(s).
- 3.2. AMEP is in advanced discussions with a number of OEMs (AMEP has the capacity to accommodate up to three) along with their respective and inter-related supply chains.
- 3.3. Many potential investors have made UK Government aware of AMEP's criticality to the offshore wind sector and its unique ability to provide a fully flexible port side location for the manufacture and deployment of next generation turbines.
- 3.4. AMEP is also the largest single Enterprise Zone in the UK, which further reflects the UK Governments' commitment to unlock the areas full economic potential through major inward investment.


	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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4. **RAIL POSITION - BACKGROUND**

- 4.1. AMEP is bisected by the Killingholme 2 Branch Line (KIL2) which runs from the northern boundary of ABP Immingham, through the AMEP site, through the Humber Sea Terminal (HST, now C.RO) and into the Able Logistics Park, where the line terminates (see plan in Appendix 3).
- 4.2. There is circa 219 ha (542 acres) of the AMEP site on the west side (Rosper Road) of the railway line and this will be the location for a number of large manufacturing facilities, the output of which will need to be transported to the quays for onward export.
- 4.3. The land to the east (seaward) side of the railway is primarily required for storing inbound materials and outbound products, for assembling components and laying out loads to be collected by installation vessels.
- 4.4. The layout requirements of major clients is for their developments to align west to east to enable the appropriate product flow. An arrangement that also optimises site utilisation.
- 4.5. The railway line itself may well be required by AMEP given the significant potential demand for steel from the nearby Tata Steelworks at Scunthorpe.
- 4.6. The existing line has not seen a commercial train movement since 2007 and has seen little traffic in the previous 20 years.
- 4.7. In promoting the scheme ABLE had (in January 2011) reached an in-principle agreement with Network Rail (NR) to purchase the track on the basis that ABLE retain the Connection Agreement for Humber Sea Terminal (now C.RO).
- 4.8. It was agreed at the time that this would be the best option and that it would provide operational flexibility for both the size and location of level crossings and cover the need for drains and services to pass under the railway.
- 4.9. At no time in those discussions did NR mention the potential of reopening the Killingholme Loop - in fact NR confirmed that the option was no longer required - hence their willingness to sell.
- 4.10. NR's clear preference was that ABLE would purchase all of the line from the northern exit point at Immingham Port through to the main line at Goxhill. ABLE confirmed that this was acceptable.
- 4.11. In October 2011, and with what represented a fundamental shift in their position, NR withdrew the potential sale for apparent 'operational reasons' – most likely as a direct consequence of ABP's determination to protect their dominant position on the Humber. ABP's stance and actions were described (at the AMEP Planning Hearing 6th September 2012) by the elected Leader of North Lincolnshire as an act of '...naked self-interest and protectionism'.

	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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- 4.12. ABLE submitted the Application to the Infrastructure Planning Commission on 17th December 2011 and, following the change in NR's stance, the Applicant sought the power of compulsory purchase in respect of the NR land.
- 4.13. During the AMEP planning process a new project – the ABP Headshunt linked to the proposed HIT3 (Biomass) project at Immingham – emerged. As a consequence and as soon as ABLE were aware of the potential scheme, ABLE withdrew the land south of Station Road from the compulsory purchase order.
- 4.14. THE KILLINGHOLME LOOP
- 4.14.1. From an overarching strategic point of view, and over the last 20 years or so, a concept known as the 'Killingholme Loop' – of which the KIL2 line would form an early element – has been the subject of extensive study and review. If constructed it would create a loop – a so-called 'merry-go-round' – in which the main line entering Immingham Port from the west would circulate back on to the main line, via AMEP, HST and ALP, ultimately rejoining the same main line from Goxhill on reconstructed track.
- 4.14.2. The Budget costs in 2009 ranged from £35m to £54m and in January 2009 ABP, NR and local stakeholders concluded that the development was not viable.
- 4.14.3. In any event the proposed scheme would face a variety of other significant challenges including:-
- 4.14.3.1. The need to acquire new land to affect the new chord at the point at which it joins the main line (see plan in Appendix 4).
- 4.14.3.2. The 'existing' route is overgrown and has become an interesting habitat for a variety of wildlife, flora and fauna (see photographs in Appendix 5).
- 4.14.3.3. The route passes through the Killingholme Haven Pits - a site of special scientific interest (SSSI).
- 4.14.3.4. The development of the Loop would require a full Environmental Impact Report and complex/rigorous incombination deliberations which would have to be measured on the assumption that the AMEP development will be operational by the time KIL2 is restored.
- 4.14.4. Whilst North Lincolnshire Council had originally supported the Killingholme Loop that position was only to aid the development of the land that is now being developed for AMEP. As a consequence, that support has been withdrawn.

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4.15. ABP is, by a considerable margin, the principal opponent of the AMEP development and as such they – despite a previous and public stance to the contrary – have recently sought to rekindle interest in the Killingholme Loop. Much of this appears to be based on potentially flawed assumptions regarding a conveniently revised Port of Immingham Masterplan which was ‘hurried through’ (John Fitzgerald ABP Grimsby and Immingham Port Director, 16th October 2012). The Masterplan suddenly placed greater emphasis on the ongoing requirements for Coal, a new (extraordinary) demand for imported biomass products (see later) and the requirement for a handily located western deepwater jetty – in the same position as AMEP’s quays.

4.16. ABLE/NETWORK RAIL – RECENT DISCUSSIONS

4.16.1. With the change of stance by NR (see 4.11) ABLE commenced discussions to pursue the potential leasing of the rail land.

4.16.2. NR proposed Heads of Terms but they were unreasonable and unworkable for a variety of reasons – not least ABP’s approval would have to be sought in the case of an alternative route being provided.

4.16.3. A counter-proposal by ABLE was subsequently rejected by NR.


4.16.4. In summary NR, regardless of any need, require ABLE to construct new bridges (even without any train movements) and would only permit one level crossing (as opposed to the four that currently exist). This contrasts starkly with the current operational safety that is obviously acceptable at both ABP Immingham and C.RO and is presumably on the basis of the erroneous assumption that the line is fully operational.

4.16.5. The Office of Rail Regulation (ORR) had taken a different and wholly practical view: “.... *the proposed construction lies within an existing port facility and will generate only two trains per day and so seems unlikely to have a material affect on the existing network.*” (Appendix 6)

4.17. C.RO/C.GEN

4.17.1. As stated C.RO has an existing Connection Agreement with NR.

4.17.2. ABLE has confirmed that C.RO’s rights of access will be maintained and this is covered within the AMEP Development Consent Order through Protective Provisions for not only C.RO but also for their ‘affiliate’ C.GEN should they ever have a need for the ‘maximum of 5 train deliveries....each day’ – C.GEN Preliminary Environmental Information Report (PEIR) document, section 3.3.3 [b].

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4.18. ABLE has had discussions with both parties. C.RO has no known requirements for trains but obviously wish to maintain their existing access rights. The C.GEN project is more speculative and we understand will be subject to a planning application (NID – DCO route). It encompasses a gas-fuelled power station that, at some point, could conceivably be converted into a coal power station. Their (PEIR) frequency of use would not have a significant detrimental effect on AMEP and one that could be accommodated.


4.19. THE SAFETY CASE

4.19.1. ABLE has previously adopted NR's suggestions to manage the site with gates as shown on the attached plan no. AHP-01147B Rail Gate Locations (see Appendix 7).

4.19.2. This would prevent any trains accessing the site whilst the crossings were in use. Equally site operations across the line would cease, allowing trains through at the agreed times.


4.19.3. ABLE has had discussions with C.RO and C.GEN and the principle of agreeing time slots etc has been agreed and ABLE are just awaiting a detailed response.

4.19.4. To ensure safety and that no plant, machinery, traffic or personnel had access to the lines when a train was using the AMEP line, the track would be fully enclosed with the east and west of the line being fenced off with gates at the crossing points. A system would be installed in which the gates enabling trains onto the site would be automatically disabled and closed until such a time that the gates for the crossings on the site were closed and the line was clear of any obstruction or personnel.

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5. **PRACTICALITIES**

- 5.1. The AMEP planning application showed three of the existing four level crossings effectively relocated a short distance on site to facilitate an optimum and logical overall site layout.
- 5.2. Four crossings have been determined on the basis of minimum specific client needs:-
 - 5.2.1. Whilst it is true that the concept of a Cluster will certainly encourage elements of collaboration the sector is also fiercely competitive and intellectual property is closely guarded. It will not be acceptable for competing companies to require regular access to each other's sites.
 - 5.2.2. As previously mentioned the site must be future-proofed and afford maximum flexibility as new products and techniques emerge. One example is that a number of clients are currently looking at fully assembling the turbines on site then lifting them directly onto specialist installation vessels – the so called 'plug and play' approach. This would produce major benefits and savings in terms of both safety (significantly reduced activity offshore) and an estimated ten-fold cost advantage. AMEP has been highlighted by the sector as one of very few European Port locations that can physically facilitate this work concept – based on no air draft restrictions or proximity to residential dwellings.
 - 5.2.3. Since the Application was submitted ABLE has received significant enquiries for the manufacture of large concrete gravity based foundations (GBFs). Whilst not part of the application – and potentially requiring subsequent planning permissions – these large items, with a labour-intensive production process, could not be accommodated without level crossings.

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6. **HANDLING EQUIPMENT & MOVEMENTS**

6.1. By its very nature the sector requires very large plant, machinery, cranes and equipment. It is envisaged that loads (GBFs) up to 8,500Te will need to be moved to the quayside area in the future by self propelled modular transporters (SPMT).

6.2. HARBOUR CRANES

6.2.1. The largest port harbour cranes available will be required for loading and unloading large project cargo to/from vessels. Currently the two cranes that fall into this category are the Gottwald HMK 8810 and the Liebherr 600 circa 38m high and weighing circa 550t (specification sheets for these are attached Appendix 8).

6.2.2. These wheeled cranes need to be able to be moved around the whole of the AMEP site to maximise utilisation, minimise costs and perform the daily duties for which they are intended.

6.2.3. Given their scale, and for stability and weight reasons, these cranes cannot use bridges.

6.3. CRAWLER CRANES


Cranes are currently needed with a lifting capacity of 1,350Te (weighing itself 1,000Te with a height of 170m) with a future anticipated need for over 2,000Te capacity cranes and again it would not be possible for them to use bridges. (Specification sheets for these are attached Appendix 9).

6.4. BLADES

6.4.1. Currently the longest blade in production is a Siemens model at 75m. One company is already planning for an 83m blade to be available within the next year and it is envisaged that as turbines continue to develop (10M- 20MW) the potential size may well exceed 110m (see attached Appendix 10).

6.4.2. Blades will be manufactured at the eastern end of the site (adjacent to Rosper Road) and need to be transported to the quay area for assembly/despatch. Due to their length it will not be possible to take them over conventional bridges without belling or hitting the road at the front or rear. The only solution is to construct specialist (expensive) bridges with a very low angle. This approach would severely constrain proposed layouts and displace valuable yard area(s). The bridge approach would bisect other client's premises and if the bridge was that long - as shown on plan No. AME-05039A (attached at Appendix 11 – marked B2) the only way clients from B could have access to the bridge would be through the land leased to client A.

6.4.3. Similarly, clients on G and H would have to go through either clients E or F's areas to gain access to the bridge.

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6.5. TUBES (TOWERS & PILES)

Plans showing cross sections of Tubes traversing the bridge are shown in Appendix 12 but the situation is further exacerbated by the weight (up to 1,000Te) and therefore the bridge design would be more heavy duty and even more costly than that for blades.

6.6. The longer and heavier components cannot be built on the western side of the railway due to the large extent of storage and assembly space required closer to the quays.

6.7. The main operation for installing turbines from AMEP will be via specialist installation vessels that will arrive and dock circa once per week to collect circa 4-5 complete sets of turbines. In the period when the vessel is installing, the operation on site has to move all of the components to the assembly area in preparation for loading.

6.8. The design has been completed on an average of 165m of quay width per client operating installation vessel. Clients are typically requesting a minimum of 6 ha (14.8 acres) behind the quay and need an assembly location to be circa 360m long.

6.9. It is important to note that operational rail track and level crossings are an integral feature at the majority, if not all, of the existing ports in Europe that are currently facilitating or plan to facilitate the offshore wind energy sector.

6.10. The ability to move large components across the tracks is well understood and incorporated in these existing facilities.

6.11. Appendix 13 shows aerial images of level crossings at some key European ports that are operating or available for the offshore wind sector. Such ports include:-


6.11.1. Bremerhaven – one of Europe’s established offshore wind ports hosting investors such as REpower, Areva and WesserWind (to name a few).

6.11.2. Esbjerg – one of Europe’s established offshore wind ports hosting investors such as Vestas, Siemens and Blue Water Shipping (to name a few).

6.11.3. Cuxhaven (Lower Saxony) – one of Europe’s established offshore wind ports hosting investors such as STRABAG, AMBAU and Cuxhaven Steel (to name a few)


6.11.4. Dundee – Currently being marketed by the Scottish Government as a potential location for offshore wind investors.

6.11.5. Sheerness – Currently being marketed by Peel Ports as a potential location for offshore wind investors.

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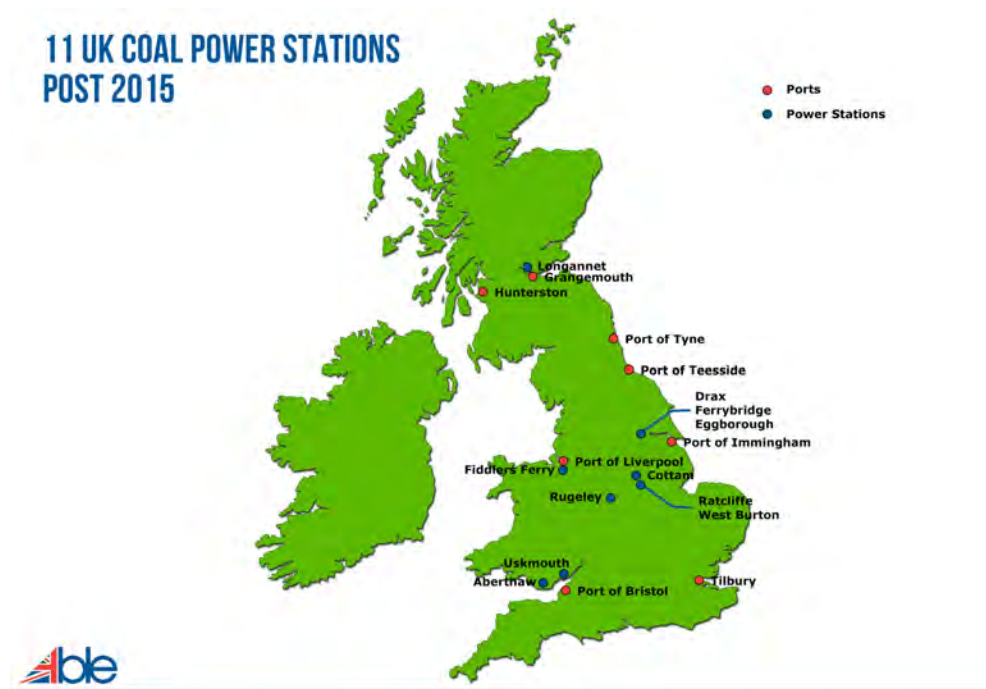
7. **COAL & BIOMASS POWER STATION REQUIREMENTS**

- 7.1. ABP have made much of the apparent need for infrastructure generated by a perceived (but wholly unrealistic) increase in demand for coal and biomass imports through Immingham.
- 7.2. Equally however we know that bespoke biomass fuelled power stations are now less favoured by the Regulatory/Subsidy regime and are also attracting extensive opprobrium from an increasing number of environmental groups.
- 7.3. A significant number of projects – including two by Drax, two by Centrica and one by Dong – have been cancelled (see Appendix 14).
- 7.4. Currently the combined output of the five largest bespoke and operational biomass power stations is only 196MW and all have local non-imported feedstock.
- 7.5. Of the nine larger consented (Section 36) bespoke biomass power stations (>49MW) none are currently operational, three are now cancelled, three are now on hold and only three are still considered to be 'live'. Of those that are still considered live two have only a total potential output of 118MW.
- 7.6. Given the above the most likely requirement for imported biomass will be for either the co-firing or conversion of existing coal fired power stations.
- 7.7. Whilst co-firing had originally been described as a likely route to mitigate the impacts of CO2 emissions the subsidy regime is now viewed to be far more favourable for the full (and effectively exclusive) conversion of individual power stations to biomass. The fuel would most likely be either imported wood pellet or chip.
- 7.8. There are sixteen major coal fired power stations on the UK mainland ranging from Uskmouth (363MW) to Drax (3,870MW) producing almost 29,000MW from over 41 million tons of largely imported coal.
- 7.9. Of the sixteen, five have opted to close (through opting out of the Large Combustion Plant Directive [LCPD] and must close by 2015): Cockenzie, Tilbury, Kingsnorth, Ironbridge and Didcot (closes March 2013). This would remove some 7,000MW of generating capacity and reduce (by some 7 million tons) the requirement for imported coal – this in turn will release some considerable port importation capacity.
- 7.10. The remaining eleven operational power stations produce over 21,000MW of power and consume 33.9 million tons of coal.
- 7.11. In 2010 total coal demand was 51 million tons of which 41 million tons was for power generation. We know that 90% of coal for power generation is imported (37 million tons) but there is very little recent forecast information on UK coal output – which, according to DECC, is subject to significant uncertainty.

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- 7.12. The future strategies of the eleven operational power stations are in varying stages of development and most public pronouncements are based around 'keeping their options open'.
- 7.13. Of the eleven – Aberthaw and Uskmouth (both Wales), Fiddlers Ferry (North West) and Longannet (Scotland) are remote from Immingham. The combined output of the four is 6,200MW with coal consumption of 8.9 million tons.
- 7.14. The remaining seven have a production capacity of almost 15,000MW derived from 24.7 million tons of coal.
- 7.15. Figures 1 and 2 (see below) - illustrate the location and the public position in respect of the seven power stations referred to in the ABP Masterplan. (Please note that Ferrybridge, Drax and Eggborough are noted by the same location indicator, as are Ratcliffe and West Burton).

Figure 1





	<p align="center">COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p align="center">ABLE MARINE ENERGY PARK</p>	<p align="right">Date: 22-Nov-12</p>
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Figure 2

Station	Owners	Coal (mt)	Fuel	Capacity (MW)	COMMENTS	POTENTIAL (mt)
Ferrybridge C	SSE	2	Coal	1,960	No Biomass Plans	-
Rugeley	International Power / Mitsui	2	Coal	1,006	Considering FEED study to convert to Biomass	?
Drax	Drax Power Ltd	10	Coal	3,870	Commitment to convert three of six power trains to biomass - each to require (2017) 2.3m tons of biomass per year - a total of 6.9m tpa	6.90
Cottam	EDF	4	Coal	2,008	EDF only publicly discuss CCS - no Biomass Plans	-
West Burton	EDF	2	Coal	2,012	EDF only publicly discuss CCS - no Biomass Plans	-
Eggborough	Eggborough Power Ltd	2	Coal	1,960	Eggborough Power aims to convert all four units at its 2GW coal-fired plant to biomass. These would consume over 7 million tonnes per year of wood pellets if all units underwent conversion. The vast majority of these will be imported.	7.50
Ratcliffe	E.On	4	Coal	2,000	No immediate Biomass Plans	-
Total		25		14,816		14.40

- 7.16. Port of Tyne have an agreement to import 2 million tons per year of biomass for Drax.
- 7.17. The ABP Masterplan describes the historic position regarding coal importation which grew from 8 million tons in 2001 up to 13 million tons in 2011.
- 7.18. What does appear strange however is the assertion that 15 million tons of coal will be imported by 2020 – despite the fact that for the UK as a whole there will be a 17% reduction in overall UK coal demand for electricity generation.
- 7.19. Equally strange is the fact that the 15 million ton level for 2020 is also set to continue 'until at least 2030'.
- 7.20. Network Rail's strategy is currently determined by the 2011 Northern Route Utilisation Strategy. It has identified gauge and signalling improvements (to the track serving Immingham) – it does not mention the Killingholme Loop. The circa £6.5m investment would enable a total in excess of eighty train paths per day in and out of the port and significantly increase individual train capacity by up to a third.
- 7.21. Currently the line is at circa 50 train paths per day (each direction).
- 7.22. The signalling improvements have already been approved and will increase the frequency of train paths from today's 4 per hour (50 per day) up to 7 from Immingham to the Doncaster Chord. The gauge enhancement increases capacity not frequency.

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- 7.23. The Railfreight Group and the Railfreight Operators Association use forecasts from MDS as their industry bible (ABP quote this document in their Masterplan). The 2011 iteration of their report (ABP quote the 2007 version) shows train movements per day at Immingham of between 50-75 rising to 75-100 by 2020 (assuming a 20% increase in train length and a six day week) but a decline back to 50-75 from 2030.
- 7.24. Drax are, by some margin, the markets most significant player with a medium term requirement to convert half of their capacity from coal to biomass. Their stated maximum (current) coal usage is 13.14 million tons per annum (in 2010 the actual use was 9.5 million tons). Their published aspiration for conversion envisages an initial single power unit conversion (June 2013) with the potential for two more by 2017. Each unit requires a maximum of 2.3 million tons per annum and so by 2017 maximum imported biomass for Drax could be as much as 7 million tons. Of this amount it is understood that Drax's contract with the Port of Tyne (to 2018) will handle up to 2 million tons per annum and that at other ports (Immingham in particular) the reduction in coal imports (by up to 6 million tons per annum) will release port handling capacity. It is also understood that Drax has arrangements with Hunterston Port - currently use for coal importation.
- 7.25. Eggborough is likely to be the next most important potential conversion. Indeed this is their declared intent and could see the full conversion of their entire 1,960MW generating capacity. ABLE has learnt that the annual biomass requirement will not exceed 7.5 million tons (in contrast to some reports of circa 15 million tons per annum of wood pellets). It is also understood that in sourcing the product (USA) the operator would have a strong preference to utilise a west coast port for importation. To this end it is worth noting that, in relative terms, the cost of terrestrial train transportation is relatively modest compared to transatlantic shipping costs. As an example, there is an additional circa 12 hours steaming to Immingham rather than say Liverpool or Bristol. With the majority of imported biomass likely to come from North America this circumstance will apply to other potential importers.
- 7.26. SSE at Ferrybridge are in a very different position, as part of a multiple and diverse utility business. It is understood that they will be far more likely to invest in other forms of power generation and to maximise the various subsidy options. Drax and Eggborough, on the other hand, are businesses with a single option.
- 7.27. We understand that neither of EDF's Power Stations – Cottam and West Burton – have declared any intention for conversion.
- 7.28. E.ON's Ratcliffe Power Station is supplied (coal) from Liverpool and whilst the power station has no declared plans for conversion, the Port of Liverpool has advanced plans to handle 3 million tons of biomass per annum including a 18.2 ha (45 acre) site with 34m high covered storage.
- 7.29. Rugeley Power Station is the smallest of the seven and is undertaking an initial analysis of conversion potential. It currently uses 1.6 million tons per annum of coal to generate up to 1,006MW.

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- 7.30. Even the most optimistic analysis of the above would find it virtually impossible to conclude that by 2020 Immingham could be importing 8 million tons per annum of biomass, let alone 10 million tons per annum by 2030 (revised Immingham Port Masterplan October 2012). It is inconceivable that other better located UK Ports will not gain any of that business. It is certainly worth noting that the vast majority of coal imported at Immingham is from either Russia (from the east) or from Columbia (de-bulked at Rotterdam from the east) whilst the vast majority of imported biomass will be from the west and from North America in particular.
- 7.31. In section 2.5 of ABP's 'final' Masterplan issued October 2012 it states that the information, coincides with the National trade forecasts produced for the Department for Transport (2006 and updated in 2007 and 2009) this statement is not correct in relation to the tonnage forecasts. ABP significantly increased their forecast from the original draft Masterplan issued in 2010 to the figures in the Final Masterplan issued during the AMEP planning application hearings.
- 7.32. We have compared the figures provided by ABP in their draft Masterplan to the new Masterplan and the differences, especially to 2020, are considerable. Overall, the additional number of trains per day in the period 2011-2020 increases from 20 to 24 equating to total train movements of 17,865 (50 per day) which, in any event, is scheduled to be accommodated by the signalling and gauge enhancements.

ABP Original Master Plan		t / train	2008	2011	2020	2030	
	Coal		15,231,000		17,000,000	20,000,000	t
	Train Loads	1,464	10,404		11,612	13,661	Trains per year
	Biomass		114,000		5,000,000	7,500,000	t
	Train Loads	1,050	109		4,762	7,143	Trains per year
	Total trains per year		10,512	-	16,374	20,804	Trains per year
ABP New Master Plan			2008	2011	2020	2030	
	Coal			13,040,000	15,000,000	15,000,000	t
	Train Loads	1,464		8,907	10,246	10,246	Trains per year
	Biomass			62,000	8,000,000	10,000,000	t
	Train Loads	1,050		59	7,619	9,524	Trains per year
	Total trains per year in 0		-	8,966	17,865	19,770	Trains per year
	Difference		(10,512)	8,966	1,491	(1,034)	Trains per year
	Actual & New Forecast		10,512	8,966	17,865	19,770	Trains per year
	Change trains per yr from 2011				8,899	10,804	trains per yr
	% Change from 2011				199%	220%	trains per yr

- 7.33. ABP Masterplan states that it coincides with the National trade forecasts produced for the Department for Transport however the DoT are forecasting a reduction of 2% over the same period - a difference of 19% from ABP forecast.

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- 7.34. ABP have amended their Masterplan by proposing a requirement for the Killingholme Loop rail (which was not mentioned in the first draft) and the immediate need for a western deep-water jetty at South Killingholme – a project potentially stated for 2030 in the original draft.
- 7.35. It is of note that other ports are forecasting reductions in coal imports up to 2030 and no other port is anywhere close to being as optimistic with regards to biomass.
- 7.36. Another important factor when considering the validity of ABP Immingham's ambitions for future biomass volumes, relates to their lack of strategy surrounding the actual storage and handling of 'anticipated' biomass. Biomass is very different to coal (more voluminous) and the same assumptions for its storage and handling cannot be made. It not only requires circa 70% more storage capacity than coal but also requires more timely distribution and rotation in order to offset the risk of fire/explosion and the loss of calorific value. In essence, hi-tech storage and handling facilities are required. Given the predicted volumes of biomass to be handled at the Port of Immingham (and transported by train) it is unclear what plans (and investment) are in place as the Masterplan clearly shows that suitable land and space is not available (see article titled: The Beauty of Biomass at Appendix 15).
- 7.37. Notwithstanding all of the above and indeed the current (albeit evolving) policy adopted by DECC a recent report by RSPB, Greenpeace and Friends of the Earth claims that wood burning could produce up to 50% more CO2 emissions. Wood is less energy dense than coal and requires significantly more energy to harvest, transport, process and burn. Whilst the report endorses the use of indigenous timber for small-scale local biomass power plants it expresses concern regarding the pressure that this could place on the demand for the traditional uses of wood and the likely consequence of substitution by plastic and concrete which have far more damaging environmental impacts. In the US, Friends of the Earth are leading a campaign to ban the export of timber pellets. A copy of the joint report is attached at Appendix 16: 'Dirtier than coal? Why Government plans to subsidise burning trees are bad news for the planet'.
- 7.38. It also needs to be noted that the ongoing requirements for the importation of raw materials - iron ore and coke – for Tata Steel at Scunthorpe will reduce with their 25% reduction of output. Tata had operated a 4 million ton operation based on four active blast furnaces but this was reduced to three earlier this year. The impact sees a 2 million ton reduction in imported material through Immingham with a consequent increase in capacity.

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APPENDIX 1

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Mega Wind Turbines of 20 MW

ScienceDaily (Apr. 21, 2011) — The present largest wind turbines have a capacity of 5-6 MW. Following five years of research at the joint European project UpWind, led by Risø National Laboratory for Sustainable Energy, the Technical University of Denmark (Risø DTU), scientists have now presented the first design basis for developing mega wind turbines of 20 MW.

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The EU project UpWind started five years ago with an ambitious plan: more than 120 wind scientists' efforts and a budget of 23 million Euro were to provide the answer to the big question: Is it possible to build a 20 MW wind turbine using the methods and materials we know today? One single wind turbine of this type in the North Sea would provide electricity for 15,000 to 20,000 dwellings.

Is it technically possible and economically feasible?

There are 16,000-20,000 components in a wind turbine. The researchers focused on the main components in wind turbines to find answers to two fundamental questions: Is it technically possible to build a 20 megawatt wind turbine? Is it economically feasible to build it?

"The overall conclusion we can draw from the UpWind project is that if you built a 20 MW wind turbine based on existing technologies and methods, it will be 15-20 percent more expensive than today's wind turbines. I find that far from discouraging, for immediately I would expect that such a simple upscaling would give even higher energy

prices," says Peter Højler Jensen, Risø DTU, who has been in charge of the project.

An intelligent wind turbine blade is one of the solutions

Risø DTU and DTU Mechanical Engineering has significantly contributed in the development of aeroelastic design methods for wind turbines of up to 20 MW. Aeroelastic methods are used to calculate the wind turbine's dynamic response to turbulence in the wind. In the UpWind project, Risø DTU and DTU Mechanical Engineering studied aeroelastic methods, materials, management and regulation and many other technologies to be developed for designing a 20 M wind turbine.

Risø DTU has contributed very significantly to UpWind through the development of smart rotor blades with trailing edge-regulation. That means that the trailing edge of the blade can move up and down like flaps on an airplane.

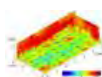
"We have worked on developing several different types of sensor systems such as pitot tubes which are also used to measure the wind speed of aircrafts. Should we introduce these innovations to existing wind turbines, they would probably be more expensive, but if they are implemented on very large turbines the savings from load reductions probably would be competitive. Our conclusion is that upscaling opens up for new technologies," says Peter Højler Jensen.

Various types of movable trailing edges for turbine blades and different mechanisms for activating the trailing edge movement have been tested, and the aerodynamic properties of the movable trailing edge have been studied in wind tunnels.

Laser technology to measure wind conditions

Related Stories

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Train plows into school bus in Egypt, 50 killed

Clinton says budget deal critical to U.S. global role, security

Florida socialite in Petraeus scandal feels "scared"

The second area in which Risø DTU has been making a substantial contribution to UpWind, is in the development of LIDAR technologies. A LIDAR measures the properties of the wind by means of laser beams. When UpWind started, Risø was the only research institution with a prototype of LIDAR to measure wind speed and with applications in wind energy research.

"During the five years of the UpWind project we have succeeded in developing the technology from this first prototype to a total of more than 200 LIDARs, of which 40 have been calibrated at Risø DTU's test station in Høvsøre in the western, more windy part of Denmark. LIDARs has now been developed into a stage where they easily can compete with the traditional anemometers used to measure wind speeds, and in amazingly short time, we managed to start using this new technology, says Peter Hjulær Jensen.

"You can imagine the difference between the two methods by thinking of a football field. With an anemometer you can measure the wind conditions in an area corresponding to the dot in the middle of the football field. The LIDAR is able to measure the wind on the whole football field in one go," says Peter Hjulær Jensen. It will open up new opportunities to gain insights into the wind turbulence, which affects wind turbines. Risø DTU has further explored the possibility of placing the LIDAR in the hub of a wind turbine, where it will be possible to let the LIDAR regulate the trailing edge. This would reduce fatigue and extreme loads on wind turbines.

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The above story is reprinted from [materials](#) provided by **Risø National Laboratory for Sustainable Energy**.

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- ☒ APA Risø National Laboratory for Sustainable Energy (2011, April 21). Mega wind turbines of 20 MW. *ScienceDaily*. Retrieved November 17, 2012, from <http://www.sciencedaily.com/releases/2011/04/110415083320.htm>
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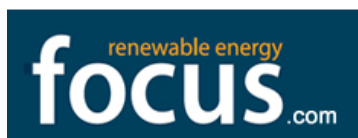
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News

Narec builds 15 MW offshore wind drive train testing facility

02 December 2011

The National Renewable Energy Centre (Narec) has signed a £14.8 million contract with Shepherd Construction to delivery a 3000 m² building for offshore wind turbine drive train testing for nacelles up to 15 MW.

By Kari Williamson

Tony Quinn, Director of Major Assets and Projects at Narec, says: "This is the third new building being built by Shepherd Construction for Narec in Blyth as part of a £100m investment in the site. The 15 MW test facility will be commissioned in the summer of 2013 and will cement our position as a world leading centre for the research, development and demonstration of innovative offshore renewable energy technologies."

The structure will be 32 m tall built with 1300 tonnes of steel, and will include a 43 m by 12 m test bed foundation with four metres deep with pile foundations.

The Energy Technologies Institute (ETI) is investing £25m in the Narec offshore wind turbine nacelle testing facility, providing funding to a consortium of Converteam and MTS Systems Corporation for the design, development and commissioning of the test rig.

Dr David Clarke, ETI Chief Executive, says: "The test rig will allow both larger wind turbines to be tested and for a wider scope of testing to take place than is available in current facilities elsewhere in the world."

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15 MW offshore wind nacelle test facility gets £25m

The planned 15 MW offshore wind turbine drive train and nacelle test rig at Narec, UK, is receiving £25 million in funding from the Energy Technologies Institute (ETI).

Construction completed at offshore wind turbine blade testing facility in UK

Shepherd Construction has completed the construction of a new offshore wind turbine blade testing facility in at Blyth, Northumberland.

BWEA31: NaREC getting ready for Round 3 and offshore renewable energy

The New and Renewable Energy Centre (NaREC) in the UK is helping the country reach its 20/20 targets for renewable energy with offshore marine and wind energy research and testing.

Narec builds offshore wind turbine blade test facility

The UK New and Renewable Energy Centre (Narec) will build a £15 million facility for testing offshore wind turbine blades of up to 100 m in length.

15 MW wind turbine drive trains and nacelles test facility

A 15 MW wind turbine drive train and nacelle test facility is planned in the UK by the Energy Technologies Institute (ETI).

Top 5 Stories

1. Controversy over high subsidies to UK wind power

2. RenewableUK says CPRE concern over wind turbines is "misplaced"

3. UK wind industry hits back with "public support" poll

4. UK: Onshore wind only cost households £4.68 last year

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Upwind Study: 20 MW Wind Turbines are on the Horizon

December 9, 2011 By [Nicholas Brown](#) [4 Comments](#)

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Middelgrunden Wind Farm off Copenhagen.

Under Europe’s Upwind project, a feasibility study was conducted and **it concluded that 20-MW (20,000-kW) wind turbines are likely by 2020.** If you’re not familiar with wind turbine sizes, this is HUGE. The standard wind turbine these days is probably 3 to 5 MW, and the ‘tremendously large’ wind turbines companies like **GE, Siemens, and Vestas are working on or offering are 6 to 10 MW.**

Large-scale wind turbines produce electricity far more economically than small, residential turbines for multiple reasons, but the main one is the fact that the average wind speed at a given location usually increases with altitude.

While larger turbines are more expensive to build, transport, and install, the altitude-related benefits make the trouble and expense of installing large-scale turbines worth it, because they generate electricity the most cheaply (9 cents/kWh unsubsidized, in the United States, and assuming a capacity factor of 35%, according to the NREL).

[Small wind turbines](#) often fail to pay for themselves due to unacceptably slow wind speeds at altitudes of less than 20 feet, and these turbines often being less than 20 feet tall. And because they don’t generate much electricity, they have to be oversized in order to generate enough electricity to meet demand, and oversized turbines are costly.

The 20-MW turbines mentioned in diameter. They would also be

Significant technological advances and are optimistic.

“Making a 20 MW wind turbine materials and way the turbine is

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e 120 meters (394 feet)

thers are working on it

in terms of design,

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APPENDIX 2

Press Article: The Desire for an Integrated Supply Chain

AREVA : Offshore wind: AREVA deploys its industrial plan to produce a 100% French wind power technology

11/14/2012| 08:15am US/Eastern

Regulatory News:

To coincide with the opening of AREVA's (Paris:AREVA) first offices in Le Havre, Luc Oursel presented the progress made with AREVA's industrial plan to produce a 100% French wind turbine in the Haute-Normandie region.

Since Iberdrola and Eole RES were chosen to develop the wind farm site in the bay of Saint-Brieuc in April 2012 and AREVA technology was selected to supply 100 5MW wind turbines, the group has been working on the construction of two plants to manufacture nacelles and blades in Le Havre.


AREVA is mobilizing its suppliers of key components such as Moventas, NTN SNR, Fouré Lagadec, ABB and Plastinov, who are ready to set up activities close to the group's plants on the Quai Joannès Couvert. This genuine industrial ecosystem being built up around AREVA's offshore wind power activity will make it possible to create more than 750 jobs and provide a structured and competitive French offer for export markets.

In addition to this, the group is also establishing numerous partnerships with small-to-medium-sized businesses in Normandy and Brittany, which will enable AREVA to provide wind power entirely produced in France.

The AREVA team in Le Havre is being further strengthened with the appointment of Plant, Purchasing and Training/HR project managers and the creation of a research & development unit.

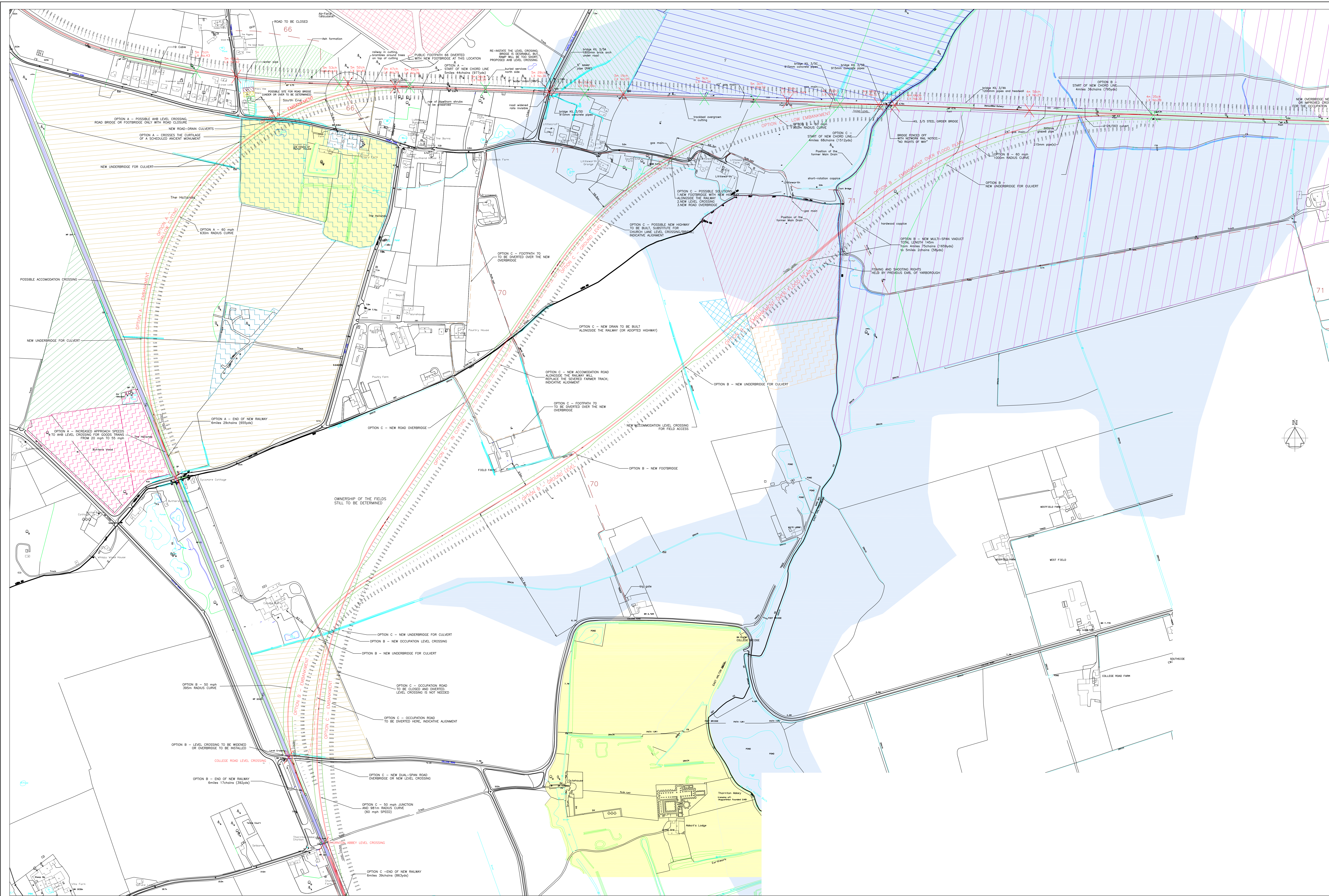
On the strength of its tried-and-tested technology with a track record of 3 years of operation in the North Sea, AREVA has all the right assets at its disposal to enable it to win contracts for additional offshore wind farms in forthcoming calls-for-tender in France and abroad.

Luc Oursel, CEO of AREVA, declared that "by deploying a robust industrial plan in Haute-Normandie, which opens up a wealth of business opportunities both in France and in the South of the UK or in Belgium, AREVA is making an active contribution to the reindustrialization of the regions in which we are present and to the export of our energy know-how".

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APPENDIX 3

Plan: Killingholme 2 Branch Line



NOTES

- KILLINGHOLME AND GOXHILL
- ORDNANCE SURVEY GRID REFERENCE
TA1020 - TA1219
- WHOLE AREA IS UNDERLAIN BY A MAJOR ADQUER OF HIGH PERMEABILITY
- EMBANKMENT AND CUTTING WIDTHS ARE INDICATIVE ONLY AND SUBJECT TO GEO-TECHNICAL INVESTIGATION

KEY:

	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 193285 OWNER: JAMES
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 206579 OWNER: ENGLAND
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 209948 OWNER: SOMERSCALES
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 223090
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 285172 OWNER: CANNWELL
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 285374
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 288814 OWNER: ROBINSON
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 288815 OWNER: ROBINSON
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 289912 OWNER: WILKINS
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 304494
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 304495
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 317759 OWNER: FAULDING
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 329063 OWNER: LAR
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 339806 OWNER: KEIGAR HOMES LTD
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 342229 OWNER: TURNER
	FREEHOLD LAND HM LAND REGISTRY TITLE NO. 344522
	AREAS AT RISK OF FLOODING WITHOUT FLOOD DEFENCES
	SCHEDULED ANCIENT MONUMENT (SAM)
	FORMER LEVEL CROSSING - DISUSED NOW
	FORMER LEVEL CROSSING - VISIBLY IN USE
	FARM ACCESS AT THIS POINT
	EXTENT OF THE PROPOSED LANDTAKE

Rev.	Date	Description of Revision	Des.	Chkd	Appr.
1	29/09/2008	Issue			

Network Rail
London North Eastern
Territory
Infrastructure Enhancements
George Stephenson House
Tuf Green, York
YO1 4JT


Corus
Railway Infrastructure
Services
PO Box 298
York
YO1 6YH
T: 01904 454600
F: 01904 454601

Status		WORKING DRAWING	
Designed	VR	Checked	HP
Approved	JA	Date	29/09/2008

KILLINGHOLME AND GOXHILL

GENERAL ARRANGEMENT
OPTIONS A, B AND C

Scale	1:2500	Scale	1:2500
Drawing Number	B50138/Transport Planning Drawings	Revision	VR
Project Number	B50138-001Y/002	Revision	A

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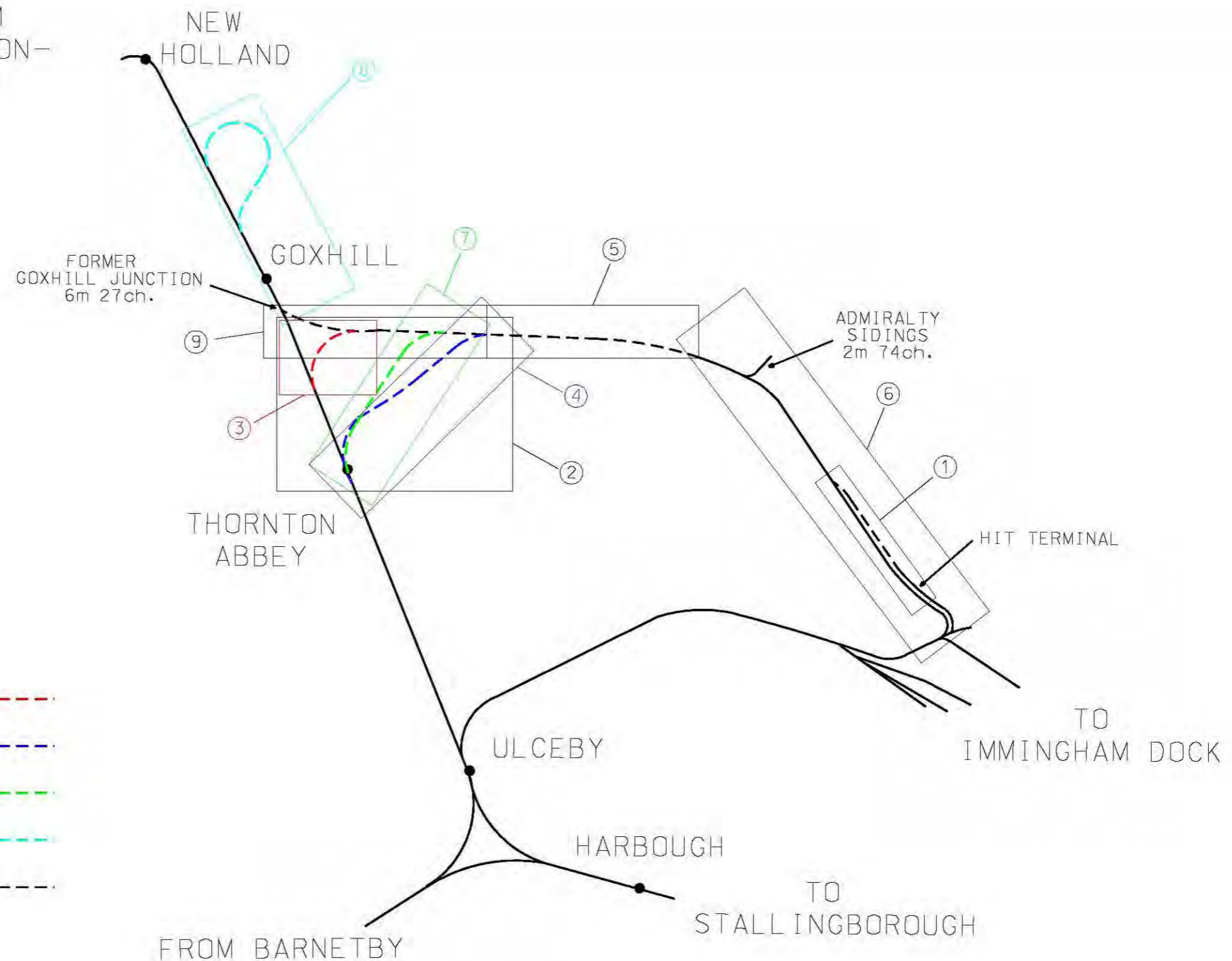
APPENDIX 4

Plan: Killingholme HIT – Goxhill Proposed Chord



TO/FROM
BARTON-UPON-
HUMBER


- ① — B50138-000H-001
- ② — B50138-001Y-002
- ③ — B50138-001Y-003 &
B50138-000H-010
- ④ — B50138-001Y-004 &
B50138-000H-011
- ⑤ — B50138-001Y-005
- ⑥ — B50138-001Y-006
- ⑦ — B50138-001Y-007 &
B50138-000H-012
- ⑧ — B50138-001Y-008 &
B50138-000H-013
- ⑨ — B50138-001Y-009

- PROPOSED OPTION A ---
- PROPOSED OPTION B ---
- PROPOSED OPTION C ---
- PROPOSED OPTION D ---
- PROPOSED REINSTATEMENT
OF KILLINGHOLME BRANCH
AS REQUIRED ---



DO NOT SCALE

KILLINGHOLME HIT – GOXHILL PROPOSED CHORD DRAWING INDEX	Status DRAFT UNCHECKED		 Network Rail George Stephenson House Toft Green York YO1 6JT
	Designed J. PARK	Checked	
	Approved	Date	 Railway Infrastructure Services PO Box 298 York YO1 6YH T: 01904 454600 F: 01904 454601
	CAD Ref. K:\B50138\TRACK DRAWINGS		
Drawing Number B50138-000H-014	Revision 0		

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APPENDIX 5

'Existing' Route Photographs





Penalty for not closing gates £1000

Stop Look Listen

Notify crossing operator
before crossing with a vehicle
which is unusually long, wide,
low, heavy or slow moving


- 1 Open both gates and look in both directions before crossing.
 - 2 Cross quickly.
 - 3 Close and secure gates after use.
- Maximum penalty for not doing so £1000.









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APPENDIX 6

ORR Responses



ABLE MARINE ENERGY PARK
SECTION 42
STATUTORY CONSULTATION RESPONSES



OFFICE OF RAIL REGULATION

Joan Chimbo

3rd March 2011

Amc/L03

Jonathan Monk

From: Andrew Acum [andrew.acum@mercury-marketing.co.uk]
Sent: 03 March 2011 15:37
To: laurenbenett@bdb-law.co.uk; walter.barton@erm.com; lutyensv@bv.com;
jmonk@ableuk.com; jdawes@ableuk.com
Subject: FW: Able UK Ltd: Proposed Application for a Development Consent Order for a quay at Killingholme, North Lincolnshire
Attachments: image001.jpg

Response from the Office of Rail regulation below.

Best wishes,

Andy.

Andrew Acum
Marketing Director



Mercury Design & Marketing Ltd
Mercury House
119-123 Marfleet Lane
HULL
HU9 5RN

Telephone: 01482 786121
Facsimile: 01482 862493

Web: www.mercury-marketing.co.uk
Facebook: mercury-marketing.co.uk/facebook
Twitter: mercury-marketing.co.uk/twitter

From: Chimbo, Joan [mailto:Joan.Chimbo@orr.gsi.gov.uk] **On Behalf Of** CCT Contact
Sent: 03 March 2011 15:35
To: info@amcp.co.uk
Subject: Able UK Ltd: Proposed Application for a Development Consent Order for a quay at Killingholme, North Lincolnshire

Dear Sir / Madam,

Thank you for your letter of 31 January 2011 enclosing the consultation document and CD containing the preliminary environmental information, regarding your (Able UK Ltd) proposed application for a Development Consent Order for a quay at Killingholme, North Lincolnshire.

We have reviewed the information relevant to us supplied in your documents and we understand that the proposed construction / facilities lies within an existing port facility and will generate only two trains per day and so seems unlikely to have a material affect on the existing network.

We note your intention to transfer the land from Network Rail to the developer which implies that this will obviate level crossing renewals. You should therefore note that the same safety standards do apply to private level crossings as to Network Rail level crossings.

As part of this process and in addition to your list of consultees, we would suggest that you also consult the major key holders (Network Rail and the relevant train operating companies) and keep them up to date on the scheme in order to assess whether there is any impact on future passenger train operations.

We have no further comments to make in relation to the proposals.

Yours sincerely

Joan Chimbo

Customer Correspondence Team

Office of Rail Regulation

One Kemble Street

London

WC2B 4AN

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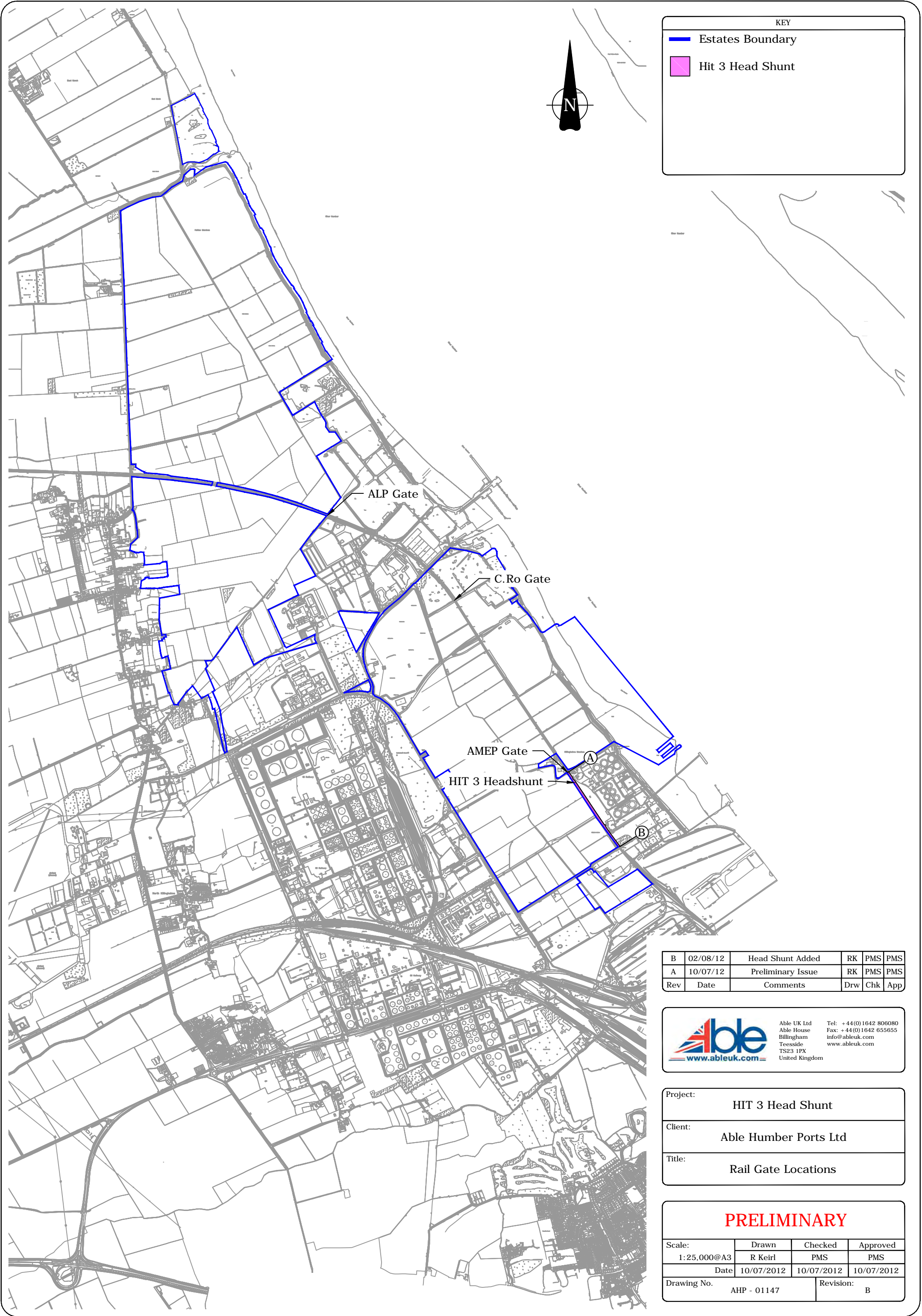
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APPENDIX 7

Rail Gate Locations: Plan No. AHP-01147B



KEY

Estates Boundary

Hit 3 Head Shunt

B	02/08/12	Head Shunt Added	RK	PMS	PMS
A	10/07/12	Preliminary Issue	RK	PMS	PMS
Rev	Date	Comments	Drw	Chk	App



Able UK Ltd

Able House

Billingham

Teesside

TS23 1PX

United Kingdom

Tel: +44(0)1642 806080

Fax: +44(0)1642 655655

info@ableuk.com

www.ableuk.com

Project:

HIT 3 Head Shunt

Client:


Able Humber Ports Ltd

Title:

Rail Gate Locations

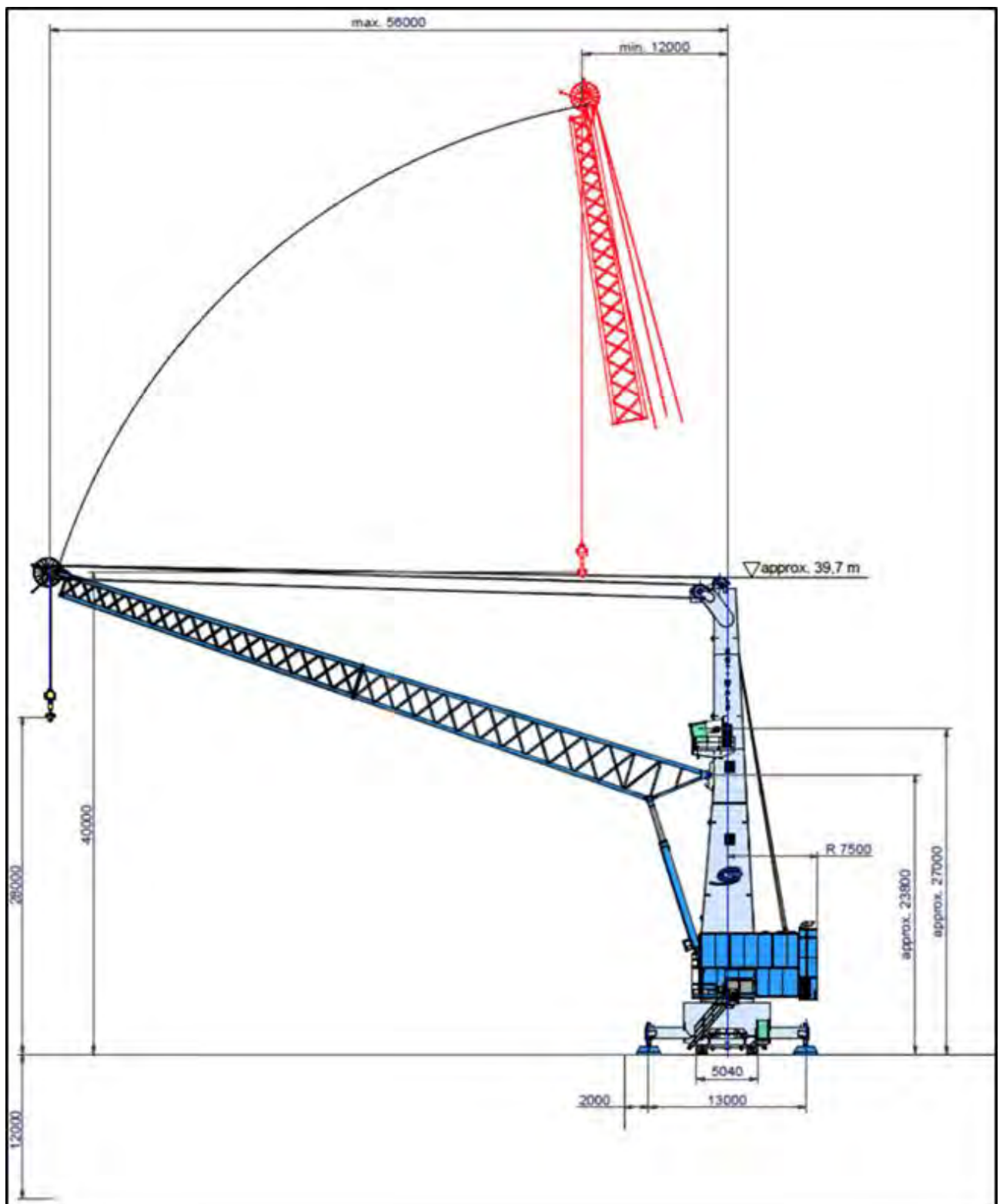
PRELIMINARY

Scale:	Drawn	Checked	Approved
1:25,000@A3	R Keirl	PMS	PMS
Date	10/07/2012	10/07/2012	10/07/2012
Drawing No.	AHP - 01147		Revision: B

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APPENDIX 8

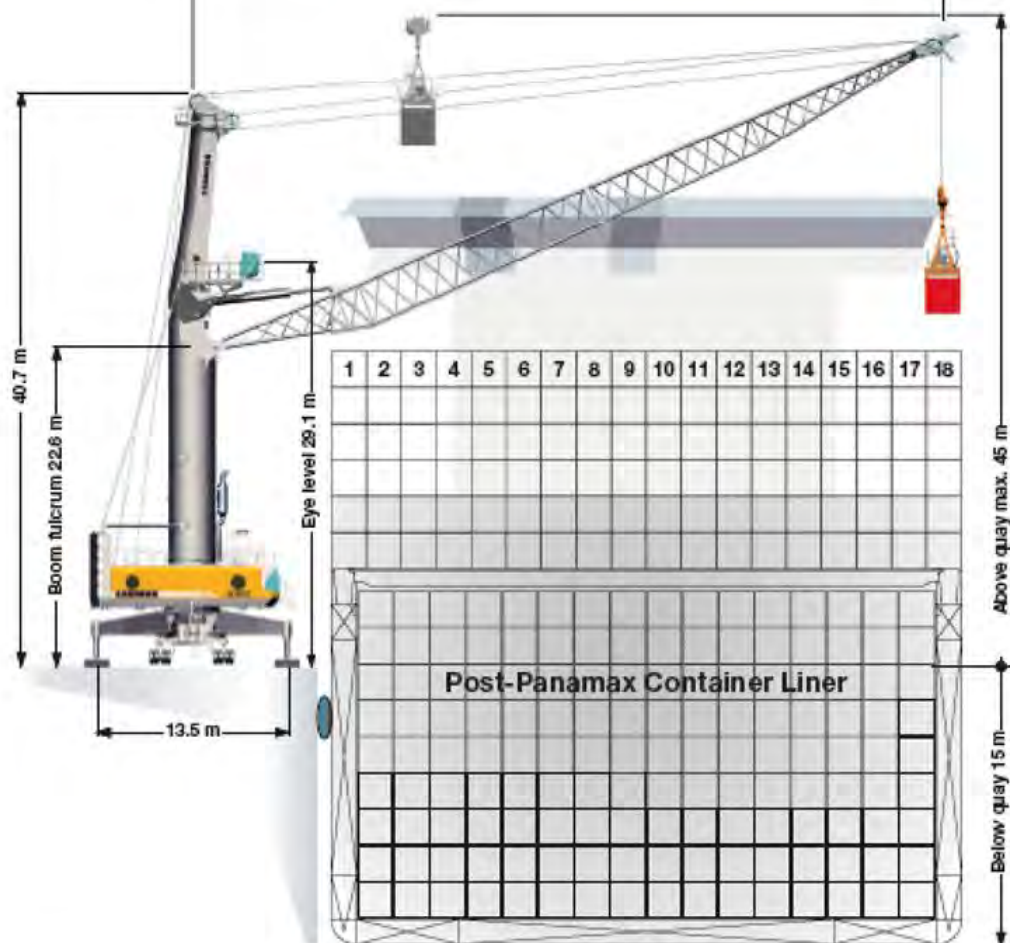
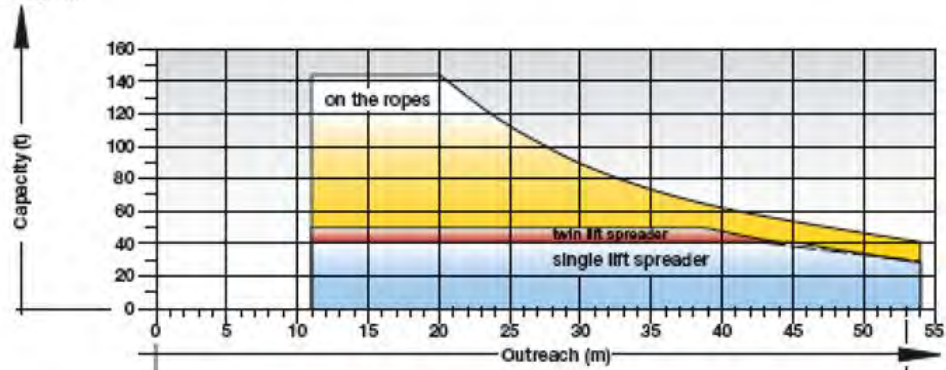
Harbour Cranes Specifications

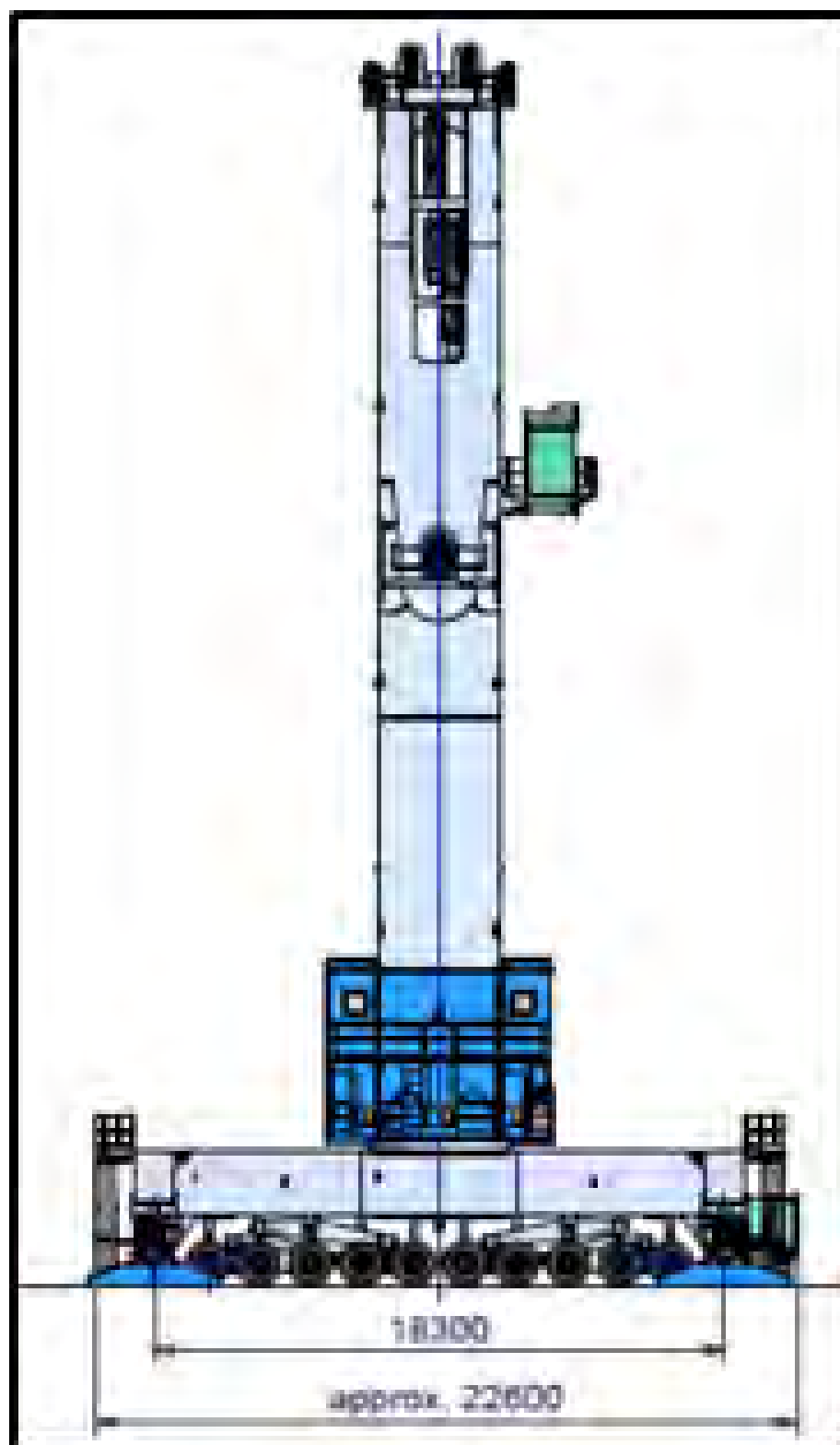



Main dimensions

Container operation

Load diagram

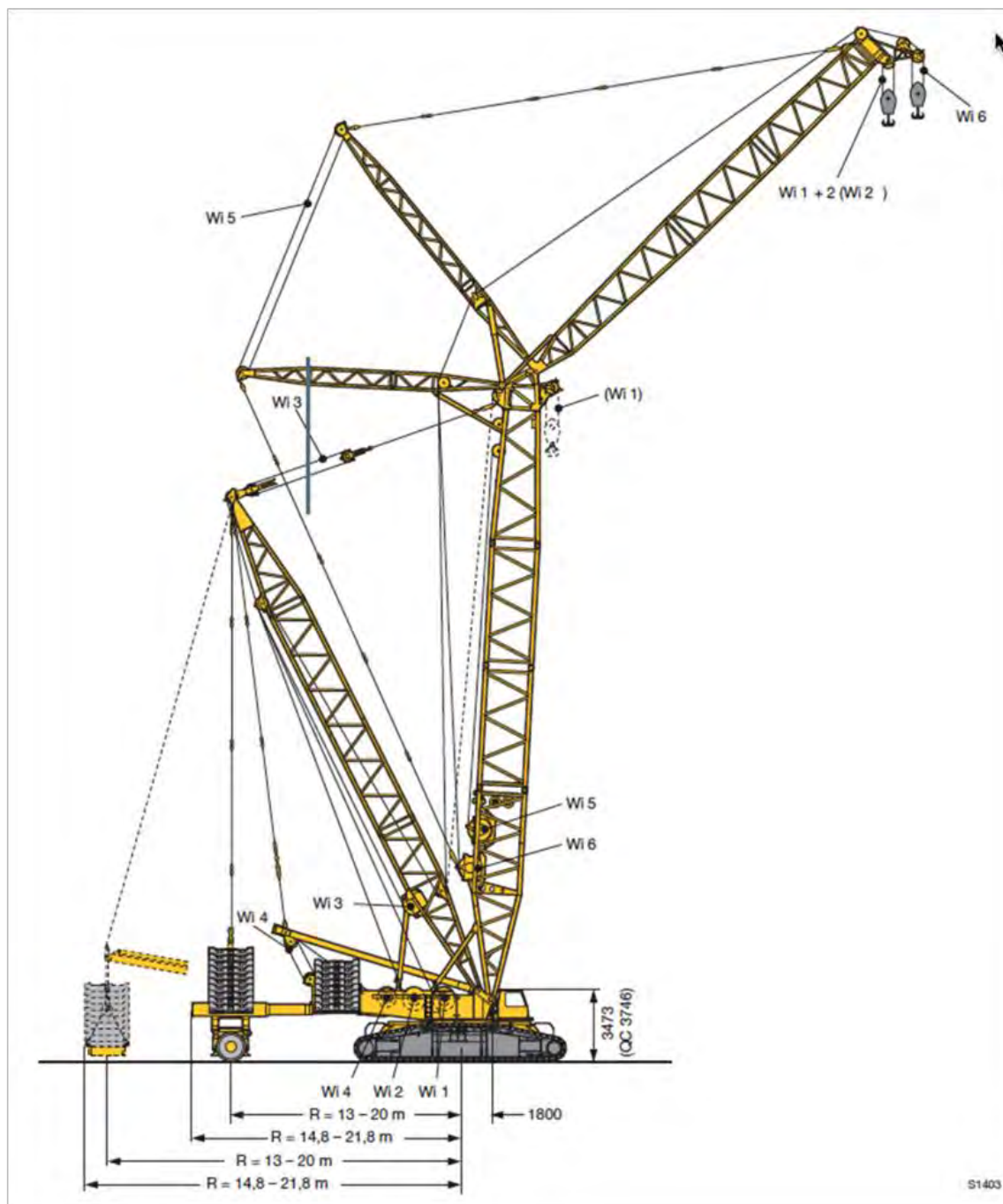


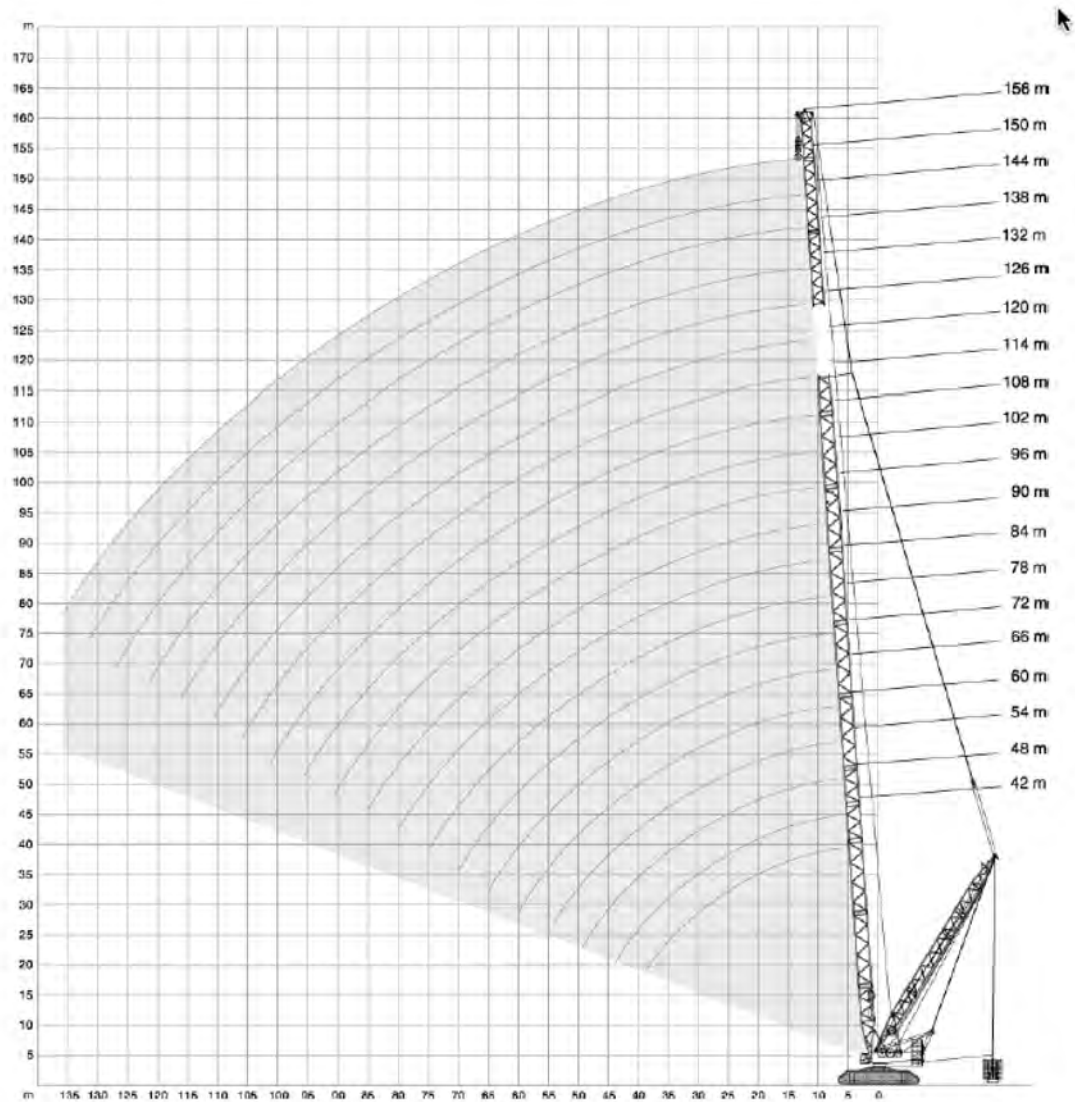



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APPENDIX 9

Crawler Cranes Specifications





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APPENDIX 10

Press Article: New Blade Designs

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Siemens AG / Energy Sector / Wind Power

Østerild, Denmark, 2012-Oct-08

Siemens wind turbine featuring the world's largest rotor goes into operation



Record-breaking rotor: World's largest rotor blade

On October 6, 2012, testing has started on the record-breaking rotor on the six-megawatt offshore Siemens wind power plant at Østerild, Denmark. At 75 meters each, for a total rotor diameter of 154 meters, the Siemens wind turbine's blades are the longest in the world. The swept area is 18,600 square meters, or the equivalent of two and a half soccer fields. The start of test operations for the 154-meter-diameter rotor on the gearless six megawatt wind turbine represents an important step in the development of promising offshore technologies for the future.

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Vestas launches design for world's largest offshore wind turbine

By [Tannith Cattermole](#)
April 6, 2011

[12 Comments](#)
[3 Pictures](#)



Vestas has revealed plans to build the largest dedicated offshore wind turbine in the world - the 164 m diameter V164

[Image Gallery](#) (3 images)

Offshore wind power specialist [Vestas](#) has revealed plans to build the largest dedicated offshore wind turbine in the world. The proposed V164 would have a 7.0 MW capacity, twice that of its predecessor, the 3.0 MW V112. The awesome 164 meter (538 ft) diameter rotor would eclipse the size of the current titleholder, the prototype G10X installed by [Gamesa](#) in Spain in 2009 which has a diameter of 128 m (420 ft).

The world's largest *capacity* wind turbine, the [Enercon E-126](#) has a rated capacity of 7.58 MW, but its 126 m (413 ft) diameter would still be dwarfed by the V164. The proposed [Sway AS](#) rotor diameter of 145m (476ft) and could stretch capacity to 10 MW.

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Vestas V164-7.0MW has a blade length of 80 meters, the length of nine routemaster buses

Horizontal-axis wind turbines (HAWT) are designed with a rotor shaft and electrical generator at the top of a tower. Small turbines are pointed into the wind by a simple wind vane, while large turbines generally use a wind sensor coupled with a servo motor. Most have a gearbox, which turns the slow rotation of the blades into a quicker rotation that is more suitable to drive an electrical generator.

Vestas approached the design using two separate R&D teams – one investigating direct drive, and one investigating geared-train turbines – and eventually a proven medium-speed drive-train solution was chosen.

Vestas' V164 has been specially designed to withstand the punishing North Sea winds and the business case is aimed at the European market, especially the North European countries of UK, France, Sweden and Germany among others.

Construction of the first V164-7.0 MW prototypes are expected in late 2012, with serial production set to begin in early 2015 if enough orders are received to justify the substantial investment needed. Vestas says that the energy taken to produce the turbine would be paid back within ten months of installation.



Wind power in perspective

In the EU in 2009 renewable energy and wind accounted for 7% and 2% respectively of energy production, compared with coal at nearly 25%.


into high-quality plastic

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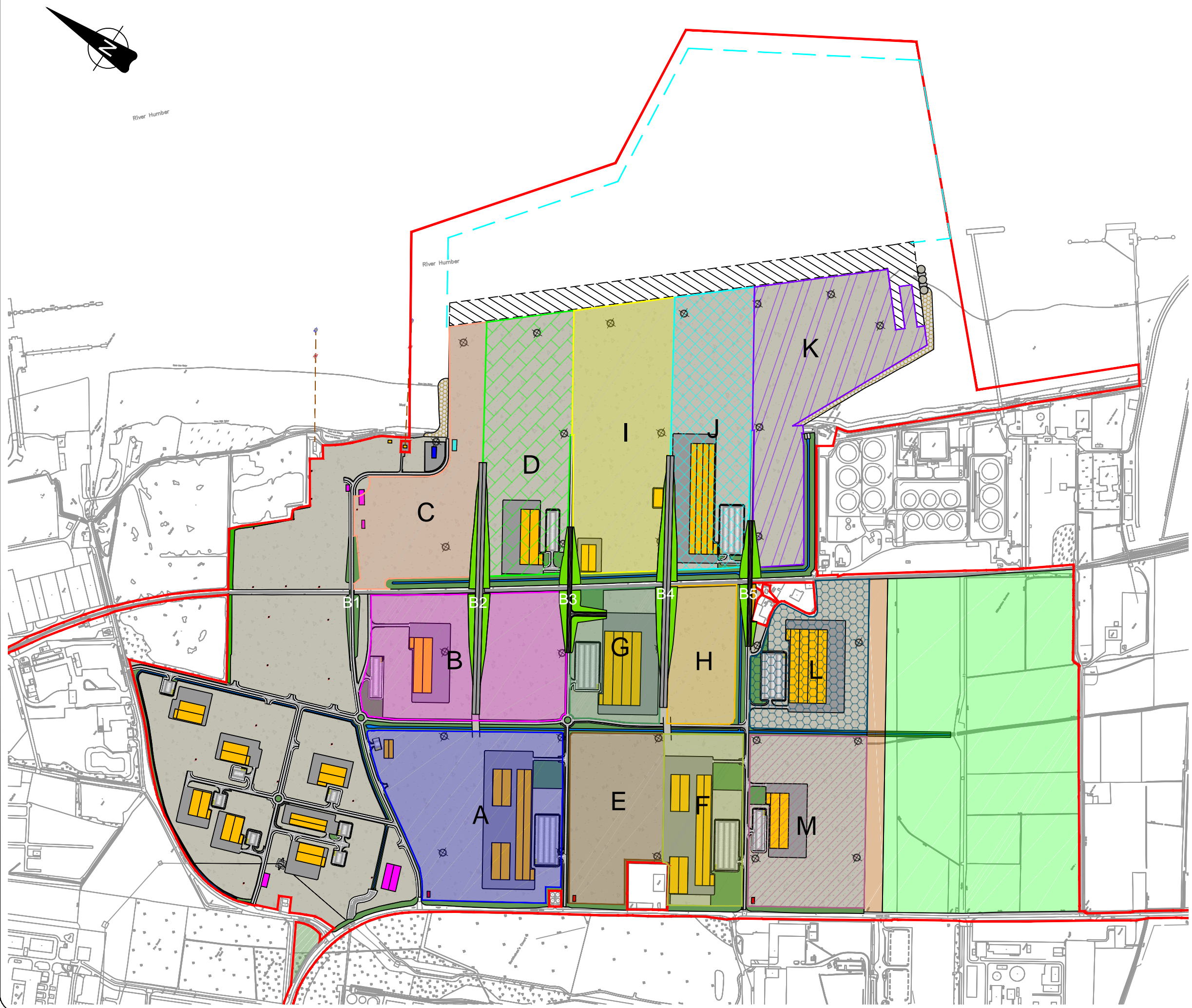
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	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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APPENDIX 11

Location of Bridges and Client Areas: Plan No. AME-05039A



KEY

- A Client A
- B Client B
- C Client C
- D Client D
- E Client E
- F Client F
- G Client G
- H Client H
- I Client I
- J Client J
- K Client K
- L Client L
- M Client M

Bridge Information

B1 J 6 1 1 {
B2 G 5 F I {
B3 F 1 6 Q
B4 G 5 F I {
B5 F 1 6 I {

A	22/10/12	Preliminary Issue	RK	PMS	PMS
Rev	Date	Comments	Drw	Chk	App



able UK Ltd
Able House
Billingham
Teesside
TS23 1PX
United Kingdom

Tel: +44(0)1642 806080
Fax: +44(0)1642 655655
info@ableuk.com
www.ableuk.com


Project: ABLE Marine Energy Park

Client: ABLE UK Ltd

Title: Bridge Location Feasibility with Client Sites

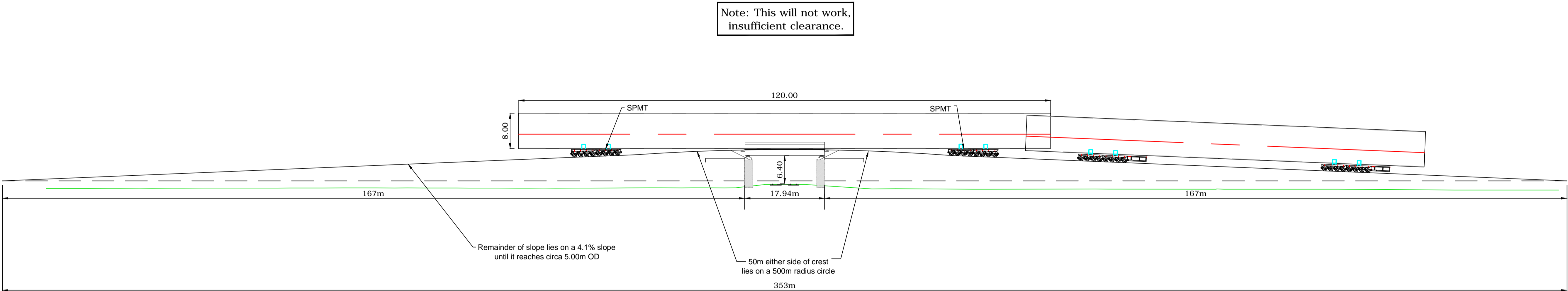
PRELIMINARY

Scale:	Drawn	Checked	Approved
1:10,000@A3	R Keir	PMS	PMS
Date	22/10/2012	22/10/2012	22/10/2012
Drawing No.	AME - 05039	Revision:	A

	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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APPENDIX 12

Cross Sections of a Tubes Traversing the Proposed Bridge **Plan No: AME-02030A**



KEY

A	22/10/12	Preliminary Issue	JH		
Rev	Date	Comments	Drw	Chk	App




able UK Ltd
Able House
Bilbrough
Leeds
LS8 1PX
United Kingdom

Tel : +44(0)1642 809080
Fax : +44(0)1642 855555
info@ableuk.com
www.ableuk.com

Project:	Able Marine Energy Park
Client:	Able UK Ltd
Title:	1200T Monopile 120m x 8m - 4.1% Gradient

PRELIMINARY			
Scale:	Drawn	Checked	Approved
1:400@A1	J Harris		
Date	22/10/2012		
Drawing No.	AME - 02030	Revision:	A

	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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APPENDIX 13

Aerial Images: Rail Infrastructure at other European Ports



KEY

Image Date
September 2011

A	25/10/12	Preliminary Issue	RK	DS	DS
Rev	Date	Comments	Drw	Chk	App



Able UK Ltd
Able House
Billingham
Teesside
TS23 1PX
United Kingdom
Tel: +44(0)1642 806080
Fax: +44(0)1642 655655
info@ableuk.com
www.ableuk.com

Project:	ABLE Marine Energy Park
Client:	ABLE UK Ltd
Title:	Rail Infrastructure Identification Port of Esbjerg

PRELIMINARY

Scale:	Drawn	Checked	Approved
NTs@A3	R Keirl	D Shepherd	D Shepherd
Date	25/10/2012	25/10/2012	25/10/2012
Drawing No.	AME - 05044		Revision: A



KEY

Image Date
September 2009

A	25/10/12	Preliminary Issue	RK	DS	DS
Rev	Date	Comments	Drw	Chk	App



Able UK Ltd
Able House
Billingham
Teesside
TS23 1PX
United Kingdom

Tel: +44(0)1642 806080
Fax: +44(0)1642 655655
info@ableuk.com
www.ableuk.com

Project:	ABLE Marine Energy Park
Client:	ABLE UK Ltd
Title:	Rail Infrastructure Identification Port of Dundee

PRELIMINARY

Scale:	Drawn	Checked	Approved
NTs@A3	R Keirl	D Shepherd	D Shepherd
Date	25/10/2012	25/10/2012	25/10/2012
Drawing No.	AME - 05045		Revision: A



KEY

Image Date
October 2012

A	25/10/12	Preliminary Issue	RK	DS	DS
Rev	Date	Comments	Drw	Chk	App




Able UK Ltd
Able House
Billingham
Teesside
TS23 1PX
United Kingdom

Tel: +44(0)1642 806080
Fax: +44(0)1642 655655
info@ableuk.com
www.ableuk.com

Project:	ABLE Marine Energy Park
Client:	ABLE UK Ltd
Title:	Rail Infrastructure Identification Port of Bremerhaven

PRELIMINARY			
Scale:	Drawn	Checked	Approved
NTs@A3	R Keirl	D Shepherd	D Shepherd
Date	25/10/2012	25/10/2012	25/10/2012
Drawing No.	AME - 05047		Revision: A

	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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APPENDIX 14

Press Article: Cancelled Biomass Projects



SCIENCE & ENVIRONMENT

12 November 2012 Last updated at 18:00

Biomass may hinder climate fight



By Roger Harrabin
Environment analyst

A report by campaign groups has warned that burning biomass (such as wood) in power stations may hinder attempts to tackle climate change.

Biomass is expected to contribute about third of the UK's mandatory EU target for renewable energy by 2020.

It's described by the Committee on Climate Change as an economic means of low-carbon power.

But [the report](#) warns it will take too long for trees to re-absorb the carbon emitted by burning wood.

It also expresses concerns over the scale of the plans.

The government has opened a consultation asking how much carbon can be saved by burning biomass (plant material) and whether the policy will harm forests.

Biomass burning is not a zero-pollution option. It creates greenhouse gases to cut and transport the wood, and when the wood is burned. But supporters say that so long as the burned vegetation is replaced by new plants to absorb CO₂ that should confer a significant advantage over using fossil fuels.

The numbers are debated. Power firms say the CO₂ savings [are worthwhile](#), but the Institute for European Environment Policy (IEEP) says there's [no reason](#) to believe the required emissions reductions will be achieved with current biomass policy.

As biomass burning expands the topic is increasingly controversial. Drax power station - the UK's biggest source of electricity - is converting three of its six giant boilers to burning biomass. They will gobble up nearly seven million tonnes of plant material a year.

Drax will have to import 90% of its biomass. The firm says its major source will be unwanted offcuts from the timber industry, mainly in the Americas.

Sceptical response

From 2013, the government mandates that biomass burning for power will need to emit no more than 70g CO₂/kJ after a lifecycle analysis including emissions from transport and cutting.

Drax says it averages between 20 and 75g, depending on the biomass used. The figures compare with 280g for the average UK coal power station (Environment Agency); 122 for North Sea gas; and 193g for Russian piped gas (Friends of the Earth).

But campaign groups are highly sceptical. They say the methodology is flawed.

Harry Hughton from the Royal Society for the Protection of Birds (RSPB) told BBC News: "Drax's demand for biomass will be huge - more than the entire output of forests in the UK. The power firms say they are using offcuts, but there are some whole trees going into the system and as demand expands we simply don't believe that forests and wildlife will be protected.

"We have seen the policy on biofuels for road transport go horribly wrong. We don't think biomass burning is as foolish as biofuels policy - but we have major misgivings about biomass policy too. Do we really want to be shipping wood to burn from America?

"Of course growing plants absorb CO₂ - but when they're burned it releases CO₂ immediately and you have to wait for decades or hundreds of years for that to be taken up. With climate change we don't have the time to waste."

The power firms say it's important to look at the detail of their proposals. Drax claims that because shipping is so efficient, it creates less CO₂ bringing a boat-load of wood from America - even the West Coast - than it does ferrying the equivalent wood by lorry from forests in Scotland.

The wood from the West Coast of America is diseased and useless for timber, they say. It could, of course, be burned in the US to make power - but shale gas is so cheap that it's not worthwhile.

If the offcuts weren't fed into power stations, they would be burned as waste or left on the ground to decay, producing methane and CO₂.

So long as the capacity of the forests to absorb CO₂ outweighs the amount released, there will still be a carbon credit. The system can be monitored by satellite and by measuring trees in the forest, Drax says.

Nigel Burdett, head of environment at Drax, told us: "The NGOs are looking at worst practice, burning whole trees.

"But timber is far too high a value for us to burn. We take sawmill residue that used to be burned to get rid of it. Much of the wood we use has been destroyed by pests, so it needs to be disposed of anyway.

"It's not zero carbon but we are confident that most of the material we use (for burning) are within our target of 80% carbon savings."

Reliable option

Dorothy Thompson, chief executive of Drax, told BBC News that biomass was the ideal fuel to balance variable wind power. "It is totally complementary - we can be flexible and reliable. Wind is a good energy source but it's intermittent - we can fill that gap."

Campaign groups agree that it is better to use offcuts as a resource rather than let them rot, but the potential scale of the enterprise alarms them as they believe in future power generators will be scouring the globe for stuff to put in the furnace.

The government is still working through its long-term policy on the issue. The latest subsidy changes mean that for many firms it's not worthwhile building bespoke biomass power stations, but it is worthwhile converting some existing coal-burning stock.

The government expects subsidy for biomass to be between £442m and £736m in 2016/17. Extra biomass generation after that will be supported by a new subsidy mechanism known as CfDs (Contracts for Difference). These are still being discussed but an industry source said that Drax alone would expect at least to recoup its £750,000 investment in converting boilers to burn wood.

The Department of Energy and Climate Change's (DECC) Renewables Roadmap estimates that biomass could potentially provide between 68 teraWatt hours (TWh) and 100TWh of renewable heat and electricity by 2020, which is 26-42% of the total needed to meet the EU renewables target.

A DECC spokesman told BBC News: "We'd stress that investment in biomass brings diversity to the (energy) mix, it's flexible so can be used as back up to intermittent sources of generation, and it's clean. We're also making sure it's sustainable."

David Kennedy, chief executive of the Committee on Climate Change said: "Biomass burning is a sensitive thing because it's an economic low-carbon source of energy - especially relative to offshore wind."

What's uncertain is the role for British farmers in this great enterprise. A few years ago they were looking for profits in energy crops like miscanthus - elephant grass - and coppiced willow.

Drax will get 10% of its fuel from British sources like these and there's a high-walled maze at the power station of blocks of chopped miscanthus next to high mounds of shredded willow.

But since energy crops first stirred agricultural excitement there's been controversy over the impact of using land to grow crops to burn. Drax say miscanthus can still be useful for farmers wanting to stabilise sandy soils.

But it is possible that in future this may be uneconomic, and that growing coppiced wood for burning will be mainly concentrated on the high-value market for wood-burning stoves in the homes of the rich.

In the meantime, the imports of wood from round the world are likely to continue.

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Drax and Centrica shelve new biomass plants, blaming lack of incentives

Terry Macalister, Guardian Sustainable Business

26th October 2012

Two of Britain's biggest power [providers](#) have shelved plans worth almost **£2.5 billion to construct five new "green" power stations**, blaming lack of government support.

Renewable energy campaigners said the decision was bad news for jobs, for supply firms and for energy security in the UK, and urged Ministers to end an "institutional bias" against new **biomass** plants.

The **Drax** group was intending to spend £2 billion on three self-standing biomass plants in North Yorkshire and Humberside. **Centrica**, meanwhile, intended to introduce one in Cumbria and another in Lincolnshire at a cost believed to be worth more than £400 million.

But instead of building new wood-burning stations Drax is proceeding with a smaller £700 million project that will convert half of its existing 4,000 megawatts (MW) coal-fired plant at Selby, North Yorkshire, to biomass.

The move follows a consultation document from the Department of Energy and Climate Change which not only proposes lowering the subsidy levels, from 2013, but also proposes a total cap on new-build UK biomass of 500 MW.

At one stage Britain was looking at the possibility of 5,000 MW of new plant. But the Government decided that it was more cost-effective to concentrate scarce public cash resources on converting carbon-heavy coal plants to wood burning.

A DECC spokesman commented: "We are determined to strike the right balance between encouraging [investment](#) in [renewable](#) electricity and ensuring value for money for consumers. That is why our proposed approach to support for new dedicated biomass plant recognises its relatively high cost of carbon saving compared to technologies like conversion and wind power."

Drax said last spring that it would not proceed with a new biomass plant at Selby but has now shelved the wider [scheme](#).

"It makes much more sense for us [to convert]," said the finance director, Tony Quinlan, who added that the company was "absolutely convinced" it could burn wood in a genuinely sustainable way.

Drax said on Thursday it had successfully raised £190 million (of new funds) via a share placing as part of measures aimed at [funding](#) the switch of three of its six units from coal to wood power.

The first phase of conversion will be ready to open in April 2013, with all three on stream by 2017 when a decision will be taken about whether to move to 100 per cent wood burning.

Drax will also be building plants on the US Gulf coast that will be able to process agricultural

and forestry wood into pallets for shipping and eventual burning. The pallets will be kept on site at Selby in four enormous white PVC domes, the first of which has already been constructed.

Drax, whose Selby plant is the largest coal-fired power station in western Europe, is changing to biomass because of legislation from the Europe Commission bringing increasingly tough environmental [regulations](#) to polluting plants. The current Drax plant produces about 22 million tonnes of carbon emissions annually, so the £700 million investment will reduce this by half – the equivalent of taking three million cars off the road – and create or save 4,000 jobs.

Centrica said that the Government's "preference" for switching coal plants to biomass rather than for new-build biomass meant it was not viable for the company to proceed with its proposed 80 MW biomass power station on its Roosecote site in Cumbria, nor with a 137 MW biomass power station adjacent to the company's gas-fired plant at Brigg.

Gaynor Hartnell, chief executive of the Renewable Energy Association, said the UK could not afford to have large companies such as Centrica dropping out of the biomass power sector.

She said: "This is bad news for employment, the supply chain and energy security. With a capacity crunch looming in 2015 the Government should be doing its utmost to encourage such shovel-ready projects. It must act swiftly to repair investor confidence in biomass, and renewables in general. Right now the Government seems to have an institutional bias against new biomass power projects."

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Energy giant axes £600m Immingham power plant plan



Saturday, October 27, 2012



[Grimsby Telegraph](#)

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PLANS for a £600-million biomass-fuelled power plant at Immingham **have been scrapped**, after lobbying attempts failed to win a change in policy from Government.

The 290MW project would have created 150 permanent jobs while boosting a flat local contracting scene with construction and ongoing maintenance opportunities, employing 850 people in the build out alone.

Proposed for land just outside Port of Immingham's western entrance, the **Heron Renewable Energy Plant**, a joint venture from Drax Power and Siemens Project Ventures, would have taken feedstock direct from vessels discharging at Humber International Terminal.

But a reluctance to back large-scale dedicated plants, favouring co-firing at converted existing power stations, has led to the decision, hinted at a year ago when the Westminster consultation began. Last October the Telegraph reported how the project was in jeopardy when the "cautious approach" from Government was published.

A similar plan for Selby was scrapped in February, while a **Hull proposal was also ruled out six months after all three schemes were first revealed in October 2008**.

Bosses at the power giant had kept Immingham on the agenda until now, chiefly because of the favourable port location. However, a recent proposal to further limit subsidy on pure biomass power generation through capping of the number of renewable obligation certificates that could be traded – the mechanics of the subsidy to encourage "green" generation – was seen as "the last straw".

Melanie Wedgbury, head of external communications for Drax, said: "Unfortunately, and with regret, we have decided

to cancel the development of this project.

"In July this year the Government confirmed the future support level was unchanged from the proposal in October which made the investment heavily challenging.

"More pressure was then put on the project in terms of the economic uncertainty regarding the regulatory framework which came out in a consultation paper in early September. That was the final straw, it was quite clear government focus was on **driving biomass electricity through conversion of existing coal-fired power stations.**"

To that end, Drax has this week raised £190 million in a share placing to convert half of the largest power station in Europe to be capable of co-firing biomass with coal, which is transported by train from Immingham, where it is imported.

It feels it now has the mandate with regulatory certainty and the framework to proceed in what will be a £650 million to £700 million project.

Centrica has also canned smaller scale plans for a biomass-fuelled power plant alongside its existing Glanford gas-driven plant at Brigg. That would have been another 50 jobs.

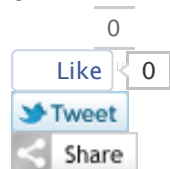
Simon Brett, deputy port manager for ABP at Grimsby and Immingham, said: "While ABP is disappointed that the Heron project is no longer going ahead, ABP continues to work with Drax Power on other opportunities for biomass through the Port of Immingham."

Cleethorpes MP Martin Vickers said he was "surprised and disappointed they had pulled the plug before the actual Energy Bill is published in detail".

He said: "These are all tentative projects in the first place. All of these companies are looking for the best deal from a renewable point of view, whether it is biomass, wind or whatever. I know uncertainty is a big problem, and I have made this point, as have colleagues.

"Government is wrestling with incredibly complex area of policy and trying to balance it off."

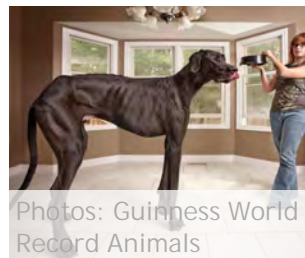
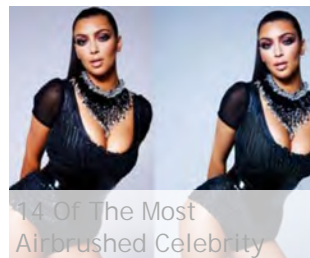
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[Report](#)

From the Web

by Taboola



Energy Secretary sees 20 new gas-fired power stations

Twenty gas-fired power stations are likely to be built in the UK to ensure that the fossil fuel can fulfill its role in meeting our future energy needs, says Ed Davey.



Ed Davey believes that the UK needs to expand generating capabilities in order to tackle climate change challenges

By Amy Wilson

4:23PM BST 04 Oct 2012

Twenty new gas-fired power stations are expected to be built in the UK over the next two decades, according to Ed Davey, the Energy and Climate Change Secretary.

The Government plans to add 20 gigawatts (GW) of electricity generating capacity from gas by 2030, Mr Davey said in an interview with *The Guardian* over the weekend.

“I strongly support more gas, just as I strongly support more renewable energy,” Mr Davey told the newspaper. “We need a big expansion of renewable energy and of gas if we are to tackle our climate change challenges.”

The UK has around 2GW of electricity generating capacity from offshore wind turbines, following the

opening of a wind farm off the Norfolk coast last week.

Mr Davey said both gas and renewables have a role in meeting Britain's future energy needs.

"People who see the UK's energy future as a competition between renewable and gas are misreading the next phase," he said.

Natural gas was used to generate around 40pc of the UK's power last year, and the Government's central estimates show that by 2030, gas will still account for around 33pc of the country's power.

Britain has also committed to produce 15pc of its energy from renewable sources by 2020.

The Irish power company ESB announced last week it was investing in a new gas-fired power station just outside Manchester, capable of generating 880 megawatts of electricity, enough power for one million homes.

"We urgently need to replace some of our ageing coal power stations and gas is relatively quick to build and half as polluting," said Mr Davey when ESB announced the new plant. "Conventional gas fired power generation needs to remain in the energy mix for some time, even as we seek to develop alternative low carbon technologies such as renewables, nuclear and carbon capture and storage."

The new Energy Bill and a gas strategy due to be published this autumn are both seeking to address the fact that 20pc of Britain's electricity generating capacity is set to be lost over the next decade, while demand for power forecast to double by 2050.

Gas is seen as an important part of the energy mix because it produces around half the emissions of coal. However members of the government, including Mr Davey, support a target of "de-carbonising" electricity production by 2030, which would mean fitting new gas power stations with carbon capture and storage technology.

Visit to read more about the role natural gas plays within the UK's changing energy landscape

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Plug pulled on 550 potential new power plant jobs near Brigg



Wednesday, October 24, 2012



[Nigel F](#)

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Centrica Energy have pulled out of plans to build a biomass power station on the old Brigg sugar factory site at Scawby Brook which would have brought 50 permanent jobs and 500 during construction.

The announcement was made this afternoon (Wednesday, October 24).



1.

How the new plant (left) would have looked at Scawby Brook - close to the railway line and the New River Ancholme

Centrica Energy had proposed to build a new 137MW biomass power station on land adjacent to its existing gas-fired power station at Scawby Brook.

The company also announced today that it will not be proceeding with its planning application to build a new dedicated 80MW biomass plant in Roosecote, Barrow-In-Furness.

However, while the government has declared its support for biomass as part of the UK's future energy mix, recent clarification on the regulatory framework for biomass indicates that the priority is to convert coal fired power stations to biomass or to encourage co-firing.

It will now look at other options for the proposed biomass plant site, including a possible new build gas-fired power station.

Centrica Energy spokesperson Suzanne Edmond said: "Over the past 12 months, Centrica Energy has been exploring the potential for a new biomass power station at Glanford Brigg, which we hoped could provide enough renewable energy to power around 200,000 homes.

"Consultation with the local community has been a central part of developing our proposals, and we have been delighted that so many local people have engaged.

"Throughout this time, we have also been talking to the government to clarify energy policy. Our understanding is that future policy will favour conversion of coal fired power stations rather than dedicated biomass, so we have made the difficult decision not to proceed with this proposal".

"While we will not progress the current plans for a biomass power station at Glanford Brigg, we remain a committed regional employer and will continue to look at investment opportunities in Brigg and the Lincolnshire coast."

Centrica Energy was conducting an extensive consultation process on its proposal to engage the local community and businesses, including exhibitions and a Supplier Day. The proposed power station was set to create 50 permanent jobs plus 500 jobs during the construction phase.

Centrica Energy will now evaluate other options for the site, including a possible new build CCGT plant.

The existing gas-fired power station will continue to operate.

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SUMMARY


The UK is currently witnessing a major rush to build large-scale electricity-only biomass plants as well as seeing an increase in biomass used in co-firing. The scale of proposed power plant development dwarfs the planned use of domestic fuel resource. Instead, many of these new plants are expected to be dependent on imported biomass. They are generally being built on the UK coast near port facilities with expected sources of feedstock from Canada, the US, Russia and the Baltic States, among others. Furthermore, new plants are often being sited in locations where it is either not possible or not economic to capture the substantial quantities of heat produced, significantly reducing their efficiency and therefore their ability to deliver greenhouse gas emissions reductions.

The RSPB has conducted analysis to understand the scale of the expected reliance on imports of biomass. This analysis shows that current planning proposals in the UK indicate a substantial shift from primarily domestic supply (74%) to a bioenergy industry based largely on imports (81%). Wood imports in particular will increase substantially from 13% to 68%, resulting in wood being the most significant feedstock type for UK biomass plants. This will be in addition to the already high level of wood imports for non-biomass use. Although absolute levels of waste used for bioenergy will increase, in relative terms the waste sector is expected to play a much more limited role, providing just 15% of overall feedstock.

With the bioenergy sector on the verge of rapid growth, the UK faces an urgent choice about its future development. Without intervention, it will be dominated by large-scale production of electricity from biomass, locking us into massive and unsustainable demand for wood that will be needed to keep these plants running for decades to come. The UK has rightly embraced the need for renewable energy, which is essential in the fight against dangerous climate change. However, it is imperative that the renewable energy industry develops sustainably and environmental impacts are not ignored. **An unsustainable bioenergy industry risks serious damage to wildlife and the climate by driving substantial**

additional logging overseas.

We need to avoid the mistakes that were made in the liquid biofuels industry where policies led to large-scale unintended environmental and social consequences. The RSPB believes, however, that a sustainable bioenergy sector based on wastes and domestic feedstocks is possible – if the UK Government acts now to encourage more sustainable technologies at appropriate scales, **rules out subsidies for large-scale electricity production dependent on imported wood,** improves sustainability standards, and fully accounts for all emissions from bioenergy.

	<p>COAL & BIOMASS – INFRASTRUCTURE IMPLICATIONS THE SOUTH HUMBER BANK A REALITY CHECK</p> <p>ABLE MARINE ENERGY PARK</p>	<p>Date: 22-Nov-12</p>
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APPENDIX 15

Press Article: Beauty of Biomass

The beauty of biomass

08 Mar 2012

Green and virtuous, biomass offers some handling challenges, as Felicity Landon finds out

As power generators look to biomass as a vital 'green' ingredient, for co-firing with coal or firing on its own, many ports see potential big business on the horizon.

Logically, ports that have traditionally been part of the supply chain serving coal-fired power stations would be expected to take up the opportunities. But therein lies a problem, or several problems – including dust, risk of fire and/or explosion, and the need for significant areas of covered storage and specialised handling systems.

"It isn't just a matter of using the same assumptions as when handling coal, and just using the same equipment and processes for biomass," says Yannick Tilley, international sales and business development manager at the Geldof Metaalconstructie, the Belgian supplier of components and solutions for storage and handling of bulks.

"Biomass is a material that requires particularly careful attention. There are numerous examples out there of people not treating biomass, and especially wood pellets, with the necessary safety precautions in mind – and they can find themselves facing explosion or fire. And even if you have the most far advanced handling system on the quay, it is still important to check the material coming in. We have heard stories of ships coming in with the biomass already smouldering."

Too many people mistakenly assume that biomass is 'just another bulk' and that somehow it will seamlessly follow coal from quay to power station, says Mr Tilley.

However, the differences are significant. When handling coal, dust problems can be resolved by using water sprinklers. Wood pellets, when handled, create a lot of dust – and there is already a certain percentage of dust within the material, which can potentially cause an explosion. But wood pellets must be kept dry, because if moisture levels get too high, they can disintegrate or the moisture will speed up the biological activity within the pellets which could lead to combustion.

"That has an impact, because the belt and transport systems must be covered – and that affects the design and price of the system."

Another key factor is quantity.

"People forget that wood pellets are a lighter, more voluminous product," says Robert van Muiden, general manager of Van Uden Bulk Logistics in Rotterdam.

"In the same ship, you might carry 50,000 tonnes of coal – but only 30,000 tonnes of wood pellets. In the same warehouse, where you normally might fit 10,000 tonnes of coal, maybe you will fit 6-7,000 tonnes of wood pellets.

"All the terminals are saying millions of tonnes of wood pellets are coming. There were 1.2m tonnes through Rotterdam last year – which sounds impressive, but is a flea bite compared with coal."

And then there is the comparative calorific value; the calculations show that for every tonne of wood pellets versus coal, the biomass option is twice as expensive and offers half the caloric value, points out one industry expert.

In the rush to be green, he says, politicians have focused on subsidies for power stations but no one has thought about the investments required in ports or trains. Coal wagons are open; wood pellets must be carried in enclosed wagons.

Robert van Muiden says: "A supply chain includes all the costs from origin to end user. People should be aware that logistics costs can kill a project, or make it."



Wood pellets need dry storage and lots of it

Wood pellets are a clean, renewable, carbon-neutral biomass fuel, says Andrew Moffat, chief executive of the Port of Tyne.

The Tyne has led the way in the handling of wood pellets, with throughput last year of nearly 1m tonnes. This was all for the Drax power station, served by rail from the quay; the port is also in talks with other generators about potential biomass imports.

“It’s important to recognise that handling biomass isn’t like handling coal just because it is going down the same supply chain to the same end user,” says Mr Moffat. “Wood pellets are basically softwood sawdust compressed using steam. I would say there are a lot of similarities with grain. For example, there is a high moisture content – the cargo can heat up and combust, if left alone, and that is one of the challenges.”

And while combustion in coal can be dealt with by raking out the stack outside and using water sprinklers, clearly that’s not an option for pellets. They would disintegrate and become unusable. Stock rotation is important: “You have to make sure you are moving stock around and aerating it, so you don’t get heat spots and potential combustion.

“Another issue is dust. When you handle the wood pellets, you get degradation of quality, leading to further dust.”

The Port of Tyne describes its first year of handling wood pellets as “both challenging and fruitful”. It invested an initial £20m in a dredging project and the construction of a biomass handling, storage and transportation facility which it believes is the most advanced of its kind in Europe, added another £1m to make some short-term modifications, and in January this year installed two new specialist hoppers, total cost £2.2m. These are equipped with extractor fans to remove dust and return it to the cargo.

The wood pellets are unloaded on the quayside using traditional grabs, operating behind a forced air curtain to keep the dust contained. The cargo is fed through the hoppers, transported to the shed and subsequently moved by covered conveyor to a silo for automatic top-loading of trains as required.

“You could cut corners and go for a least-cost solution but if you are not careful you will get environmental issues, whether that is dust or potentially storing for too long and risking fire,” says Mr Moffat. “We are a key element of the supply chain and believe that you need to invest properly, as we have done. We handled nearly 1m tonnes last year. The potential is huge.”

Geldof has provided biomass handling solutions for logistics and utility customers throughout Europe – among recent projects, the company delivered a wood pellet handling installation for the Electrabel Gelderland power plant in the Netherlands, where barges are unloaded pneumatically at 500 tonnes/hour via a mobile unit that eliminates dust emissions. The complete circuit, from quay to boiler, uses closed conveyor belts, silos, hammer mill and buildings kept under slight pressure to avoid the escape of wood dust.

Yannick Tilley says people tend to talk about biomass as one type of cargo, when the variety is considerable in both quality and handling requirements.

“One of the biggest misconceptions is that wood pellets, wood chips and waste-wood (often processed from demolition sites) can be treated in the same way.”

It is logical that ports want to maximise flexibility and storage, he says. “And of course people on the power side also want maximum flexibility; they have no idea what long-term or medium-term contract they can secure for their supplies, and they want to keep their options open.”


But the materials are very different in their physical properties, he emphasises. Wood pellets tend to be free-flowing and need to be kept dry. Wood chips are less sensitive to moisture and do not have the same dust-related problems. But they tend to stick together, which potentially gives a lot of problems with transport. And because waste-wood often comes from old furniture and fittings, residues of paint and other coatings can be an environmental issue.

“If you just mix it all up and try to come up with a one solution fits all type of installation, it becomes very technically very hard,” says Mr Tilley.

Images for this article - click to enlarge



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APPENDIX 16

Report: 'Dirtier than coal? Why Government plans to subsidise burning trees are bad news for the planet'

Dirtier than coal?

Why Government plans to subsidise burning trees are bad news for the planet



GREENPEACE

Summary

The UK Bioenergy Strategy set a clear direction for future bioenergy policy, including commitments to only support sustainable bioenergy that delivers genuine greenhouse gas emission reductions. These principles are now being undermined by Government's proposals to continue to subsidise large-scale power generation from wood.

The Government's own analysis, provided to Princeton academic Timothy Searchinger¹, shows that the use of whole trees in this way would increase greenhouse gas emissions by at least 49% compared to using coal over 40 years. Yet, Government's current proposals, to continue to subsidise biomass power under the Renewables Obligation, do not account for this by distinguishing between different sources of biomass. They are therefore likely to actually increase greenhouse gas emissions.

Friends of the Earth, Greenpeace and the RSPB are therefore calling for:

- 1** An immediate review and revision of DECC's impact assessment to include the emissions that arise as a result of the time delay between combustion and forest re-growth, and from taking wood out of existing industries that may have to use non-wood alternatives, such as plastic and concrete.
- 2** The withdrawal of public subsidy via the Renewables Obligation and Feed-in Tariff for generating electricity from feedstocks derived from tree trunks (roundwood and sawlogs).
- 3** A refocus of support for bioenergy on the use of wastes and other feedstocks that are harvested sustainably, and where indirect substitution emissions can be shown to be minimal. This would guarantee emission reductions.
- 4** A comprehensive accounting system to be developed for biomass that includes carbon debt and indirect emissions from product substitution.

Background

DECC are currently consulting² on proposals that will determine the level of public subsidy for bioenergy, along with the sustainability and carbon standards that generators will have to meet to claim their subsidy.

DECC claims that these proposals will ensure 'sustainability and affordability' for the use of biomass, and argues that the need to reduce carbon emissions is one of the key reasons for continuing to support biomass power, alongside security of supply. The consultation is supported by an impact assessment³ that attempts to substantiate these benefits.

The consultation follows the UK Bioenergy Strategy⁴, published in early 2012, which established a number of key principles for bioenergy. Critically, these included the following commitment: "Policies that support bioenergy should deliver genuine carbon reductions that help meet UK carbon emissions objectives to 2050 and beyond". This promise is in danger of being broken, as DECC have chosen to exclude a number of key sources of emissions associated with bioenergy in their calculations, significantly over-estimating the climate benefits of generating electricity from wood.

¹ Searchinger (2012) Sound principles and an important inconsistency in the 2012 UK Bioenergy Strategy

² DECC (2012) Biomass Electricity & Combined Heat & Power plants – ensuring sustainability and affordability <http://www.decc.gov.uk/assets/decc/11/consultation/ro-banding/6339-consultation-on-biomass-electricity-combined-hea.pdf>

³ <http://www.decc.gov.uk/assets/decc/11/consultation/ro-banding/6342-impact-assessment-biomass-electricity-and-combined.pdf>

⁴ DECC, Defra & Dft (2012) The UK Bioenergy Strategy <http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/bio-energy/5142-bioenergy-strategy-.pdf>

Flawed emission accounting

DECC have proposed a limit on life cycle greenhouse gas emissions from biomass power that ranges from 200 to 285g CO₂/kWh, but the standard is fundamentally flawed. It doesn't count significant emissions to the atmosphere for electricity that is generated from wood harvested from forests, significantly over-estimating the climate benefits.

Theoretically, this is a saving of 43–60% in comparison with the current grid average in the UK. The standard includes emissions from harvesting, transporting, drying, processing and converting the biomass into energy. However, DECC have chosen to omit two large sources of emissions: 'carbon debt' and 'indirect substitution'. Taken together, these omissions make the greenhouse gas limit meaningless. Recent research suggests that full accounting for carbon debt alone makes generating electricity from wood a bad idea if we want to reduce greenhouse gas emissions.

1 Carbon debt

As with any organic material, when wood is burnt, CO₂ is emitted – one tonne of dry wood burnt in a power station will emit 1.8 tonnes of CO₂ into the atmosphere⁵. Yet DECC has chosen to ignore these emissions and hasn't counted them in their proposed emission limit; they argue that the carbon released is offset by the carbon absorbed by growing the forest. Effectively, they assume that biomass itself is a 'carbon-free asset'. This means that the very real carbon emitted by the smokestacks of powerplants can be completely ignored, on the assumption that it is offset by the growth of trees. Unfortunately, this ignores the fact that forests are already growing and already storing carbon, and when the trees are harvested and burnt, that carbon storage is reduced and the carbon that was in the tree is released into the atmosphere.

Clearly, if the land remains forested, the trees will grow back. But the trees would also continue to grow if not harvested. Eventually, tree growth slows down as trees mature. That means that the regrowing forest can catch up with the forest if left alone. But that takes a long time. During the intervening period, the harvest of wood has added carbon to the air. And that matters because that means global warming has increased. The "carbon debt" refers to this increase of carbon in the atmosphere, and the "carbon payback" refers to the delay before such carbon neutrality can be assumed in practice. A variety of studies have found that this carbon debt will typically last many decades.

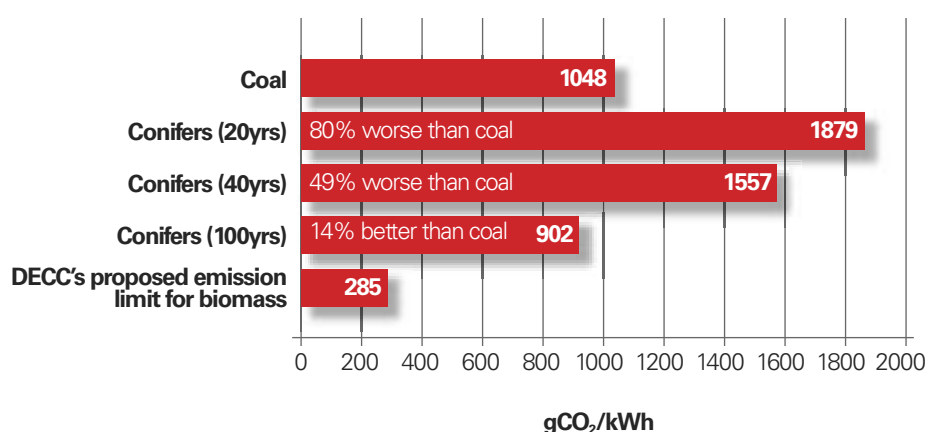
Perhaps the first person to recognize this mistake was Timothy Searchinger, a researcher at Princeton University who specialises in bioenergy, and whose previous papers uncovered the bioenergy accounting flaws. Searchinger used DECC data (which was used to produce Figure 4 in the UK Bioenergy Strategy), to calculate that over a 20-year period, emissions from power generation using wood from conifer plantations are 1879 g/kWh. That is 80% greater than coal power. Over a 40-year period emissions are lower because the trees have had longer to re-capture carbon, but even then biomass emissions would be 49% greater than coal power. Only after 100 years does electricity generation from conifer trees perform better than coal. And, regardless of the time period, it's never better than the current grid average and never meets DECC's proposed maximum emission limit for biomass (Figure 1). These figures should be seen in the context of the Climate Change Committee's recommendation, that the power sector in the UK needs to reduce its emission intensity from the current average of 500g CO₂/kWh to 50g by 2030⁶. This is not a lifecycle standard, but it demonstrates the fact that biomass power – even with a flawed accounting system – can only have a limited role to play in the longer-term.

⁵ Haberl et al. (2012) Correcting a fundamental error in greenhouse gas accounting related to bioenergy Energy Policy in press

⁶ Committee on Climate Change (2010) *The Fourth Carbon Budget - Reducing emissions through the 2020s*

This means that burning whole trees in power stations would make global warming worse, undermining goals of reducing our greenhouse gases by 2050. Unfortunately, whilst this is recognised in part of the UK Bioenergy Strategy, subsequent parts of the Strategy and DECC's current proposals ignore it and revert to the assumption that biomass power is automatically carbon free.

Figure 1 - The implications of carbon debt - lifecycle greenhouse gas emissions per kWh of electricity⁷



2 Indirect substitution emissions

Regardless of where whole trees come from, their use for electricity generation will contribute to climate change for decades. But where will biomass come from to power expanded bioenergy in the UK?

The UK produces about 10 million tonnes of green wood each year. Most (98%) of this is softwood, three-quarters of which is used in sawmills and for wood panels. A further 11% is used as woodfuel already. Whilst domestic sources currently provide most biomass used in electricity generation in the UK, this cannot be sustained as the sector grows. DECC expect approximately 80% of feedstock to come from imports in the future⁹. This finding was reflected in a 2011 RSPB review⁹ of planning applications for new biomass power stations (Figure 2). This is because the UK has a limited domestic wood resource that is already in demand from other industries: domestic wood production supplies only 20% of the wood-based products we consume.

The significant role that imported wood is expected to play in generating electricity in the UK, and the risk that this poses as a result of carbon debt, is confirmed by Forest Research in their report to DECC⁸, which advises:

"The possibility that [UK bioenergy demand] might be met from ongoing management of forest areas already in production was explored, but finally discounted on both a pure theoretical basis and in the light of evidence on likely changes to patterns for wood demand. Instead it was concluded that a significant increase in requirement for imported wood in the UK would entail intensification of the management of forests in other countries, similar in some respects to restoration of management in neglected forests."

Demand for wood, for electricity generation, will therefore add to the existing trade imbalance, given that UK consumption is already principally met through imports. If this demand is met from UK sources, then wood will be diverted from existing uses, such as construction and wood panels, forcing substitution with either imported wood or non-wood alternatives such as concrete and plastic. DECC's own research¹⁰ shows that diverting roundwood and sawlogs (i.e. wood from the tree trunk) into bioenergy results in negligible or increased emissions. This is true even when the carbon emissions from combustion are not counted because the original uses for this wood are substituted with higher carbon alternatives.

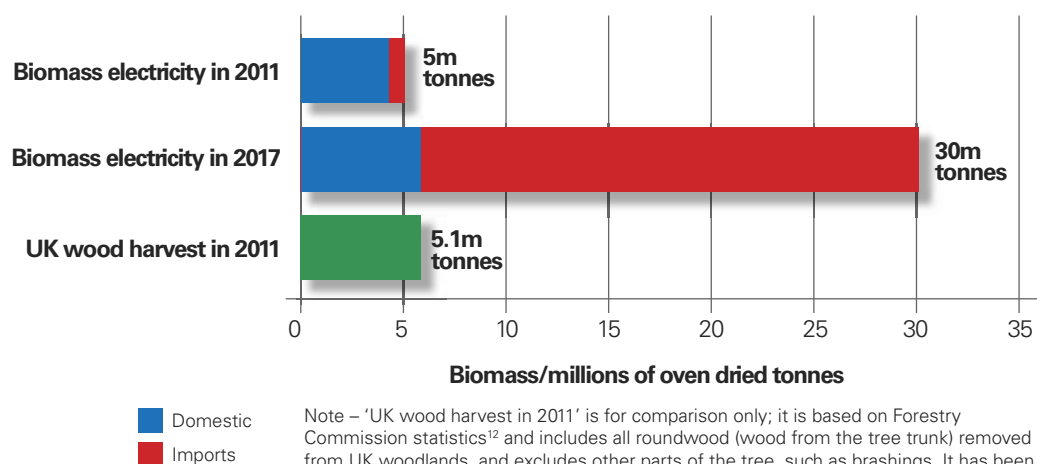
⁷ Data from Searchinger (2012) Sound principles and an important inconsistency in the 2012 UK Bioenergy Strategy

⁸ Forest Research & North Energy (2011) Carbon impacts of using biomass in bioenergy and other sectors: forests p. 60

⁹ RSPB (2011) Bioenergy – a burning issue http://www.rspb.org.uk/Images/Bioenergy_a_burning_issue_1_tcm9-288702.pdf

¹⁰ Forest Research & North Energy (2011) Carbon impacts of using biomass in bioenergy and other sectors: forests p.163

Figure 2 - Demand for biomass for electricity generation in the UK compared to wood production¹¹



Maximum emission reductions are made from forests when the roundwood and sawlogs go into conventional wood markets, such as construction and panels, and only the offcuts and brashings are used for bioenergy. This is because the carbon is retained in timber when it is used in construction, furniture, fencing, etc – whereas it is immediately released into the atmosphere when used for energy. Offcuts and brashings are best used for woodfuel, because there are few alternative uses.

This failure to account for indirect substitution emissions directly contradicts the UK Bioenergy Strategy which contains explicit and important principles for carbon accounting. Specifically, the Strategy commits to accounting for “the emissions resulting from redirecting biomass from other uses which store carbon,” including the carbon storage if trees were “left in the forest to complete their natural lives.”

¹¹ Source – RSPB (2011) Bioenergy – a burning issue; DECC (2012) Impact assessment - consultation on proposals for the levels of banded support for solar PV under the Renewables Obligation for the period 2013-17

¹² Forestry Commission (2012) Forestry Statistics 2012 - UK-Grown Timber
<http://www.forestry.gov.uk/website/forstats2012.nsf/LUContents/88BDD8FEA0D881448025734E004F27BB>

Implications of the carbon accounting flaws

DECC's current failure to account for the emissions from carbon debt and the substitution is a major flaw in bioenergy policy. Continuing to underpin UK policy in this way will come at considerable cost to the public, and have a damaging impact on our climate.

DECC has not, as yet, analysed the proportion of the biomass supply chain that is at risk of carbon debt, and therefore it is difficult to estimate the total impact this could have. However, for indicative purposes, if we assume that whole trees constitute even just 50% of the biomass used for electricity generation, then emissions from the UK electricity generation sector would increase by 5 million tonnes of CO₂, i.e. approximately 3% of current total emissions from the power sector. In the absence of better data, 50% seems a reasonable assumption, given that imports are expected to make up 80% of supply, and a proportion of these will be from non-forest sources and existing forestry that is not affected by carbon debt (because, for example, it previously supplied another market that has since shrunk). Even if 25% of the biomass used in electricity generation results in carbon debt, emissions would increase by approximately two million tonnes of CO₂, or 1.5% of total current emissions from electricity generation.

The overall implications of increasing the cost of wood for other industries, and the resulting emissions from the substitution of wood products, are unclear but likely to be considerable given that, according to the UK Bioenergy Strategy, substitution often results in even higher emissions. Indeed, it's already clear that bioenergy is having such an effect from the Wood Panel Industries Federation campaign for subsidies for biomass to be removed because they are concerned about the impact on their industry¹³.

¹³ E.g. <http://www.stopburningourtrees.org/>

Recommendations

The Government's proposals for continued subsidies for biomass electricity, and an emission limit to mitigate the effect this will have on our climate, are based on fundamentally flawed data relating to greenhouse gas implications.

DECC's proposals therefore misrepresent the cost effectiveness of the emission reductions for British consumers. We believe that this threatens the UK's short and long term commitments to reducing greenhouse gas emissions under the Climate Change Act (2008), at least in terms of actual emissions to the atmosphere in the critical period to 2050, within which we must avert dangerous climate change.

We are therefore calling for:

- 1** An immediate review and revision of DECC's impact assessment to include emissions from carbon debt and indirect substitution.
 - 2** The withdrawal of public subsidies for generating electricity from feedstocks derived from tree trunks (roundwood and sawlogs).
 - 3** A refocus of support for bioenergy on the use of wastes and other feedstocks that are harvested sustainably and where indirect substitution emissions can be shown to be minimal. This would guarantee emissions reductions.
 - 4.** A comprehensive accounting system to be developed for biomass that includes carbon debt and indirect emissions from product substitution.
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David J Slater (rspb-images.com)


DECC research shows that wood from the trunks of conifers such as these are best used in construction and furniture rather than for energy production.

ABLE HUMBER PORTS
CROWN FORESHORE
Summary

Date: 20-11-2012

1. The Foreshore and Sea-Bed that will accommodate the proposed Quays for the Able Marine Energy Park (AMEP) are leased, by the Crown Estate, to Associated British Ports (ABP). The Lease dates back to January 1869 and has a 999 year term.
2. In proposing the development the Applicant (Able Humber Ports Limited) has sought an Underlease from ABP and its efforts in this regard were undertaken with the full knowledge and support of the Crown Estate. Indeed this course of action was recommended by the Crown who had (16th December 2011) provided both a copy and transcript of the original Lease (attached Appendices 1 and 2).
3. At a preliminary meeting with Captain Phil Cowing – the Harbourmaster – the Applicant was directed to liaise with Mike Hill, of ABP's Regional Property Department, regarding all matters pertaining to a potential lease.
4. At a meeting held on 19th April 2012 between Mike Hill and Neil Etherington, ABLE's Group Development Director, the background, formula and operation of an Underlease were explained – meeting notes attached (Appendix 3). It was also agreed that ABP would provide draft Heads of Terms. The following day, in consultation with the Harbourmaster the AMEP Harbour Authority Area was confirmed and agreed as being the area that extends 100m from the Berthing Face. (E-mail 20th April 2012 – Harbourmaster - Appendix 4).
5. In the intervening 5 months through to the Specific Hearing (17th October 2012) regular communications with ABP were characterised by their persistent stalling and unfulfilled promises to respond. A Communication Log is attached (Appendix 5) which clearly depicts the problem - the approach to the Grimsby & Immingham Port Director, John Fitzgerald (mid August 2012) also failed to expedite any progress.
6. At the Hearing itself, Alison Gorlov (Winkworth Sherwood), for the Harbourmaster, acknowledged, ".....the broadest possible principle was reached many months ago that an underlease would be a very sensible way out. And then, for reasons which I'm sorry to say, are all of them to do with the organisation of property management for the Conservancy Authority, the expected draft lease simply hasn't appeared. The applicant hasn't seen it, all very regrettable, but I'm afraid we are where we are."
7. Furthermore, and on the same day, the Harbourmaster undertook to supply a draft lease 'within a week'.
8. The following has been prepared (19th November 12) by Barney Frith, Solicitor and Partner at Square One Law LLP, Newcastle, who has been acting for the Applicant with specific regard to the proposed Underlease:
 1. *Having previously been advised by ABP that the aim was to have a draft underlease with us by Tuesday/Wednesday (22/23 October 2012) the draft underlease was finally received from Andrew Jackson (ABP's solicitors) on Friday 26 October 2012 at 17:54.*

In the covering e-mail Andrew Jackson advised that they had been instructed to act on behalf of Associated British Ports (ABP) in connection with this matter in liaison with Winckworth Sherwood and

	ABLE HUMBER PORTS CROWN FORESHORE Summary	Date: 20-11-2012
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that:-


- (i) the transaction was to comprise an agreement for lease and underlease;*
- (ii) Able was to be responsible for ABP's legal costs and disbursements incurred in connection with the transaction whether or not the matter proceeded to completion;*
- (iii) ABP's legal costs would be calculated on a time incurred basis at the rate of £205 per hour plus Vat and disbursements for Andrew Jackson and £250 plus VAT and disbursements for Winckworth Sherwood; and*
- (iv) an initial undertaking would be required from Square One Law LLP to be responsible for ABP's legal costs and disbursements in an initial sum of £10,000 plus VAT and disbursements.*

No explanation/justification was offered as to why Able should have to bear the costs of two firms of solicitors.

The draft underlease omits details such as the level of rent and lacks clarity as to the length of the term (attached Appendix 6). In addition, the draft underlease plan is unworkable (see Appendix 7) in so far as the area (foreshore and sea bed) adjacent to the so-called ABP triangle is completely omitted. Even with a signed Agreement the proposal is wholly unreasonable, completely impractical and does not suggest a willingness to resolve the issue.

No title information or copy of the Crown lease was provided.

2. *I responded on Wednesday 31/10/2012 explaining that you [Neil Etherington] had only recently returned from leave, that the terms of the underlease were under review, and requesting:-*
 - (i) a copy of the Crown lease dated 1st January 1869*
 - (ii) clarification as to the length of term, the level of rent proposed and the basis upon which that level of rent had been/was to be determined.*
 - (iii) draft of the contemplated agreement for lease.*
 - (iv) replies to CPSE.1 and CPSE.3 enquiries*
3. *A certified copy of a certified copy of the Crown lease was subsequently provided (but without associated plans) but none of the other issues raised in my e-mail dated 31/10/2012 have yet been addressed.*
4. *Having reviewed the provisions of the Crown lease, on 08/11/2012, I sought confirmation/clarification on the following:-*
 - (i) what consents were required in relation to the proposed underlease and confirmation that the necessary requests for consent had been made.*

	<p style="text-align: center;">ABLE HUMBER PORTS</p> <p style="text-align: center;">CROWN FORESHORE</p> <p style="text-align: center;">Summary</p>	<p style="text-align: right;">Date: 20-11-2012</p>
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- (ii) *to whom the rent payable under the Crown lease is currently paid.*
- (iii) *the basis upon which the rent due under the Crown lease is currently ascertained.*
- (iv) *that ABP was not aware of any disputes or breaches of covenants alleged in relation to the Crown lease.*

I also sought specific confirmation that there was no financial security attached to the land to be demised and also requested copies of the plans referred to in the Crown lease.


To date I have received no response.

5. *On 12/11/2012, I specifically requested confirmation that the draft underlease was comparable to, and no more onerous than, other leases granted by ABP to other statutory harbour authorities together with copies (financial and other confidential commercial details excluded) of the two most recent analogous leases that have been entered into by ABP.*

To date I have not received a response to this enquiry either.

The absence of the information/clarification requested has made it impracticable to make any meaningful progress.

9. The above, again, clearly reflects the on-going intransigence of ABP who, at every turn, seem set, to preclude progress even with only 3 days remaining of the Examination period.
10. On Tuesday 20th November 12 Andrew Jackson Solicitors did finally respond producing a suite of documents as follows:-
 - (i) Letter from the Crown Estate November 2006 regarding works (identity redacted) within the Lease area.
 - (ii) Copy of the Underlease and Deed of Variation (Humber Sea Terminal) 1st October 2008.
 - (iii) Copy of the Counterpart Licence to Charge (Humber Sea Terminal) 18th August 2004.
 - (iv) Copy of the Counterpart Underlease (Simon Storage Group Limited) 20th February 1997.
 - (v) A further copy of the AMEP Underlease Plan (as Appendix 7).
 - (vi) A rent calculation based on the two separate Underlease areas.
 - (vii) An email confirming a 60-year term.
11. Clearly the above – received lunchtime on the eve of the final Hearing – was far too late to pursue any meaningful progress, no doubt its intent, and, in any event, the same Underlease Plan remained.

	<p style="text-align: center;">ABLE HUMBER PORTS</p> <p style="text-align: center;">CROWN FORESHORE</p> <p style="text-align: center;">Summary</p>	<p style="text-align: right;">Date: 20-11-2012</p>
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12. As a consequence the Applicant has no other reasonable course of action other than to compulsorily seek to acquire the relevant part of the ABP Lease.
13. In so doing the Applicant has liaised with the Crown Estate and John Houghton (Bond Pearce) has confirmed that the Crown Estate is prepared to grant their consent to acquiring ABP's interest provided that Able agreed that the lease once acquired could be replaced with a modern version that the two parties would agree together, subject to arbitration in the case of dispute. The Applicant has confirmed that this would be the case.

Appendices:-

1. Underlease dated 16th December 2011 (copy)
2. Underlease dated 16th December 2011 (transcript)
3. Meeting Notes – 19th April 2012
4. E Mail Harbourmaster – 20th April 2012
5. Communications Log
6. Draft Underlease
7. Draft Underlease Plan

	<p>ABLE HUMBER PORTS CROWN FORESHORE Summary</p>	<p>Date: 20-Nov-2012</p>
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APPENDIX 1

Underlease dated 16th December 2011 (copy)

the
the Board
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Dec. 29. 51.
Dec 1976 p. 171

of residue of this lease to L. N. E. & Co. for 21-7-37 - M 5731/37
and Bed of the River Ouse and Trent - see p. 436. H.M. 25/10/66.

This Indenture of Lease made the first day of January one thousand eight hundred and sixty nine **Between** The Queens Most Excellent Majesty of new first part The Board of Trade of the second part and The Honourable Conservancy Commissioners (in this Lease called the Commissioners) of the third part **Witnesseth** that the Board of Trade on behalf of the Queens Majesty and by virtue and in exercise of the powers in them vested under the Statute in Conservancy Act, 1863 and of every other power enabling them in this behalf by these presents grant demise and lease to the Commissioners and their successors those the Foreshores and bed of the River and the Estuary thereof from the confluence into the pame of the Ouse and Trent to the Sea (that is to say) to an imaginary line drawn straight from Donna Hook to the mooring post of the chequered Buoy at the mouth of the River and straight thence to the Eastern extremity of the line forming the Northern boundary of that portion of the Foreshore outside Spurn Head which is at the date of this Indenture granted or agreed to be granted on behalf of the Queens Majesty to the said Commissioners for executing the Office of Lord High Admiral as far as the Foreshores and Bed aforesaid are under the management of the Board of Trade (which Foreshores and bed intended to be comprised in this Lease are in this Lease for brevity referred to as the demised Foreshores) but so that nothing in this Lease shall be deemed to extend to the lands or the parts of the Foreshores and bed aforesaid or the rights described or referred to in the Schedule to this Lease Except nevertheless and always reserving out of this Lease first Hall and free right for the Queens Majesty Her Heirs and Successors and for all persons by Her or their permission (which permission shall be assumed to have been granted until the contrary is shewn) to ride drive walk or otherwise pass to and fro over and to fish and bathe on and to gather seaweed from the demised Foreshores and to land thereon Goods and Passengers from Vessels and Boats and to embark therefrom Goods and Passengers in Vessels and Boats save as far as the Board of Trade from time to time by License in writing under the hand of one of their Secretaries or Assistant Secretaries (if and to such an extent as they lawfully can or may) authorize the Commissioners to interfere permanently or otherwise with the right aforesaid in all or some respects in relation to any portion of the demised foreshores specified in the License secondly **All** rights of way and access to and over the demised Foreshores existing at the date of this Lease by means of any public road footpath bridge or other means -

To have and to hold

the demised Foreshores with their rights members and appurtenances to the Commissioners and their Successors for the term of five hundred and ninety nine ^{years} from the date of this Lease yielding and paying therefor during the said term unto the Queens Majesty Her Heirs and Successors the portion of net profits to be ascertained as in this Lease provided **And** the Commissioners do hereby for themselves and their successors covenant with the Queens Majesty Her Heirs and Successors in manner following that is to say -

the Records in
the Record

77
First. The Commissioners will at all times keep a proper separate Account of their receipts and expenditure in respect of the demised Forestores which Account shall be made up annually to the Twenty first day of December. Secondly That Account and the Voucher thereto shall be at all reasonable times freely open to the inspection of the Board of Trade their Officers and Agents Thirdly The Commissioners will annually on or before the Thirtieth day of April furnish to that Board of Trade a full and true Abstract of that Account and will at any time if required by the Board of Trade furnish to the Board of Trade a copy of that Account Fourthly The net profits if any derived by the Foremen from the demised Forestores (in this Lease referred to as the net profits) shall year by year be divided into three equal parts one whereof the Commissioners will pay to the Board of Trade by their Accountant for the time being at their Office in London on or before the Thirtieth day of June in each year provided that the expenses of the obtaining and executing of "The Humber Conservancy Act 1868" shall be a charge on the gross profits derived by the Commissioners from the demised Forestores in this Lease referred to as the gross profits and those profits shall accordingly be liable to the payment of those expenses before the ascertainment of the net profits Fifthly The Commissioners will duly pay out of the gross profits the Land Tax (if any) and all other present and future Landlords and Tenants Taxes rates charges and impositions (if any) except the Landlords' Property Tax payable in respect of the demised Forestores or by the Landlord or Tenant on account thereof which when paid shall be allowed in the ascertainment of the net profits Sixthly The Commissioners will not execute or seek for powers to execute any embankment or other works on the demised Forestores except with the previous consent in each instance of the Board of Trade by writing under the hand of one of their Secretaries or Assistant Secretaries Seventhly The Commissioners will not in any way hinder or obstruct the due exercise or enjoyment of any rights or privileges excepted and reserved out of this Lease except in accordance with a License granted as in this Lease provided Eighthly The Commissioners will not except with the previous consent in each instance of the Board of Trade by writing under the hand of one of their Secretaries or Assistant Secretaries at any time assign the demised Forestores or any part thereof or the benefit in whole or in part of this Lease or underlet the demised Forestores or any part thereof Ninthly The Commissioners will cause all assignments and underleases of the demised Forestores or any part thereof made by them with the consent of the Board of Trade and all probates and Letters of Administration affecting the demised Forestores to be within six calendar months after the Commissioners have Knowledge thereof entered and enrolled in the Office of Said Revenue Records and Documents and also will cause Minutes or Vouchers thereof to be entered in the Office of the Commissioners in charge of the Land Revenue of the

Crown in England **Provided always** that if that portion of the net profits which is payable to the Board of Trade under this Lease or any part thereof is unpaid for thirty days after and day on which the same ought to be paid (whether legally demanded or not) or in case default is made by the Commissioners in the observance or performance of any covenant or provision in this Lease or if any act is done or suffered by the Commissioners whereby the demised Premises or any part thereof shall or may without the consent of the Board of Trade as aforesaid become vested in any person or in any body other than the Commissioners then the Board of Trade by their Officers or Agents in the name and on behalf of the Queen's Majesty Her Heirs and Successors at any time thereafter into and on the demised Premises or any part thereof in the name of the whole may re-enter and the same may have again repossess and enjoy as if this Lease had never been made and thereupon the term by these presents granted shall cease without prejudice to any right or remedy of the Queen's Majesty Her Heirs or Successors under this Lease **Provided nevertheless** that if at any time the Commissioners with the consent of the Board of Trade as aforesaid assign or underlet any part of the demised Premises the Board of Trade may if they think fit release as far as regards that part the power of re-entry reserved to them by this Lease without prejudice to the exercise of that power as regards the residue of the demised Premises **Provided also** and it is hereby agreed that if at any time a difference arises between the Board of Trade and the Commissioners respecting the Account required by this Lease or the amount of the gross profits or of the net profits or the division of the net profits the same shall be referred to a single Arbitrator to be agreed on and appointed by the Board of Trade and the Commissioners or in default of Agreement in the appointment of a single Arbitrator then to two Arbitrators and an Umpire the Arbitrators being appointed by the Board of Trade and the Commissioners respectively and the Umpire being appointed by the two Arbitrators before entering on the reference and every such reference and the consequences thereof shall be regulated by "The Common Law Procedure Act, 1854" or any Statutory modification thereof for the time being in force **And** it is hereby declared that the Indenture shall be deemed sufficiently executed by the Deposit of a Duplicate thereof in the Office of Land Revenue Records and Instruments and the filing or making of an entry of such deposit by the Keeper of those Records and Instruments **In witness** whereof to one part of this Indenture remaining with the Commissioners the President of the Board of Trade has subscribed his name and caused the Seal of the Board of Trade to be affixed and to the other part or Counterpart thereof remaining with the Board of Trade the Commissioners have caused their Common Seal to be affixed the Day and year first above written.

(over)

The Schedule to which the foregoing Indenture refers. Lands and parts of
 of Horsham and Bed of Humber and rights excepted. First All Lands and parts
 of Horsham and Bed of Humber coloured Red on the plans submitted in
 section twenty five of "The Humber Conservancy Act, 1868." Secondly Any
 other Lands or parts of Horsham or Bed of Humber excepted by section
 twenty five of "The Humber Conservancy Act, 1868" out of that Act or the
 Agreement set forth in the schedule thereto. Thirdly Any Lands or
 Horsham of the Dock Company at Kingston upon Hull before the
 passing of "The Humber Conservancy Act, 1868" purchased or
 contracted to be purchased by that Company from the Crown
 or any rights of that Company attaching to or connected with those
 Lands. Fourthly ^{the parts of} Horsham or Bed of Humber as before
 or at the passing of "The Humber Conservancy Act, 1868" had been sold
 or disposed of or contracted to be sold or disposed of or were held on lease
 either for lives or for years.

(sd) John Bright

(seal
 and signature)

Signed by the Right Honourable
 John Bright President of the
 Board of Trade in the presence
 of Henry Calcraft
 Board of Trade

I certify that a Duplicate of this Deed has been deposited in the Office
 of said Records and Enrolments and an entry thereof made
 or filed by me.

(sd) H. G. Hewlett

Keeper of the Records

3d Feb. 1869

	<p>ABLE HUMBER PORTS CROWN FORESHORE Summary</p>	<p>Date: 20-Nov-2012</p>
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APPENDIX 2

Underlease dated 16th December 2011 (transcript)

APPENDIX 2 - Transcript 1869 Lease River Humber Commissioner

This indenture of lease made the first day of January 1869 between The Queens Most Excellent Majesty of the first part The Board of Trade of the second part and The Humber Conservancy Commissioners (in this lease called the Commissioners) of the third part witnesseth that the Board of Trade on behalf of the Queens Majesty and by virtue and in exercise of the powers in them vested under 'The Humber Conservancy Act 1868' and of every other power enabling them in this behalf Do by these presents grant demise and lease to the Commissioners and their successors All those the Foreshores and Bed of the Humber and the Estuary thereof from the confluence into the same of the Ouse and Trent to the sea (that is to say) to an imaginary line drawn straight from Donna Nook to the mooring points of the jacket buoy at the mouth of the Humber and straight thence to the eastern extremity of the line focusing the northern boundary of that portion of the foreshore outside Spurn Head which is at the date of this indenture granted or agreed to be at granted on behalf of the Queens Majesty to the Lords Commissioners for executing the Office of Lord High Admiral as far as the foreshores and bed aforesaid are under the management of the Board of Trade (which foreshores and bed intended) to be comprised in this lease are in this lease for brevity referred to as the demised foreshores) but so that nothing in this lease shall be deemed to extend to the lands or the parts of the foreshore and that the aforesaid are the rights described or referred to in the schedule to this lease Except nevertheless and always reserving out of this lease

First full and free right for the Queens Majesty Her Heirs and Successors and for all persons by Her or their permission (which permission shall be assumed to have been granted until the contrary is shown) to ride drive walk or otherwise pass to and fro over and to fish and bathe over and to gather seaweed from the demised foreshores and to land thereon goods and passengers from vessels and boats and to embark therefrom goods and passengers into vessels and boats saved as far as the Board of Trade from time to time by licence invoking under the hand of one of their secretaries or assistant secretaries (if and to such an extent as they lawfully can or may) authorise the Commissioners to interfere permanently or otherwise with the rights aforesaid in all or some respect in relation to any portion of the demised foreshore specified in the licence

Secondly all rights of way and access to and over the demised foreshore existing at the date of this lease by means of any public road footpath bridge or other access To have and to hold the demised foreshores with their rights encumbers and appurtenances to the Commissioners and their successors for the term of 999 years from the date of this lease Yielding and paying therefore yearly during the paid term unto the Queens Majesty Her Heirs and Successors the portion of net profits to be ascertained as in this lease provided And the Commissioners do hereby for themselves and their successors covenant with the Queens Majesty Her Heirs and Successor in manner following that is to say First the Commissioners will at all times keep a proper separate account of their receipts and expenditure in respect of the demised foreshores which account shall be made up annually to the 31st day of December Secondly that account and voucher related thereto shall be at all reasonable times freely open to the inspection of the Board of Trade their offices and agents

Thirdly the Commissioners will annually on or before the first day of April furnish to the Board of Trade a full and true abstract of that account and will at any time if required by the Board of Trade furnish to the Board of Trade a copy of that account

Fourthly the net profit if any derived by the Commissioners from the demised foreshores (as this lease referred to as the net profits) shall year by year be divided into three equal

APPENDIX 2 - Transcript 1869 Lease River Humber Commissioner

parts One whereof the Commissioners will pay to the Board of Trade by their accountants for the time being at their office in London on or before the 30th day in June in each year provided that the expenses of the obtaining and executing of 'The Humber Conservancy Act 1868' shall be a charge on the gross profit derived by the Commissioners from the demised foreshores in this lease referred to as the gross profits and those profits shall accordingly be liable to the payment of those expenses before the ascertainment of the net profits

Fifthly the Commissioners will duly pay out of the gross profits the land tax (if any) and all other present and future landlords and tenants taxes rates charges and impositions (if any) except landlord property tax payable in respect of the demised foreshore or by the landlord or tenant on accounts thereof which when paid shall be allowed in the ascertainment of the net profits

Sixthly the Commissioners will not execute or seek for powers to execute any embankment or other works on the demised foreshores except within the previous consent in each instance of the Board of Trade by writing under the hand of one of their secretaries or assistant secretaries

Seventhly the Commissioners will not be in any way hinder or obstruct the due exercise or enjoyment of any rights or privilege accepted and reserved out of this lease except in accordance with the licence granted as in this lease provided

Eighthly the Commissioners will not except with the previous consent in each instance of The Board of Trade by writing under the hand of one of their secretaries or assistant secretaries at any time assign the demised foreshore or any part thereof or the benefits in whole or in part of this lease or underlet the demised foreshore or any part thereof

Ninthly the Commissioners will cause all assignments and underleases of the demised foreshore or any part thereof made by them with the consent of the Board of Trade and all probates and letters of administration affecting the demised foreshores to be within six calendar months after the Commissioners have knowledge thereof entered and enrolled in the Office of Land Revenue Records and enrolments and also will cause minutes or dockets thereof to be entered in the office of the Commissioners in charge of the land revenue of the Crown in England Provided always that if that portion of the net profits which is payable to the Board of Trade under the lease or any part thereof is unpaid for 30 days after and day on which the same ought to be paid (whether legally demanded or not) or in case default is made by the Commissioners in the observance or performance of any covenants or provisions in this lease or if any act is done or suffered by the Commissioners whereby the demised foreshore or any part thereof shall or may without the consent of the Board of Trade as aforesaid become vested in any person or in any body other than the Commissioners then the Board of Trade by the officers or agents in the same and on behalf of the Queens Majesty Her Heirs and Successor at any time thereafter into and on the demised foreshores or any part thereof in the name of the whole may re-enter and the same may have again repossess and enjoy as if this lease had never been made and thereupon the term of the lease presents granted shall cease without prejudice to any right or remedy of the Queens Majesty Her Heirs or Successor under the lease Provided nevertheless that if at any time the Commissioners with the consent of the Board of Trade as aforesaid assigned or underlet any part of the demised foreshore the Board of Trade may if they think fit release as far as regards that part the power of re-entry reserved to them by this lease without prejudice to the

APPENDIX 2 - Transcript 1869 Lease River Humber Commissioner

exercise of that power as regards the residence of the demised foreshore Provided also and it is hereby agreed that if at any time a difference arises between the Board of Trade and the Commissioners respecting the account requirement by this lease or the amount of the gross profits or of the net profits or the divisions of the net profits the same shall be referred to a single arbitrator to be agreed on and appointed by the Board of Trade and Commissioners or in default of agreement in the appointments of a single arbitrator then to two arbitrators and an umpire the arbitrators being appointed by the Board of Trade and the Commissioners respectively and the umpire being appointed by the two arbitrators before entering on the reference and every such reference and the consequences thereof shall be regulated by 'the Common Law Procedure Act 1854' or any statutory and encodification thereof for the time being in force And it is hereby declared that this indenture shall be deemed sufficiently enrolled by the deposit of a duplicate hereof in the Office of Land Revenue Records and Enrolments and the filing or making of and entry of such deposit by the keeper of the records and enrolments. In witness whereof to one part of this indenture remaining with the Commissioners the President of The Board of Trade has subscribed his name and caused the seal of the Board of Trade be affixed and to the other part the counterpart thereof remaining with the Board of Trade the Commissioners have caused their common seal to be affixed the day and year first above written The schedule to which the foregoing indenture refers Lands and parts of Foreshores and Bed of Humber and rights accepted

First all lands and parts of Foreshore and Bed of Humber (coloured red on the plans mentioned in section 25 of 'The Humber Conservancy Act 1868'

Secondly any other lands or parts of foreshore or bed of Humber excepted by section 25 of 'The Humber Conservancy Act 1868' out of that act or the agreement set forth in the schedule thereto

Thirdly any lands or any foreshore of the Dock Company at Kingston-upon-Hull before the passing of 'The Humber Conservancy Act 1868' purchased or contracted to the purchasers by the company from the power or any rights of that company attaching to or connected with these lands

Fourthly such parts of Foreshores or Bed of Humber as before or at the passing of 'The Humber Conservancy Act 1868' had been sold or disposed of or contracted to be sold or disposed of or withheld on lease either for lives or for years

I certify that a duplicate of this deed has been deposited in the Offices of the Land Revenue Records and enrolments and entry thereof made or filed by me.

Signed H T Hewlett - Keeper of the Records
3 February 1869

and

Signed and sealed by - The Honorable John Bright President of The Board of Trade
In the present of Henry G Calcraft - Board of Trade

	<p>ABLE HUMBER PORTS CROWN FORESHORE Summary</p>	<p>Date: 20-Nov-2012</p>
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APPENDIX 3

Meeting Notes – 19th April 2012

	<p align="center">ABP – CROWN LEASE/DREDGING/S30 AGREEMENT</p>	<p align="right">By: NFE</p> <p align="right">Date: 19-APR-12</p>
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Meeting with Mike Hill (MH), Property Manger, ABP (north) – Goole – 19th April 2012

Crown Lease

The 999 year lease to ABP dates back to 1869 and will end 2868!

Whilst the Crown had previously sought to base the rental on turnover the tried and tested formula in exclusive use is as follows (and applies to all jetties and docks, including ABP):

The values are subject to OMV every five years

The Lease periods (historically) have ranged from 50-99years

The extent of the Harbour Authority had historically tended to be 200m but more recently at 100m (from the berthing face) – this was agreed 'in principle' with Phil Cowing (Harbourmaster) at a meeting mid March 12 and again by email 20th April 12.

The Rent is payable from the date that operations start. It is not uncommon for start dates to be delayed and from the point of agreeing the rent that level is RPI linked until such a time as the Lease actually starts and the first 5 year period commences.

MH would provide draft HofT.

Dredging

The Crown Lease also requires payments for capital dredging works which MH believes to be currently 10p/m³ for material removed and dumped and 20/m³ for material removed and re-used to benefit.

	<p>ABLE HUMBER PORTS CROWN FORESHORE Summary</p>	<p>Date: 20-Nov-2012</p>
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APPENDIX 4

Email Harbour Master 20th April 2012

Subject: RE: AMEP: ABP CROWN LEASE FORESHORE
Date: Friday, 20 April 2012 15:40:55 British Summer Time
From: Phil Cowing
To: Neil Etherington, Mike Hill
CC: Richard Cram, Harrison Colin

Hello Neil,

That is correct.

The draft DCO proposes the establishment of Able as a new harbour authority with limits of jurisdiction extending 200 metres riverward from the new berth. However, recently constructed facilities on the Humber (such as HST) have a 100m limit of jurisdiction from the berth face and it is this limit which should apply.

Richard and I discussed and agreed this in principle on 7 March. The dredged berth pocket, which I recall extends 60m out from the berth face, would therefore be contained wholly within the 100m limit of jurisdiction.

Rgds

Phil

[Capt Phil Cowing | Harbour Master Humber | Humber Estuary Services](#)

PO Box 1 | Port House | Northern Gateway | Hull | HU9 5PQ

Tel: +44(0)1482 617200 | Fax: +44 (0)1482 608432 | Email: pcowing@abports.co.uk

From: Neil Etherington [mailto:netherington@ableuk.com]

Sent: 20 April 2012 15:26

To: Mike Hill

Cc: Phil Cowing; Richard Cram; Harrison Colin

Subject: AMEP: ABP CROWN LEASE FORESHORE

Mike, many thanks for the time placed at my disposal yesterday.

With regard to the area described as the 'The extent of the Able Harbour Authority' I now understand that this has been discussed between our Richard Cram and Captain Cowing at a meeting on 7th March 12.

It was agreed – Phil I would be grateful if you could confirm this - that the boundary would extend 100m from the 'berthing face', in other words the Quay itself, rather than the dredged pocket.

Once this is confirmed I shall re-issue the plan and we can take it from there.

Have a great weekend.

Kind Regards

NEIL ETHERINGTON

Group Development Director

Able UK Ltd

Able House

Billingham Reach Industrial Estate

Billingham

Teesside TS23 1PX


Tel: 01642-806080

Mob: 07768 405464

Fax: 01642-655655

Email: netherington@ableuk.com

Web: www.ableuk.com & www.ablehumberport.com

	<p>ABLE HUMBER PORTS CROWN FORESHORE Summary</p>	<p>Date: 20-Nov-2012</p>
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APPENDIX 5

Communications Log

COMMUNICATION LOG – ABP RE CROWN FORESHORE – 12 March 2012-				
DATE	METHOD	FROM	TO	INFORMATION
12-Mar-12	Email	NF Etherington	M Hill	Seeking Meeting
17-Apr-12	Email	NF Etherington	M Hill	Plans sent
19-Apr-12	Meeting	NF Etherington	M Hill	MH explained basis of under lease; Harbour Authority area defined – 100m from the berthing face – to be confirmed by Harbourmaster. ABP to supply draft HoT
20-Apr-12	Email	Harbourmaster	NF Etherington M Hill	Confirmation re berthing face
21-May-12	Email	NF Etherington	M Hill	Chase HoT; copy of PC email (above); Plan confirming areas.
26-Jun-12	Email	NF Etherington	M Hill	Chase HoT
28-Jun -12	Telecon	NF Etherington	M Hill	Confirmation that ABP would supply HoT
28-Jun -12	Email	NF Etherington	M Hill	Confirmation of earlier telecon and copy of previous communications
6-Aug-12	Email	NF Etherington	M Hill	Chase HoT
10-Aug-12	Telecon	NF Etherington	J Fitzgerald	Chase HoT (plus other issues)
10-Aug-12	Email	NF Etherington	J Fitzgerald	Confirm earlier telecon
10-Aug-12	Email	J Fitzgerald	NF Etherington	Will chase MH (on vacation) 'has a pretty full in tray'
18-Sep-12	Email	NF Etherington	M Hill	Chase HoT
18-Sep-12	Telecon	NF Etherington	M Hill	HoT will be sent next week!
25-Sep12	Email	NF Etherington	M Hill	Chase HoT
26-Sep-12	Email	M Hill	NF Etherington	"I have now got a process to go through which will now involve other people and it looks as though there will be a delay in getting the Heads of Terms to you"
28-Sep-12	Email	NF Etherington	M Hill	Chase HoT
1-Oct-12	Telecon	NF Etherington	I Mills (TCE)	Explained the problem – will revert to agent Carter Jonas
4-Oct-12	Email	NF Etherington	M Hill	Chase HoT
4-Oct-12	Email	M Hill	NF Etherington	Assumes we missed his previous email (26/9!) "I reiterate there will be a delay in getting the Heads of Terms to you."
				HEARING

	<p>ABLE HUMBER PORTS CROWN FORESHORE Summary</p>	<p>Date: 20-Nov-2012</p>
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APPENDIX 6

Draft Underlease

DATED _____

20[]

ASSOCIATED BRITISH PORTS

to

ABLE HUMBER PORTS LIMITED

Draft/

UNDERLEASE

- of -

areas of riverbed and foreshore of the River Humber

For the term of [] years

Commencing: { }

Expiring: { }

Rent - £ per annum

(exclusive of Value Added Tax)

(Subject to increase and review)

Andrew Jackson

Solicitors

HULL

PRESCRIBED LEASE CLAUSES

<p>LR1. Date of lease</p>	<p style="text-align: right;">20[]</p>
<p>LR2. Title number(s)</p>	<p>LR2.1 Landlord's title number(s)</p> <p>[None]</p> <p>LR2.2 Other title numbers</p> <p>None</p>
<p>LR3. Parties to this lease</p> <p><i>Give full names, addresses and company's registered number, if any, of each of the parties. For Scottish companies use a SC prefix and for limited liability partnerships use an OC prefix. For foreign companies give territory in which incorporated.</i></p>	<p>Landlord</p> <p>Associated British Ports a statutory body corporate constituted under the Transport Act 1981 with Company Reference Number ZC000195 whose principal place of business is at Aldwych House 71-91 Aldwych London WC2B 4HN</p> <p>Tenant</p> <p>Able Humber Ports Limited (Jersey Company Registration Number 107029) whose registered office is at Ogier House The Esplanade St Helier Jersey JE4 9WG and whose registered U.K. branch is at []</p> <p>Other parties</p> <p>Guarantor</p> <p>[] (Company Registration Number [] whose registered office is at []</p>
<p>LR4. Property</p> <p><i>Insert a full description of the land being leased</i></p> <p>or</p> <p><i>Refer to the clause, schedule or paragraph of a schedule in this lease in which the land</i></p>	<p>In the case of a conflict between this clause and the remainder of this lease then, for the purposes of registration, this clause shall prevail.</p> <p>The land at [] as described in clause 1 of this lease</p>

<p><i>being leased is more fully described.</i></p> <p><i>Where there is a letting of part of a registered title, a plan must be attached to this lease and any floor levels must be specified.</i></p>	
<p>LR5. Prescribed statements etc.</p> <p><i>If this lease includes a statement falling within LR5.1, insert under that sub-clause the relevant statement or refer to the clause, schedule or paragraph of a schedule in this lease which contains the statement.</i></p> <p><i>In LR5.2, omit or delete those Acts which do not apply to this lease.</i></p>	<p>LR5.1 Statements prescribed under rules 179 (dispositions in favour of a charity), 180 (dispositions by a charity) or 196 (leases under the Leasehold Reform, Housing and Urban Development Act 1993) of the Land Registration Rules 2003.</p> <p>None</p> <p>LR5.2 This lease is made under, or by reference to, provisions of:</p> <p>None</p>
<p>LR6. Term for which the Property is leased</p> <p><i>Include only the appropriate statement (duly completed) from the three options.</i></p> <p><i>NOTE: The information you provide, or refer to, here will be used as part of the particulars to identify the lease under rule 6 of the Land Registration Rules 2003.</i></p>	<p>The term as specified in this lease at clause 4</p>
<p>LR7. Premium</p> <p><i>Specify the total premium, inclusive of any VAT where payable.</i></p>	<p>None</p>
<p>LR8. Prohibitions or restrictions on disposing of this lease</p> <p><i>Include whichever of the two statements is appropriate.</i></p> <p><i>Do not set out here the wording of the provision.</i></p>	<p>This lease contains a provision that prohibits or restricts dispositions.</p>
<p>LR9. Rights of acquisition etc.</p> <p><i>Insert the relevant provisions in the sub-clauses or refer to the clause, schedule or paragraph of a schedule in this lease which contains the provisions.</i></p>	<p>LR9.1 Tenant's contractual rights to renew this lease, to acquire the reversion or another lease of the Property, or to acquire an interest in other land</p> <p>None</p> <p>LR9.2 Tenant's covenant to (or offer to) surrender this lease</p>

	<p>None</p> <p>LR9.3 Landlord's contractual rights to acquire this lease</p> <p>None</p>
<p>LR10. Restrictive covenants given in this lease by the Landlord in respect of land other than the Property</p> <p><i>Insert the relevant provisions or refer to the clause, schedule or paragraph of a schedule in this lease which contains the provisions.</i></p>	<p>None</p>
<p>LR11. Easements</p> <p><i>Refer here only to the clause, schedule or paragraph of a schedule in this lease which sets out the easements.</i></p>	<p>LR11.1 Easements granted by this lease for the benefit of the Property</p> <p>The easements as specified in clause 1 of this lease</p> <p>LR11.2 Easements granted or reserved by this lease over the Property for the benefit of other property</p> <p>The easements as specified in clause 3 of this lease</p>
<p>LR12. Estate rentcharge burdening the Property</p> <p><i>Refer here only to the clause, schedule or paragraph of a schedule in this lease which sets out the rentcharge.</i></p>	<p>None</p>
<p>LR13. Application for standard form of restriction</p> <p><i>Set out the full text of the standard form of restriction and the title against which it is to be entered. If you wish to apply for more than one standard form of restriction use this clause to apply for each of them, tell us who is applying against which title and set out the full text of the restriction you are applying for.</i></p> <p><i>Standard forms of restriction are set out in Schedule 4 to the Land Registration Rules 2003.</i></p>	<p>The Parties to this lease apply to enter the following standard form of restriction {against the title of the Property} or {against title number {*****}}</p> <p>Not applicable</p>
<p>LR14. Declaration of trust where there is more than one person comprising the Tenant</p>	<p>Not applicable</p>

<p><i>If the Tenant is one person, omit or delete all the alternative statements.</i></p> <p><i>If the Tenant is more than one person, complete this clause by omitting or deleting all inapplicable alternative statements.</i></p>	
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WITNESSETH as follows:-

Parcels

1. AT the request of the Guarantor and in consideration of the rents and the Lessee's covenants hereinafter reserved and contained ABP hereby demises unto the Lessee ALL THOSE parcels of land comprising parts of the bed and foreshore of the River Humber as the same are delineated on Plan 1 and thereon coloured pink and magenta (all such premises being hereinafter called "the demised premises" which expression shall where the context so admits include all additions or improvements hereafter made to the demised premises (including the Works) and all buildings fixtures drains and other works now or hereafter thereon and the fences or walls and gates now or hereafter erected on the boundaries of the demised premises) But subject to the Subjections Together with (subject to the Lessee (i) so far as not already obtained as at the date of this Lease first obtaining from any Competent Authority and any other relevant third party all licences consents approvals permissions and other authorisations in so far as requisite for the exercise of the particular right in question (ii) subject to the Subjections and in relation to the rights only insofar as and to the extent that ABP can lawfully grant the same (iii) in every case subject to and in compliance with the Order and (iv) in common with ABP and persons authorised by ABP) the rights detailed below:

- (1) the right to berth vessels within the Berthing Pocket for the purposes of control of the Lessee's operations to be carried out from the demised premises
- (2) the right to use the Dock Master's jurisdiction for the purposes of the control of the Lessee's operations to be carried out from the demised premises
- (3) the right to discharge foul/surface water into the River Humber via the outfall shown at point [] on Plan 1 subject to complying with the Lessee's covenants in this Lease relating to such (including without limitation Clause 7(g)) and obtaining the relevant Environmental Permits and all other necessary consents in relation thereto

Mines and Minerals

2. THE mines and minerals in and under the demised premises are excepted and there is also excepted any right of support from mines and minerals

Exceptions and Reservations

3. THERE IS ALSO EXCEPTED AND RESERVED unto ABP and all persons claiming under it or permitted by it or any other person for the time being entitled to the same:-

- (a) The right from time to time and at all times during the term hereby granted to carry out any works by ABP under the Order together (without limitation) with the right to carry out (whether on or from any part or parts of the demised premises including without limitation the Quay Area and/or the Rock Revetment Area) any works which may in the opinion of ABP be necessary for the proper operation of ABP's Statutory Undertaking
- (b) The right at all reasonable times on prior notice (or in case of emergency at any time) to enter on the demised premises including without limitation the Quay Area and the Rock Revetment Area for the purpose of repairing maintaining or inspecting any adjoining property of ABP and of exercising the rights reserved by Clause 3(a) and of carrying out any alterations or improvements to the River Humber and its navigation or any adjoining or neighbouring land or interests of ABP that ABP considers necessary and of carrying on of its undertaking in exercise of its powers
- (c) All rights whatsoever enjoyed by ABP and its predecessors and by all others authorised by them whether by statute regulation bye-law or any other Enactment right or entitlement over under and contiguous to the demised premises
- (d) All the rights reserved to the Head Landlord by the Head Lease
- (e) All such rights as are necessary to enable ABP to carry out its obligations and duties or to exercise its rights under the Head Lease
- (f) All such rights as are necessary to enable the Harbour Master to carry out his obligations and duties
- (g) The right on prior written notice (except in an emergency) to enter on the demised premises:-
 - (i) to inspect the condition of the demised premises and take schedules of condition and inventories of fixtures and other items to be yielded up on the

expiration or sooner determination of the term hereby granted

- (ii) to carry out work or do anything reasonably and properly comprised within the obligations of ABP in this Lease
 - (iii) to exercise any of the rights reserved to ABP by this Lease in accordance with the provisions governing the exercise of such rights
 - (iv) to execute any works on the demised premises which ABP may be statutorily liable to carry out
 - (v) for any reasonable purpose connected with ABP's interest in the demised premises
- (h) The power and liberty at any time hereafter to stop up or otherwise affect any rights of way or other easements or privileges whether now in existence or not which the Lessee may at any time during the term hereby granted be using or enjoying (other than by virtue of an express grant made by these presents or of any Grant or Licence in writing from ABP) over any adjoining land as appurtenant or belonging to the demised premises
- (i) Full right and liberty from time to time to use its adjoining and neighbouring lands in such manner as it may think fit and to build or execute works upon such lands and to carry out whatever improvements or alterations to the River Humber and its navigation or to any adjoining or neighbouring land or interests of ABP that ABP may deem necessary for the proper operation of ABP's undertaking notwithstanding that the access of light and air to the demised premises may be thereby affected
- (j) (i) Nothing contained in this Lease shall affect or prejudice the statutory duties obligations and powers of ABP and/or its Harbour Master or the carrying out by ABP of any of its statutory undertakings in exercise of its powers
- (ii) ABP reserves the right to enter on the demised premises for the purpose of complying with its statutory duties and obligations

PROVIDED THAT ABP shall in the exercise of the said rights hereinbefore reserved to it cause as little damage to and interference with the demised premises and the Lessee's right

of access thereto from the River Humber or the Lessee's operations therefrom as reasonably practicable and shall make good as soon as reasonably practicable all damage caused by or in the exercise of such rights to the fabric of the demised premises or the land comprised in the demised premises

Habendum

4. THE Lessee shall HOLD the demised premises (subject to all rights and easements affecting the same including without limitation the Subjections) for the term of [sixty] years commencing on the { } day of { } Two thousand {and } determinable nevertheless as hereinafter provided

Rent

5. THE Lessee shall PAY therefor:-

- (a) (subject as hereinafter provided) the yearly rent of { } pounds (£{ }) (exclusive of Value Added Tax) payable by equal quarterly payments in advance by Banker's Order on the First day of January the First day of April the First day of July and the First day of October in every year (hereinafter called the "quarter days") without any deduction the first payment (being in respect of the period from and including the date of commencement of the term hereby granted to and including the day before the next quarter day) to be made on the date hereof and
- (b) (subject as provided in the Fourth Schedule) the Outfall Discharge Rent at the times and in the manner detailed in the Fourth Schedule
- (c) by way of further rent on demand:-
 - (i) all costs charges and expenses which ABP may from time to time incur in connection with or procuring the remedying of any breach by the Lessee of any of the covenants on the part of the Lessee contained in this Lease
 - (ii) all other sums payable by the Lessee to ABP pursuant to this Lease

Review of Rent

6. AT any time during the period of six months next before or on or at any time after the { } day of { } Two thousand and { } and each fifth yearly

anniversary thereof (each such date being hereinafter called a "Rent Review Date") ABP may serve on the Lessee a notice in writing (hereinafter called a "Rent Notice") providing for the increase of the rent payable hereunder as from the Rent Review Date then current to an amount specified in the Rent Notice and thereupon the following provisions shall have effect:-

- (a) The Lessee within one month after the service upon the Lessee of the Rent Notice but not otherwise may serve on ABP a counter-notice in writing in accordance with Clause 12 hereof and calling upon ABP to negotiate with the Lessee the amount of the rent to be paid hereunder as from the Rent Review Date then current
- (b) If the Lessee shall fail to serve a counter-notice within the period aforesaid the amount of the rent to be paid hereunder as from the Rent Review Date then current shall be conclusively fixed at the amount of rent specified in the Rent Notice
- (c) If the Lessee shall serve on ABP a counter-notice calling upon ABP to negotiate with it as aforesaid then the parties hereto shall forthwith consult together and use their best endeavours to reach agreement as to the amount of the rent to be paid hereunder as from the Rent Review Date then current but failing agreement within one month after service of such counter-notice (or within such extended period as the parties hereto shall mutually agree) the question of whether any and if so what increase ought to be made in the rent payable hereunder as from the Rent Review Date then current shall be referred to the arbitration of a single arbitrator who (failing agreement between the parties hereto) shall be nominated on the joint application of the parties hereto (or if either of them shall neglect forthwith to concur in such application then on the sole application of the other of them) by the President for the time being of the Royal Institution of Chartered Surveyors
- (d) The Arbitrator shall determine the question so referred to him by ascertaining in accordance with the Arbitration Act 1996 or any statutory modification or re-enactment thereof for the time being in force the yearly rent which would reasonably be expected to become payable in respect of the demised premises after

the expiry of a rent free period of such length as would be negotiated in the open market between a willing lessor and a willing lessee upon a letting of the demised premises as a whole with vacant possession without a fine or premium in the open market as between a willing lessor and willing lessee as at the Rent Review Date then current for a term equal to the length of the term hereby granted commencing on the Rent Review Date then current and in all other respects on the terms of this Lease (other than as to user and as to the amount of rent but including the provisions for rent review herein contained) and assuming that:-

- (i) the demised premises are fit and available for immediate beneficial occupation and may lawfully be used for any of the purposes permitted by this Lease (as varied or extended by any licence granted pursuant thereto) or any other dock related user
- (ii) all the covenants herein contained on the part of the Lessee have been fully performed and observed and
- (iii) no work has been carried out to the demised premises which has diminished the rental value thereof and that in case the demised premises have been destroyed or damaged they have been fully restored
- (iv) the demised premises enjoy full and adequate facilities for access and services required both for development and subsequent use of the demised premises for all such uses as hereinbefore detailed

but disregarding:-

- (i) any effect on rent of the fact that the Lessee has been in occupation of the demised premises
- (ii) any goodwill which shall have become attached to the demised premises since the commencement of the term hereby granted by reason of the carrying on thereat of the business of the Lessee
- (iii) any effect on rent of any improvement or the execution of any works effected or carried out by the Lessee during the term hereby granted other than any

such carried out pursuant to an obligation to ABP and

- (iv) any rent free period and other rent concessions granted to the Lessee at the commencement of the term hereby granted
- (e) If the rent so ascertained exceeds the rent payable hereunder the difference shall be the increase in the rent payable hereunder
- (f) If the rent so ascertained is less than or equal to the rent payable hereunder then the rent payable as from the Rent Review Date then current shall be an amount equal to the rent payable hereunder immediately prior to the Rent Review Date then current
- (g) If the revised rent payable on and from any Rent Review Date has not been ascertained by that Rent Review Date rent shall continue to be payable at the rate previously payable (such payments being on account of the rent subject to review) and forthwith upon the revised rent being ascertained (that is to say the date when the same has been agreed between the parties or the date of the Arbitrator's award) the Lessee shall pay to ABP any shortfall between what would have been paid on the Rent Review Date then current and on any subsequent quarter days had the revised rent been ascertained before the Rent Review Date then current and the payments made by the Lessee on account together with interest at the prescribed rate (as defined in Clause 7(b) hereof) on the difference between each instalment of rent which would have been payable on the Rent Review Date then current and on any subsequent quarter days had the revised rent been ascertained before the Rent Review Date then current and the amount paid on account interest being payable for the period from that date upon which the instalment was due up to the date of payment of the shortfall
- (h) If the Lessee shall fail to pay any costs awarded by the Arbitrator against the Lessee in the case of an arbitration carried out pursuant to the provisions of this Clause 6 within twenty one days of the same being demanded by the Arbitrator ABP shall be entitled to pay the same and the amount so paid and all incidental expenses shall be repaid by the Lessee to ABP on demand

Lessee's Covenants

7. THE Lessee for itself and its assigns hereby covenants with ABP as follows:-

To pay rent

- (a) To pay to ABP the yearly and other rents hereby reserved at the times and in manner aforesaid

To pay interest

- (b) If any rent or other sum payable by the Lessee to ABP pursuant to this Lease shall remain unpaid for more than twenty one days after becoming due (whether formally demanded or not and without prejudice to any other right or remedy to which ABP may be entitled) to pay to ABP interest thereon at a rate of four per centum per annum above the base rate of National Westminster Bank plc or such other bank being a member of the Committee of London and Scottish Bankers as ABP may from time to time nominate (or such other rate or rates for the time being replacing the same by reference to which prime clearing banks determine their own rates of interest) from time to time ("the prescribed rate") calculated on a day to day basis from the date of the same first becoming due down to and including the date of payment and the amount thereof shall be recoverable in like manner as rent in arrear

To pay outgoings

- (c) To pay and indemnify ABP against all rates (including without limitation any business rates which are at any time separately assessed as applying to the demised premises or any part thereof) charges taxes assessments duties impositions and outgoings whatsoever (whether or not of a capital or non-recurring nature or of a wholly novel character) which are now or shall during the term hereby granted be assessed charged imposed upon or payable in respect of the demised premises or upon the owner or occupier thereof excluding (save as otherwise provided in this Lease) any payable by ABP occasioned by receipt of the rents or by any dealing with any interest reversionary to this Lease

Electricity and other services

- (d) (i) To pay all sewer and drainage rates and all other rates water rates electricity and all other charges duties impositions assessments and outgoings whatsoever now or hereafter imposed charged or assessed upon or payable in respect of the demised premises
- (ii) To pay to the suppliers and to indemnify ABP against all charges for electricity and other services consumed or used at or in connection with the demised premises and all charges for meters insofar as such charges are not levied under Clause 7(d)(i) hereof and to observe and perform all regulations and requirements of the supplying authorities

Planning

- (e) (i) To observe and comply with the provisions and requirements of the Planning Acts, the Transport and Works Act 1992 and the Harbours Act 1964 affecting the demised premises and their use
- (ii) At its own expense to obtain any planning permissions orders or other consents and serve any notices that may be required to carry out any development on or at the demised premises
- (iii) Notwithstanding any consent that may be granted by ABP under this Lease the Lessee must not carry out any development on or at the demised premises until all necessary notices under the Planning Acts have been served and copies produced to ABP all necessary permissions under the Planning Acts or orders under relevant Enactments have been obtained and produced to ABP and ABP has acknowledged that every planning permission and order is acceptable to it
- (iv) Where a condition of any planning permission or order granted for development begun before the end of the term hereby granted requires works to be carried out to the demised premises by a date after the end of the term hereby granted the Lessee must unless ABP directs otherwise finish those works before the end of the term hereby granted
- (v) In any case where a planning permission or order is granted subject to

conditions and if ABP so requires the Lessee must provide sufficient security for its compliance with the conditions and must not implement the planning permission or order until that security has been provided

(vi) The Lessee shall consult with ABP on the form and content of any Application and submit full details of any Application to ABP (including without limitation all drawings plans and specifications for the proposed development to be submitted with the Application) and shall take account of any representations or comments by and amendments required by or on behalf of ABP and no Application shall be submitted to the relevant planning or other authority or Competent Authority until ABP has given its approval thereto in writing (such approval not to be unreasonably withheld or delayed)

(vii) The Lessee may not vary or amend any Application without ABP's consent which shall not be unreasonably withheld or delayed and shall submit to ABP sufficient information to enable ABP to determine the extent and scope of any variation or amendments to any Application

(viii) In prosecuting any appeal against:

(aa) a deemed refusal of any Application; or

(bb) an actual refusal of any Application; or

(cc) a grant of a planning permission or consent or approval or order subject to conditions that are not acceptable to the Lessee

the Lessee will keep ABP fully informed of all relevant information with respect to the appeal including all correspondence notifications instructions to and advice of Counsel evidence of expert and other witnesses and the dates of any inquiry hearing or for the submission of written representations

(ix) Prior to making any Application to inform ABP of its intention to do so and to produce to ABP for noting:

(aa) within 14 days of obtaining notice of the result of such Application the document granting or refusing the same and

- (bb) in the case of an order under the Harbours Act 1964 the Transport and Works Act 1992 or the Planning Act 2008 as soon as reasonably practicable after the making of the order a Queen's Printer's copy of the order

and as soon as reasonably practicable following the receipt of any enforcement or other notice or order (including without prejudice to the generality of the foregoing in relation to any planning application or decision) or any proposal for the same from a Planning Authority or other Competent Authority to give full particulars thereof to ABP and if required to produce such notice or order (including as aforesaid) or proposal and any and all information in connection therewith to ABP and at the request of ABP to make or join with ABP in making any objection or representation against or in respect of any such notice or order (including as aforesaid) or proposal as ABP shall deem expedient

- (x) Subject only to any statutory direction to the contrary to pay and satisfy any tax charge or levy (including without limitation any community infrastructure levy) that may be imposed under the Planning Acts or any other Enactment in respect of the carrying out or maintenance of any development on or at the demised premises and/or arising from and/or in respect of any planning permission or order obtained pursuant to the provisions of this Clause 7(e) and/or its and/or their implementation

User

- (f) To use the demised premises and every part thereof only as and for:
- (i) the mooring of vessels
 - (ii) the loading and unloading of such vessels and
 - (iii) the storage and handling of cargoes on the Quay Area subject to such cargoes being only items associated with marine energy infrastructure and any cargo that is incidental or ancillary to such items

Statutes and Bye-Laws etc.

- (g) (i) The Lessee will at all times keep itself informed of and comply with all

Applicable Laws

- (ii) The Lessee will at all times keep itself informed of and comply with all ABP Regulations relevant to its activities at the demised premises and/or the exercise of the rights granted by this Lease
- (iii) The Lessee will, without limitation to the other provisions of this Lease, carry out risk assessments of its activities at the demised premises and the Berthing Pocket and the Dock Master's jurisdiction and in the exercise of the rights granted by this Lease to the full extent required by Applicable Laws (in particular, but not limited to, those concerned with environmental protection and health and safety and safety of navigation) and will ensure that appropriate action is taken on the basis of those risk assessments
- (iv) The Lessee will procure that its contractors, sub-contractors, agents and any other persons whom the Lessee invites onto the demised premises or to exercise any of the rights granted by this Lease including without limitation any underlessee or other occupier conduct their own activities in compliance with the obligations in this Clause 7(g)
- (v) The Lessee will, where relevant:
 - (aa) apply for and secure all Environmental Permits necessary in connection with any activity carried out by it at the demised premises and/or in the exercise of the rights granted by this Lease;
 - (bb) comply with all conditions or limitations imposed by any such Environmental Permit;
 - (cc) upon request provide a copy of any such Environmental Permit to ABP and where such Environmental Permit has been so provided, notify ABP as soon as practical in the event that there is any material variation to any such Environmental Permit or if the Lessee ceases to hold such Environmental Permit
- (vi) The Lessee will conduct its activities at the demised premises and/or in the

exercise of the rights granted by this Lease at all times in such a way as to minimise any nuisance or disturbance to ABP or its tenants or users of the River Humber or ABP's docks or the owners or occupiers of neighbouring lands and property

- (vii) The Lessee will conduct its activities at the demised premises and/or in the exercise of the rights granted by this Lease at all times in such a way as to:
 - (aa) prevent any escape of Cargo or any other substance (in whatever form and whether alone or in combination with any other substance) within the possession or control of the Lessee from the demised premises or from any vessel or other means of transport in the possession or under the control of the Lessee or its contractors, sub-contractors or agents;
 - (bb) ensure that no Hazardous Materials or substance or matter of which the discharge passage or escape would be contrary to the Environmental Permitting (England and Wales) Regulations 2010 (*SI* 675) or any other substance or material which may cause an obstruction or damage or pollution is permitted to pass or escape into any sewer, drain or watercourse serving the demised premises or into the River Humber or into the sea or into or onto any other land or premises or water areas
- (viii) If a Pollution Incident should occur as a result of the activities of the Lessee at the demised premises and/or in the exercise of the rights granted by this Lease, including but not limited to the escape of any Cargo which might cause damage to the Environment or discharge of any Hazardous Materials or other substance matter or material referred to in Clause 7(g)(vii)(bb) in breach of that Clause 7(g)(vii)(bb) or any other substance or material which may cause an obstruction or damage or pollution, the Lessee shall, upon becoming aware of the Pollution Incident:

- (aa) take immediate steps to prevent further pollution occurring as a result of the Pollution Incident;
 - (bb) notify ABP as soon as reasonably practicable and provide ABP with a copy of any notice that has been given to any Competent Authority in connection with the incident;
 - (cc) as soon as reasonably practicable remediate the consequences of the Pollution Incident to the reasonable satisfaction of ABP and/or any Competent Authority
- (ix) The Lessee irrevocably and unconditionally agrees to indemnify ABP in full and on demand and hold harmless and keep ABP so indemnified against all damage damages losses costs expenses actions demands proceedings claims and liabilities made against or incurred or suffered by ABP as a result of the breach of Clauses 7(g)(vii) or 7(g)(viii) by the Lessee, its contractors, sub-contractors, agents or any other person who the Lessee invites onto the demised premises or to exercise any of the rights granted by this Lease including without limitation any underlessee or other occupier
- (x) Subject to any written agreement with ABP to the contrary:
 - (aa) the Lessee will make proper and adequate arrangements for the removal from the demised premises and disposal of all trade and other waste in accordance with the requirements of Applicable Laws as often as may be necessary or as reasonably directed by ABP
 - (bb) if the Lessee fails to remove trade and other waste from the demised premises to the reasonable satisfaction of ABP then ABP reserves the right to remove and dispose of the trade or other waste itself and the Lessee will reimburse ABP in full for all costs or expenses incurred by ABP in undertaking such removal;
 - (cc) the Lessee will maintain proper and full records of all waste disposal that it undertakes and will, upon request, provide a copy of any such

records to ABP

- (xi) The Lessee will be responsible for ensuring that any Dangerous Substances stored at the demised premises as a result of the activities of the Lessee do not exceed any limits permitted under the Dangerous Substances Regulations, or any limits imposed under any other Applicable Laws

Maintenance

- (h) (i) To keep the demised premises (including all or any buildings structures fencing and gates which by virtue of Clause 1 hereof shall have been embraced by the expression "demised premises") in good and substantial repair and condition to the satisfaction of ABP and to keep the perimeter of the demised premises neat and tidy
- (ii) To procure that:-
 - (aa) if requested by ABP and in any event no less frequently than annually throughout the term hereby granted the structure of the quay wall of the demised premises is fully inspected by a structural engineer (a member of The Institution of Structural Engineers) and that a Structural Engineers Report is produced by the structural engineer
 - (bb) all requirements and recommendations contained in the Structural Engineers Report are promptly carried out and
 - (cc) a copy of each Structural Engineers Report and details of any works or actions to be carried out pursuant to any such requirements or recommendations are forthwith supplied in writing to ABP

Painting and Decoration

- (i) To keep the exterior of all buildings and structures situated on the demised premises properly painted and decorated at all times

Yielding up

- (j) (i) At the expiration or sooner determination of the term hereby granted with reasonable despatch to ensure that all waste (as defined in Section 75 of the

Environmental Protection Act 1990) or material contaminated by waste on the demised premises is removed and to remediate and decontaminate the demised premises in accordance with all Environmental Laws and to demolish and remove any/or all buildings structures erections and works on the demised premises including any piled foundations to a level [] metres below ground level (whether or not constructed or placed thereon in performance of a covenant or obligation to ABP) excluding save as aforesaid the Quay and the Rock Revetment all to the extent to which ABP shall specify in a written notice sent to the Lessee and to make good to the reasonable satisfaction of ABP all damage occasioned by or in such remediation decontamination demolition and removal or the demolition and removal of any other buildings erections and works to the remaining parts of the demised premises and the Retained Land Provided That any such removal remediation decontamination and demolition shall be carried out by the Lessee only in accordance with a method statement and/or remediation plan approved in writing by ABP (such approval not to be unreasonably withheld or delayed) and the Lessee shall procure that there is provided to ABP for approval such method statement and/or remediation plan no later than six weeks after receipt of the written notice from ABP hereinbefore referred to

(ii) Subject to the provisions of Clause 7(j)(i) and 7(j)(iii) hereof at the expiration or sooner determination of the term hereby granted quietly and peaceably to deliver up the demised premises leaving the same in good and substantial repair and condition and (for the avoidance of doubt) remediated and decontaminated in accordance with Clause 7(j)(i) to the reasonable satisfaction of ABP

(iii) Not later than 4 months prior to the expiration or sooner determination of the term hereby granted to commission at the cost and expense of the Lessee a survey report in respect of the demised premises recording (as at the date of its issue) the state of repair and condition (including without limitation environmental condition) of the demised premises Provided That the terms of engagement of any prospective

provider of such survey report shall have received the prior approval in writing of ABP (such approval not to be unreasonably withheld or delayed) and within 10 Working Days of the receipt by the Lessee of such survey report the Lessee shall provide to ABP a certified copy thereof

Inspection

- (k) To permit ABP or its agents at all reasonable times to enter on the demised premises for the purposes of viewing and seeing the condition thereof and forthwith (so far as the Lessee is liable) to execute all repairs and works required to be done by written notice given by ABP. Provided that if such notice be not complied with within one month time being of the essence it shall be lawful for ABP to carry out the work referred to in such notice and the expense of carrying out such work shall be repaid by the Lessee to ABP on demand

Notices

- (l) To pay all expenses (including Solicitors costs and Surveyors fees) incurred by ABP incidental to the preparation and service of a notice under Section 146 of the Law of Property Act 1925 notwithstanding forfeiture is avoided otherwise than by relief granted by the Court

Insurance

- (m) (i) Forthwith to insure and thereafter to keep insured in the name of the Lessee and with the interest of ABP noted thereon at its own expense the demised premises from loss or damage by an "All Risks" policy in a form and with an Insurance Company or office approved by ABP (or their approved agents) to the full replacement cost thereof at least as at the commencement of the term hereby granted and adjusted at each subsequent renewal to take account of current rebuilding and other related costs and to produce to ABP the Policy of Insurance and whenever required to produce to ABP or its agents the receipts for the current year's premium thereon. Provided Always that if the Lessee shall at any time fail to insure the demised premises or pay the premium on the Policy in accordance with this

covenant ABP shall be at liberty to insure the demised premises as aforesaid and thenceforth to pay the premium payable from time to time on the Policy and the amount thereof shall be repaid by the Lessee to ABP on demand and shall be recoverable in like manner as rent in arrear

(ii) If the demised premises or any part thereof shall be destroyed or damaged through any of the risks required to be covered by the Policy of Insurance required to be maintained under Clause 7(m)(i) then forthwith to the satisfaction of ABP to rebuild and reinstate the demised premises and the amount received from the said Insurer shall be applied to that purpose and if such amount shall be insufficient for that purpose to make good any deficiency out of its own money

(iii) Forthwith to effect and thereafter to maintain insurance in respect of public and third party liability in respect of the demised premises and/or the grant and/or exercise of the rights hereby granted in such sum which is not less than [[] million pounds (£[],000,000.00)] as may be approved by ABP in respect of each and every claim and with ABP's interest noted on the insurance policy/policies either specifically or generically and whenever required (but not more than once a year) to produce to ABP a copy of the policies of such insurance and whenever required to produce to ABP copies of the receipts for or other evidence of payment of the current premiums thereon Provided Always that if the Lessee shall at any time fail to effect such insurance or pay the premiums on the insurance policy/policies in accordance with this covenant ABP shall be at liberty to insure against such liabilities as aforesaid and thenceforth to pay the premiums payable from time to time on the insurance policy/policies and the amount thereof shall be repaid by the Lessee to ABP within 5 Working Days of demand and shall be recoverable in like manner as rent in arrear

To observe Conditions of Policy not to increase fire risks

(n) To observe and perform the conditions of the Policies of Insurance and not without the previous consent in writing of ABP and the sanction of the said Insurer (such

sanction to be produced to ABP) to do or suffer on the demised premises anything which would be likely to increase the risk of fire or explosion

Advertisements

- (o) (i) That no sign placard or advertisement whatsoever shall be fixed or placed on the demised premises other than a Notice of the Lessee's name and business in a form to be approved by ABP
- (ii) Not to erect and/or install on any part of the demised premises any pole mast wire or telecommunication dish or other communication apparatus (all together hereinafter referred to as "Telecommunications Apparatus") without the prior consent in writing of ABP (such consent not to be unreasonably withheld or delayed) and subject to compliance with the provisions hereinafter detailed in Clause 7(o)(iii)
- (iii) To submit to ABP with any application for consent made pursuant to the provisions of Clause 7(o)(ii) full and complete details of the Telecommunications Apparatus the Lessee proposes to erect and/or install together with if reasonably requested by ABP a specialist technical report detailing to the reasonable satisfaction of ABP that the Telecommunications Apparatus will not interfere with any other telecommunications apparatus in use on the River Humber
- (iv) Immediately on receipt of notice from ABP detailing that any Telecommunications Apparatus is causing interference with any other telecommunications apparatus in use on the River Humber to procure the cessation of the use of the Telecommunications Apparatus until such time as ABP agrees that such interference has ceased and/or been remediated to ABP's reasonable satisfaction
- (v) To procure that the Telecommunications Apparatus is used solely and exclusively by the Lessee for the purposes of its own operations and activities conducted at the demised premises

Alterations

- (p) Not to make any alterations or additions to the demised premises nor to carry out on or at or in the demised premises any works amounting to development within the meaning of the Town and Country Planning Act 1990 or any statutory modification or re-enactment thereof without the previous licence by deed or in writing of ABP as ABP may require such licence if required by ABP to provide for the Lessee to reinstate the demised premises to their former state at the expiration or sooner determination of the term hereby granted if ABP shall then so require

Assignment

- (q) (i) Not to assign or charge part only of the demised premises or save as hereinafter provided assign or charge the whole of the demised premises or sublet or part with or share the possession or occupation of the whole or any part of the demised premises or part with these presents
- (ii) Not to assign the whole of the demised premises without first:-
- (aa) obtaining the licence in writing of ABP which shall not be unreasonably withheld
- (bb) satisfying the circumstances specified for the purposes of Section 19(1A) of the Landlord and Tenant Act 1927 as set out in Clause 7(q)(iii) hereof and
- (cc) complying with the condition specified for the purposes of Section 19(1A) of the Landlord and Tenant Act 1927 as set out in Clause 7(q)(iv) hereof
- (iii) The circumstances referred to in Clause 7(q)(ii)(bb) are that:-
- (aa) the Lessee shall have provided to ABP's solicitors a solicitors' undertaking to pay the proper costs and disbursements of ABP's solicitors (including any Value Added Tax) in dealing with the application for the licence to assign and any deed of indemnity and guarantee required in accordance with Clause 7(q)(iv) hereof (whether or not licence is granted or is granted subject to lawful conditions) together with ABP's reasonable administration costs in relation thereto (including any Value Added Tax)

- (bb) all sums due from the Lessee under this Lease have been paid at the date of the application for the licence to assign
- (cc) in ABP's reasonable opinion there are at the date of the application for the licence to assign no material outstanding breaches of any lessee covenant of this Lease or any personal covenants undertaken by the Lessee
- (dd) in ABP's reasonable opinion the assignee is a person who is at the date of the application for licence to assign likely to be able to comply with the lessee covenants of this Lease and to continue to be such a person following assignment
- (iv) The conditions referred to in Clause 7(q)(ii)(cc) hereof are that:-
 - (aa) upon or before any assignment and before giving occupation to the assignee the Lessee shall covenant by way of indemnity and guarantee with ABP in the terms set out in the First Schedule hereto with such amendments as ABP shall reasonably require
 - (bb) (if ABP reasonably so requires) upon or before any assignment and before giving occupation to the assignee the Lessee shall procure that a guarantor or (if ABP reasonably so requires) more than one guarantor for the assignee reasonably acceptable to ABP covenants by way of indemnity and guarantee with ABP in similar terms to those set out in the Second Schedule hereto with such amendments as ABP shall reasonably require
 - (cc) if required by ABP upon or before any assignment and before giving occupation to the assignee the Lessee shall procure that the guarantor or guarantors hereinbefore referred to in Clause 7(q)(iv)(bb) have agreed with ABP prior to the execution and delivery to ABP of the covenants by way of indemnity and guarantee hereinbefore referred to in Clause 7(q)(iv)(bb) that the provisions of Sections 24-28 inclusive of the Landlord and Tenant Act 1954 shall be excluded in relation to any tenancy which may be created pursuant to the covenants to be made by such guarantor or guarantors with

ABP and that such agreement has been rendered valid by the proper implementation of the procedure laid down in Schedules 1 and 2 of the 2003 Order or other relevant Enactment

(dd) if required by ABP upon or before any assignment and before giving occupation to the assignee the Lessee shall prior to the execution and delivery to ABP of the covenant by way of indemnity and guarantee hereinbefore referred to in Clause 7(q)(iv)(aa) agree with ABP that the provisions of Sections 24-28 inclusive of the Landlord and Tenant Act 1954 shall be excluded in relation to any tenancy to be created pursuant to the provisions of the deed of indemnity and guarantee aforesaid and implement such procedures as are required by ABP to procure that such agreement has been rendered valid by the proper implementation beforehand of the procedure laid down in Schedules 1 and 2 of the 2003 Order or other relevant Enactment

(v) Not without the previous licence in writing of ABP (such licence subject as hereinafter provided not to be unreasonably withheld where the Lessee satisfies the circumstances set out in Clause 7(q)(iii) hereof (mutatis mutandis and as if reference to licence to assign read licence to underlet and in the case of Clause 7(q)(iii)(dd) hereof as if reference to the lessee covenants of this Lease read the lessee covenants contained or to be contained in the underlease)

to sublet the whole or any part of the demised premises or permit the assignment of any underlease thereof Provided That:-

(1) any permitted subletting shall be at a rent which is not less than the greater of the open market rent without a fine or premium of the premises to be sublet as at the time of the grant of the proposed underlease and the yearly rent then payable hereunder (or a due proportion previously approved in writing by ABP (such approval not to be unreasonably withheld) of it where only part of the demised premises is to be sublet)

- (2) any permitted subletting shall be granted without a fine or premium and
- (3) any permitted subletting shall be on terms the same mutatis mutandis as those contained in this Lease
- (4) any permitted subletting shall contain provisions to ensure that where ABP exercises any right contained in this Lease to determine this Lease or this Lease otherwise determines the term granted by such underlease will also determine (without any right of the underlessee to remain in possession or occupation of any part of the demised premises) on a date not later than the date upon which this Lease will determine as a consequence of the exercise by ABP of any such right to determine this Lease or the date this Lease otherwise determines
- (5) any permitted subletting shall contain provisions to ensure that where the Lessee exercises any right contained in this Lease to determine this Lease or this Lease otherwise determines the term granted by such underlease will also determine (without any right of the underlessee to remain in possession or occupation of any part of the demised premises) on a date not later than the date upon which this Lease will determine as a consequence of the exercise by the Lessee of any such right to determine this Lease or the date this Lease otherwise determines
- (6) prior to the grant of any permitted subletting the necessary procedure shall be followed in order to procure that the operation of the provisions of Sections 24 - 28 inclusive of the Landlord and Tenant Act 1954 are excluded in relation to the tenancy to be created by the proposed underlease and evidence produced to ABP that such Sections will be validly excluded in relation to such tenancy
- (7) the form of the proposed underlease has been approved in writing by ABP (such approval not to be unreasonably withheld or delayed)

And Provided Further That any such licence shall be by deed and include a covenant

by the proposed underlessee or assignee as the case may be with ABP to observe and perform the covenants on the part of the underlessee and the conditions to be contained in the proposed underlease or contained therein as the case may be until such time as the underlessee or assignee as the case may be shall be released from liability therefor by an assignment thereof in accordance with the terms thereof

(vi) Not without the previous consent in writing of ABP (such consent not to be unreasonably withheld or delayed) to charge the whole of the demised premises

(vii) Within one month after the date of the happening of any event for which licence is given as aforesaid or of any devolution of the leasehold title to give ABP notice and full particulars thereof in writing

(viii) Notwithstanding the other provisions of this Lease nothing herein contained shall prevent the Lessee from sharing occupation of the demised premises or any part thereof with another company within the same group of companies as the Lessee as defined in Section 42 of the Landlord and Tenant Act 1954 for so long as both companies remain members of the same group and provided that no relationship of landlord and tenant is thereby created

Sale by Auction

(r) That no public sale or sale by auction shall be held on the demised premises

Easements and Encroachments

(s) (i) Not to give any third party any acknowledgement that the Lessee enjoys the access of light or air to any of the windows or openings in the demised premises by the consent of such third party nor to pay any sum of money to or enter into any agreement with such third party for the purpose of inducing or binding him to abstain from obstructing the access of light or air to any such windows or openings And in the event of such third party doing or threatening to do anything which obstructs or would obstruct such access of light or air to notify the same forthwith in writing to ABP

(ii) To take all necessary steps to prevent and not to suffer any encroachment

upon the demised premises or the acquisition of any right to light or air passage drainage or other easement over or upon or under the demised premises and forthwith to give notice in writing to ABP of any threatened encroachment or attempt to acquire any such easement

(iii) To permit ABP to enter upon the demised premises for the purpose of taking such of the necessary steps as are referred to in Clause 7(s)(ii) hereof and to permit ABP to bring all such actions as it may think fit in the name of the Lessee in respect of the obstruction of the access of light or air to any of the windows or openings in the demised premises or in respect of any such encroachment or easement as aforesaid Provided Always that ABP shall indemnify the Lessee from and against all costs losses or damage which it may suffer by reason of any act or action which ABP may do or bring under this Clause 7(s)(iii)

Excavations and Nuisances

- (t) (i) That no earth clay or other substance shall be excavated upon the demised premises and that no act shall be done upon the demised premises which may endanger the safety or stability of ABP's property or of any neighbouring property and that no inflammable dangerous or explosive substance liquid or gas shall be stored or placed upon the demised premises
- (ii) That nothing shall be done upon the demised premises which may be or become or grow to be a public or private nuisance or a danger annoyance or disturbance to ABP or its tenants or users of ABP's or other docks and neighbouring property or persons
- (iii) That all structures and erections situated on the demised premises shall be kept in a safe condition

Indemnity

- (u) To be responsible for and to keep ABP fully indemnified against all damage damages losses costs expenses actions demands proceedings claims and liabilities made against or suffered or incurred by ABP arising directly or indirectly out of:-

- (i) the grant of the demise herein contained or
- (ii) the user of the demised premises or
- (iii) the exercise of the rights granted by this Lease or
- (iv) any act omission or negligence of the Lessee or any persons at the demised premises expressly or impliedly with the Lessee's authority or
- (v) any breach or non-observance by the Lessee of the covenants on its part and the conditions contained in this Lease or
- (vi) any Contamination existing or arising at the demised premises and/or at any part or parts of the Retained Land where any part or parts of the Works are or have been carried out and/or any of the rights granted by this Lease are or have been exercised or
- (vii) any Migration or
- (viii) any obligations to remediate Contamination from the demised premises and/or from any part or parts of the Retained Land where any part or parts of the Works are or have been carried out and/or any of the rights granted by this Lease are or have been exercised or
- (ix) complying with any environmental notices served by any Competent Authority in respect of the demised premises and/or any part or parts of the Retained Land where any part or parts of the Works are or have been carried out and/or any of the rights granted by this Lease are or have been exercised

Spillages etc.

- (v) To ensure that any storage of equipment and materials in connection with the Lessee's business as authorised pursuant to this Lease is confined to the demised premises and does not encroach upon or spill on to any adjoining lands and/or water areas including without limitation the River Humber

To pay Value Added Tax

- (w) (i) To be responsible for pay and keep ABP fully indemnified against all Value Added Tax which may be chargeable in relation to any supply made or deemed to be

made by ABP to the Lessee as a result of or in connection with this Lease

- (ii) Whenever in this Lease provision is made for the Lessee:-
 - (aa) to pay any sum on which Value Added Tax is chargeable (including rents) then (without prejudice to the generality of Clause 7(w)(i) hereof) to pay in addition to such sum (including rents) Value Added Tax thereon at the rate appropriate at the time of supply
 - (bb) to repay to ABP or indemnify ABP against any sum then to repay in addition any Value Added Tax borne by ABP (except to the extent to which ABP in respect of services rendered to ABP recovers the same as input tax)

Environmental Matters

- (x) (i) Without prejudice to the generality of Clause 7(g) hereof:-
 - (aa) not to use the demised premises in such a way or to store anything thereon which causes or may cause a breach or violation of or otherwise offends Environmental Laws and to ensure that the demised premises and the activities carried out at the demised premises comply with Environmental Laws at all times
 - (bb) not to permit to be released or to be discharged into the Environment whether upon or from the demised premises or otherwise any Relevant Substance causing contamination or pollution or otherwise causing any further contamination or pollution of or to the Environment including without limitation the demised premises
 - (cc) to obtain all consents as may be required to comply in all aspects with all Environmental Laws and to keep ABP indemnified in respect of any breach thereof

Land Registration Act 2002

- (y) (i) Within two months of completion of this Lease to take all necessary steps to lodge at the land registry an application for registration of this Lease in accordance with the Land Registration Act 2002 (hereinafter called "the 2002

Act”) and to pursue such application diligently

- (ii) To deliver to ABP within ten days of completion of such registration official copies of the title of the Lessee evidencing that the Lessee is registered at the land registry as proprietor of this Lease
- (iii) On the expiration or sooner determination of the term hereby granted to deliver to ABP the original of this Lease and any other documentation in the Lessee’s possession or control necessary to procure the closure of the registered title of this Lease
- (iv) To indemnify and keep indemnified the person who originally granted this Lease and any subsequent person for the time being entitled to the reversion immediately expectant on the determination of the term hereby granted from liability suffered or properly incurred by the person who originally granted this Lease or any subsequent person for the time being entitled to the reversion immediately expectant on the determination of the term hereby granted due to any failure of the Lessee to register this Lease

Head Lease

- (z) (i) To observe and perform all the covenants and conditions on the part of the tenant contained in the Head Lease so far as they relate to the demised premises and are still subsisting and capable of taking effect (except only the covenants to pay the rents reserved by the Head Lease)
- (ii) Not to do or allow any act or thing in relation to the demised premises which is inconsistent with or in breach of the provisions of the Head Lease or which if done omitted or suffered by ABP would constitute a breach of the covenants on the part of the tenant and the conditions binding on the tenant contained in the Head Lease
- (iii) To permit the Head Landlord (with or without others as provided in the Head Lease) to exercise any right to enter the demised premises granted or allowed to the Head Landlord pursuant to the Head Lease
- (iv) Wherever consent or approval of the Head Landlord is required under the

terms of the Head Lease not to do or omit to do anything for which such consent or approval is so required without first obtaining ABP's consent or approval thereto

Costs

- (aa) To pay on the grant of this Lease the fair and reasonable fees and disbursements of ABP's Solicitors in relation to the negotiation preparation execution and grant of this Lease

Subjections

- (bb) To comply with all matters subject to which this demise and the rights granted by this Lease take effect (including without limitation the Subjections) and to comply with the agreements covenants obligations and stipulations contained in the deeds and documents referred to in the Third Schedule hereto insofar as such matters agreements covenants obligations and stipulations relate to the demised premises and/or the exercise of the rights hereby granted and to comply with the obligations contained in the provisos governing the exercise of the rights granted by this Lease

Outfall Discharge Rent

- (cc) To observe and perform the obligations on the part of the Lessee contained in the Fourth Schedule

Provisos

8. PROVIDED ALWAYS AND IT IS EXPRESSLY AGREED as follows:-

Re-entry

- (a) (i) That if at any time during the term hereby granted:-
- (aa) the said yearly rents or any part thereof shall be in arrear for twenty one days next after any of the said days whereon the same ought to be paid as aforesaid whether the same shall or shall not have been legally demanded or
- (bb) there shall be a breach non-performance or non-observance of any of the covenants on the part of the Lessee or conditions herein contained or
- (cc) an Act of Insolvency occurs
- then it shall be lawful for ABP at any time thereafter into or upon the demised

premises or any part thereof in the name of the whole to re-enter and the same to have possess and enjoy as of ABP's former estate but without prejudice to any right or remedies of ABP then subsisting

(ii) In the event that ABP becomes entitled to terminate this Lease pursuant to Clause 8(a)(i) ABP will not without first giving any Lender not less than 30 Working Days' previous notice in writing exercise any right it may have to terminate this Lease

(iii) ABP shall not terminate this Lease if within the 30 Working Days notice period referred to in Clause 8(a)(ii) the Lender shall give notice in writing to ABP of its intention to step in (either itself or through a Lender's Appointee) and the Lender or the Lender's Appointee delivers to ABP a perfected deed of covenant within the said period of 30 Working Days in such form as is required by ABP acting reasonably whereby it assumes the obligations of the Lessee under this Lease and covenants to remedy any existing breaches of this Lease within a reasonable period after ABP's notice given pursuant to Clause 8(a)(ii) and following receipt by ABP of any such deed of covenant and subject to the remediation of such breaches within such reasonable period and the provisions hereinafter contained this Lease shall thereafter continue in full force and effect but subject always and without prejudice to the provisions of Clause 8(a)(i) and shall be construed as though the name of the Lender or the Lender's Appointee was substituted for the name of the Lessee

(iv) Where the deed of covenant is provided by a Lender or a Lender's Appointee it shall be a requirement of the deed of covenant that within 40 Working Days of the date of ABP's notice given pursuant to Clause 8(a)(ii) the Lender or the Lender's Appointee procures the assignment of this Lease to a Lender's Appointee which can include the Lender's Appointee which has delivered to ABP the perfected deed of covenant pursuant to the provisions of Clause 8(a)(iii)

(v) Neither the Lender nor any Lender's Appointee shall have any liability to ABP under this Lease unless and until the Lender gives notice to ABP and the Lender or the Lender's Appointee provides the deed of covenant referred to at Clause 8(a)(iii)

whereupon the Lender or the Lender's Appointee (as appropriate) shall be liable for the performance of the Lessee's obligations under this Lease and ABP shall be liable to the Lender or the Lender's Appointee (as appropriate) for the performance of ABP's obligations under this Lease

(vi) ABP shall not be concerned or required to enquire whether and shall be bound to assume that as between the Lessee and the Lender sufficient events have occurred to permit the Lender or the Lender's Appointee to provide the deed of covenant as referred to in Clause 8(a)(iii)

Rights of parties on determination

(b) That where at the date on which the Lessee is to quit the demised premises they have been occupied for a period less than five years immediately preceding that date for the purposes of the business carried on by the Lessee or other the occupier the right to compensation conferred by Sections 37 and 59 of the Landlord and Tenant Act 1954 shall be wholly excluded

Exclusion of implied rights

(c) This demise shall not confer upon or be deemed to include (by implication or otherwise) in favour of the Lessee any rights or privileges heretofore enjoyed by it or by any other person previously in the occupation of the demised premises or any part thereof in relation thereto not expressly herein set out nor any right of light or air liberties privilege easements or advantages (except such as may be specifically granted in this Lease) in through over and upon any land or premises adjoining or near to the demised premises

Rights of Third Parties

(d) (i) Unless the right of enforcement is expressly provided it is not intended that any third party is to have the right to enforce any of the terms of this Lease pursuant to the Contracts (Rights of Third Parties) Act 1999 but this provision does not affect any rights which are available apart from that Act

(ii) The parties to this Lease may determine or vary this Lease without the

consent of a third party to whom an express right to enforce any of its terms may have been provided

2002 Act

- (e) The person who originally granted this Lease and any subsequent person for the time being entitled to the reversion immediately expectant on the determination of the term hereby granted shall not be liable to the Lessee for any liability suffered or incurred by the Lessee due to any failure of the Lessee to register this Lease

Legislation

- (f) (i) Unless otherwise specified, a reference in this Lease to a particular law or statutory instrument is a reference to it as it is in force for the time being taking account of any amendment extension application consolidation or re-enactment and includes any subordinate laws or legislation for the time being in force made under it and all orders notices instruments directions regulations bye-laws consents permissions conditions schemes codes of practice and guidance made under it
- (ii) A reference in this Lease to laws in general is to all local national and directly applicable supra-national laws in force for the time being taking account of any amendment extension application consolidation or re-enactment and includes any subordinate laws and legislation for the time being in force made under them and all orders notices instruments directions regulations bye-laws consents permissions conditions schemes codes of practice and guidance made under them

Joint and several liability

- (g) In this Lease words that indicate the singular include the plural and vice versa and where any party to this Lease for the time being comprises two or more persons obligations expressed or implied to be made by or with that party are deemed to be made by or with the persons comprising that party jointly and severally

Definitions and Interpretation

- (h) (i) In this Lease the terms defined in this clause shall for all the purposes hereof have the meanings specified unless the context otherwise requires:-

"ABP Regulations" means all bylaws, codes of practice or other directions or regulations issued from time to time by ABP in connection with the River Humber;

"Act of Insolvency" means:

- (a) the taking of any step in connection with any voluntary arrangement or any other compromise or arrangement for the benefit of any creditors of the Lessee or any guarantor; or
- (b) the making of an application for an administration order or the making of an administration order in relation to the Lessee or any guarantor; or
- (c) the giving of any notice of intention to appoint an administrator, or the filing at court of the prescribed documents in connection with the appointment of an administrator, or the appointment of an administrator, in any case in relation to the Lessee or any guarantor; or
- (d) the appointment of a receiver or manager or an administrative receiver in relation to any property or income of the Lessee or any guarantor; or
- (e) the commencement of a voluntary winding-up in respect of the Lessee or any guarantor, except a winding-up for the purpose of amalgamation or reconstruction of a solvent company in respect of which a statutory declaration of solvency has been filed with the Registrar of Companies; or
- (f) the making of a petition for a winding-up order or a winding-up order in respect of the Lessee or any guarantor; or
- (g) the striking-off of the Lessee or any guarantor from the Register of Companies or the making of an application for the Lessee or any guarantor to be struck-off; or
- (h) the Lessee or any guarantor otherwise ceasing to exist (but excluding where the Lessee or any guarantor dies); or
- (i) the presentation of a petition for a bankruptcy order or the making of a

bankruptcy order against the Lessee or any guarantor

The paragraphs above shall apply in relation to a partnership or limited partnership (as defined in the Partnership Act 1890 and the Limited Partnerships Act 1907 respectively) subject to the modifications referred to in the Insolvent Partnerships Order 1994 (*SI 1994/2421*) (as amended), and a limited liability partnership (as defined in the Limited Liability Partnerships Act 2000) subject to the modifications referred to in the Limited Liability Partnerships Regulations 2001 (*SI 2001/1090*) (as amended)

Act of Insolvency includes any analogous proceedings or events that may be taken pursuant to the legislation of another jurisdiction in relation to a Lessee or guarantor incorporated or domiciled in such relevant jurisdiction;

"Agreement for Lease" means the agreement dated [] made between ABP (1) and the Lessee (2) relating to the demised premises and the grant of this Lease;

"Applicable Laws" means all applicable law and legislation of any jurisdiction including all or any statutes, rules, regulations, statutory guidance, treaties, directives, decisions, directions, recommendations, codes of practice (including the ISPS Code), guidance notes, circulars, bylaws, orders, notices, demands, regulations or official guidance issued by any Competent Authority which are applicable to the Lessee and/or the demised premises and/or the Works and/ or the exercise of the rights granted by this Lease and/or the Lessee's activities at the demised premises and/or in the exercise of the rights granted by this Lease including without limitation its use and occupation of the demised premises as the same may be amended or modified from time to time;

"Application" means an application for planning permission or for any order under the

Harbours Act 1964 or the Transport and Works Act 1992 or the Planning Act 2008 or any other statutory consent affecting the demised premises;

"Authorised Guarantee Agreement" includes a deed of covenant by way of indemnity and guarantee completed pursuant to the condition detailed in clause 7(q)(iv)(aa);

"Berthing Pocket" means the water area comprising [] acres or thereabouts shown hatched blue on Plan 1;

"Cargo" means any goods passing to and from the demised premises under the control of the Lessee its contractors, sub-contractors or agents;

"Competent Authority" means any supranational, national, regional, local or municipal government or regulatory authority, body, agency, court, ministry, inspectorate or department, or any official, public or statutory person or body, police, customs or port authority, in each case acting in accordance with its or their statutory or legal authority in any jurisdiction having authority over the parties to this Lease or having responsibility for the regulation or governance of any aspect of the performance of this Lease and/or the demised premises and/or the Works and/or the exercise of the rights granted by this Lease and/or the Lessee's activities at the demised premises and/or in the exercise of the rights granted by this Lease including without limitation its use and occupation of the demised premises;

"Contamination" means the presence of any Relevant Substance and/or Hazardous Materials in on or under the demised premises or the Retained Land or any structure thereon (or emanating from in on or under the demised premises or any structure thereon or from in on or under the Retained Land or any structure thereon) and/or its disturbance and/or exposure;

"Contractual Term" means the term granted by this Lease;

"Dangerous Substances" means a substance or article described in regulation 3 of the Dangerous Substances Regulations;

"Dangerous Substances Regulations" means the Dangerous Substances in Harbour Areas Regulations 1987;

"Dock Master's jurisdiction" means the water area comprising [] acres or thereabouts shown coloured blue on Plan 1;

"Enactment" means any Act of Parliament law statute rule regulation treaty directive bye-law code of practice circular guidance note and any notice order direction or requirement given or made pursuant thereto for the time being in force;

"Environment" includes the following (whether alone or in combination):-

- (i) ecological systems and living organisms (including humans);
- (ii) air (including air within buildings or other structures and whether below or above ground);
- (iii) land and soil (including buildings and any other structures in, on or under land and soil, anything below the surface of the land and land covered with water);
and
- (iv) water (including water under or within land or within pipe or sewage systems);

"Environmental Laws" means all laws statutes byelaws regulations directions directives decisions orders notices demands or any mandatory obligation duty or liability or any sanction for non-observance or breach relating to Environmental Matters including any

codes of practice circulars and guidance notes issued by United Kingdom regulatory authorities or by any supranational authority;

"Environmental Matters" means any matters affecting the Environment including without limitation:-

- (i) the release emission entry or introduction of any Relevant Substance into the air
- (ii) the release of any Relevant Substance into ground waters as defined in the Environmental Protection Act 1990 controlled waters as defined in the Water Resources Act 1991 or in to drains or sewage or waste water systems
- (iii) the release deposit storage or disposal of any Relevant Substance in or on land
- (iv) the handling treatment processing manufacture or collection of any Relevant Substance
- (v) nuisance litter noise or the abstraction of water;

"Environmental Permits" means any agreement, permission, permit, licence, consent, exemption or other approval required by the Lessee under any Applicable Laws in order to lawfully carry out its activities at the demised premises and/or to exercise any of the rights granted by this Lease;

"Harbour Master" means the person who is for the time being the Harbour Master, Humber appointed by ABP in its capacity as conservancy authority for the River Humber;

"Hazardous Materials" means any substance in whatever form whether alone or in combination with any other substance known or reasonably believed to be harmful to human health or the Environment, whether or not for that reason it is subject to statutory controls on production, use, storage or disposal;

"Initial Liability Period" means:

- (a) in respect of the Guarantor herein named the period from and including the date of commencement of the term hereby granted until and including the date upon which the Lessee herein named makes an assignment of this Lease (or where such assignment is an excluded assignment within the meaning of the Landlord and Tenant (Covenants) Act 1995 the first subsequent assignment which is not such an excluded assignment) and "Further Liability Period" means in respect of the Guarantor herein named any further period (following the expiry of the Initial Liability Period) during which the Lessee herein named is liable under an Authorised Guarantee Agreement entered into in compliance with the requirements of this Lease; and
- (b) in respect of any guarantor for an assignee of this Lease the period from and including the date of the relevant assignment to that assignee until and including the date upon which that assignee itself makes an assignment of this Lease (or where such assignment is an excluded assignment within the meaning of the Landlord and Tenant (Covenants) Act 1995 the first subsequent assignment which is not such an excluded assignment) and "Further Liability Period" means in respect of such guarantor any further period (following the expiry of the Initial Liability Period) during which such assignee is liable under an Authorised Guarantee Agreement entered into in compliance with the requirements of this Lease;

"Lender" means any mortgagee or chargee of the Lease who shall at the time of the grant of the mortgage or charge have been approved by ABP pursuant to the provisions of Clause 7(q)(vi);

"Lender's Appointee" means a reputable party approved by ABP for the purpose of

such assignment such approval not to be unreasonably withheld or delayed subject to the same circumstances mutatis mutandis as set out in Clause 7(q)(iii) (excluding (but subject and without prejudice to the provisions of Clause 8(a)(iii)) Clause 7(q)(iii)(cc);

"Migration" means the leaching migration escape seepage or other movement through air land or water of any Relevant Substance and/or Hazardous Materials from the demised premises (including without limitation from any structure or substance in on or under the demised premises) and/or from any part or parts of the Retained Land where any part or parts of the Works are or have been carried out and/or any of the rights granted by this Lease are or have been exercised into the Environment

"Order" means the Able Marine Energy Park Development Consent Order [20] (SI[]);

"Plan 1" means the plan annexed to this lease marked Plan 1;

"Planning Acts" means the Town and Country Planning Act 1990 the Planning (Listed Buildings and Conservation Areas) Act 1990 the Listed Buildings Act 1990 the Planning (Hazardous Substances) Act 1990 the Planning (Consequential Provisions) Act 1990 and the Planning and Compensation Act 1991 the Planning Act 2008 and any other applicable town and country planning legislation;

"Policy of Insurance" means any insurance policy required to be maintained by the Lessee under clause 7(m); and "Policies of Insurance" means all such policies;

"Pollution Incident" means a discharge of any Relevant Substance and/or Hazardous Materials to the Environment in breach of any Applicable Laws;

"Quay" means [];

"Quay Area" means [the part of the demised premises shown coloured pink on Plan 1];

"Relevant Substance" means any substance or noise which causes or is capable of causing pollution of the Environment or harm to man or any other living organism supported by the Environment or any waste of a type or whose disposal handling keeping or treatment is controlled by any Environmental Laws;

"Renewed Subject Documents" means any lease agreement licence or other arrangement or deed which is a renewal of any of the Subject Documents and/or any other lease agreement licence or other arrangement or deed which relates to the whole or part of the subject matter of any of the Subject Documents;

"Rents" means the yearly rent payable pursuant to Clause 5(a) (subject to review) and the other rents and sums payable pursuant to Clause 5(b)-(c) (inclusive) (subject to review);

"Retained Land" means all those the premises demised pursuant to the Head Lease (excluding the demised premises) and all that the property of ABP as statutory harbour authority for the Port of Immingham and the Port of Grimsby

"Rock Revetment" means [];

"Rock Revetment Area" means [the part of the demised premises shown coloured magenta on Plan 1];

"Statutory Undertaking" in relation to ABP means (unless expressly stated otherwise) ABP in its capacity as conservancy authority for the River Humber and includes all the functions of the Harbour Master;

"Structural Engineers Report" means a report by a structural engineer (a member of The Institution of Structural Engineers);

"Subject Documents" means the documents detailed in and/or otherwise referred to in the Third Schedule;

"Subjections" means the agreements covenants obligations conditions rights easements stipulations and other matters contained in the documents detailed in and/or otherwise referred to in the Third Schedule and other matters detailed in the Third Schedule;

"Working Day" means any day from Monday to Friday (inclusive) which is not Christmas Day Good Friday or a statutory Bank Holiday;

"Works" means the Tenant's Works as defined in the Agreement for Lease the Berthing Pocket the Dock Master's jurisdiction and any premises forming part of the Able Marine Energy Park authorised by the Order;

(ii) Unless the context otherwise requires, where the words "include(s)" or "including" are used in this Lease they are deemed to have the words "without limitation" following them

(iii) Any obligation on the Lessee not to do or omit to do anything shall include an obligation not to allow that thing to be done or omitted to be done by another person

(iv) Any reference to ABP's consent or approval being required under this Lease

is to a consent or approval which must be obtained before the relevant act is taken or event occurs

(v) Nothing contained in this Lease shall imply or warrant that the demised premises may lawfully be used for any of the purposes herein authorised or the rights granted hereunder may be lawfully exercised whether pursuant to the Planning Acts or otherwise howsoever and the Lessee hereby acknowledges that ABP has not given or made at any time any representation or warranty that any such uses are or will be or will remain lawful uses or the rights granted hereunder may be lawfully exercised whether pursuant to the Planning Acts or otherwise howsoever and that notwithstanding that any such uses as aforesaid may not be lawful uses or rights granted hereunder may not be lawfully exercised whether pursuant to the Planning Acts or otherwise howsoever the Lessee shall remain bound and liable to ABP in respect of the obligations undertaken by the Lessee in this Lease without being entitled to any compensation recompense or relief of any kind whatsoever

(vi) The expression "tenant covenant" has the meaning given to it by the Landlord and Tenant (Covenants) Act 1995

(vii) A reference to a guarantor includes a reference to the Guarantor and to any other guarantor of the tenant covenants of this Lease including a guarantor who has entered into an Authorised Guarantee Agreement made in respect of this Lease

Head Lease

(i) (i) Any rights or reservations reserved to or exercisable by ABP or any right exercisable by the Lessee in common with ABP are to be construed as including where appropriate reference to the exercise of the right or reservation by the Head Landlord and all persons authorised by her or in common with all persons having a like right

(ii) Where the consent or approval of the Head Landlord is required under the terms of the Head Lease then the consent or approval of ABP is also required under the terms of this Lease

(iii) Where under the terms of this Lease the consent or approval of ABP is required and consent or approval is also required from the Head Landlord under the terms of the Head Lease ABP is entitled to withhold the giving of consent or approval until the consent of the Head Landlord has been given and nothing in this Lease is to be construed as:-

- (aa) imposing on ABP any obligation not to unreasonably refuse consent or approval in so far as it requires the obtaining of such consent or approval from the Head Landlord where such consent or approval is not forthcoming provided that ABP shall use all reasonable endeavours to obtain the same
- (bb) imposing on the Head Landlord any obligation not unreasonably to refuse any such consent or approval or construed as implying or indicating that any such obligation is imposed on the Head Landlord by virtue of the terms of the Head Lease

Disputes under the Head Lease

- (j) Any issue question or matter arising out of under or relating to the Head Lease that also affects or relates to the provisions of this Lease is to be determined as provided in the Head Lease and the determination of that issue question or matter pursuant to the provisions of the Head Lease is to be binding on the Lessee as well as ABP for the purposes both of the Head Lease and this Lease

Restrictions in this Lease Prevail Over Matters Permitted by the Head Lease

- (k) Where this Lease restricts or prohibits matters which are otherwise permitted by the Head Lease with or without qualifications (including but not limited to the restrictions upon dealings in this Lease) the terms of this Lease prevail to restrict or prohibit such matters

Governing Law and Jurisdiction

- (l) (i) This Lease and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of England and Wales

(ii) ABP the Lessee and the Guarantor irrevocably agree that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim that arises out of or in connection with this Lease or its subject matter or formation (including non-contractual disputes or claims). Nothing in this Clause 8(l) shall limit the right of ABP to take proceedings against the Lessee and/or the Guarantor in any other court of competent jurisdiction nor shall the taking of proceedings in any one or more jurisdictions preclude the taking of proceedings in any other jurisdictions whether concurrently or not to the extent permitted by the law of such other jurisdiction

(iii) Able Humber Ports Limited (Jersey Company Registration Number []) irrevocably appoints [] of [] as its agent to receive on its behalf in England or Wales service of any proceedings under Clause 8(l)(ii). Such service shall be deemed completed on delivery to such agent (whether or not it is forwarded to and received by Able Humber Ports Limited (Jersey Company Registration Number [])) and shall be valid until such time as ABP has received prior written notice from Able Humber Ports Limited (Jersey Company Registration Number []) that such agent has ceased to act as agent. If for any reason such agent ceases to be able to act as agent or no longer has an address in England or Wales Able Humber Ports Limited (Jersey Company Registration Number []) shall forthwith appoint a substitute acceptable to ABP and deliver to ABP the new agent's name and address within England and Wales

Guarantee

9.(1) THE Guarantor hereby covenants with ABP to observe and perform the provisions of the Second Schedule and the obligations on the part of the Guarantor contained in the Second Schedule or otherwise arising by virtue of this Lease

(2) If an Act of Insolvency occurs in relation to a guarantor or if any guarantor (being an individual) dies or becomes incapable of managing his affairs the Lessee shall if ABP

requests procure that a person of standing acceptable to ABP enters into a replacement or additional guarantee and indemnity of the tenant covenants of this Lease in the same form as that entered into by the former guarantor

(3) For so long as any guarantor remains liable to ABP the Lessee shall if ABP requests procure that that guarantor joins in any consent or approval required under this Lease and consents to any variation of the tenant covenants of this Lease

ABP's Covenant for Quiet Enjoyment

10. ABP hereby covenants with the Lessee that the Lessee paying the rents hereby reserved as and when the same ought to be paid and observing and performing all the covenants and conditions herein contained and on the part of the Lessee to be performed and observed shall peaceably hold and enjoy the demised premises without any disturbance or interruption by ABP or any person or persons rightfully claiming through under or in trust for it But Subject to all rights of navigation affecting the same Provided Always that the carrying on by ABP of its undertaking in exercise of its powers and subject to its statutory and common law obligations shall be deemed not to be in breach of this covenant and not to be in derogation from ABP's grant

Exclusion of Security of tenure

11.(1) ABP has prior to the date of this Lease served on the Lessee a notice in the form (or substantially in the form) set out in Schedule 1 to the Regulatory Reform (Business Tenancies) (England and Wales) Order 2003 (hereinafter called "the 2003 Order") and:-

- (a) the Lessee has prior to the date of this Lease made a statutory declaration in the form (or substantially in the form) set out in paragraph 8 of Schedule 2 to the 2003 Order and
- (b) ABP and the Lessee agree that the provisions of Sections 24 - 28 inclusive of the Landlord and Tenant Act 1954 shall be excluded in relation to the tenancy created by this Lease and
- (c) where the statutory declaration was made by a person other than the Lessee the declarant was duly authorised by the Lessee to make the statutory declaration on the

Lessee's behalf

- (2) ABP and the Guarantor confirm that:
 - (a) ABP served a notice on the Guarantor as required by section 38A(3)(a) of the Landlord and Tenant Act 1954 and which applies to the tenancy to be entered into by the Guarantor pursuant to paragraph 3 of the Second Schedule before this Lease was entered into; and
 - (b) the Guarantor made a statutory declaration dated [] in accordance with the requirements of section 38A(3)(b) of the Landlord and Tenant Act 1954; and
 - (c) ABP and the Guarantor agree that the provisions of Sections 24-28 inclusive of the Landlord and Tenant Act 1954 shall be excluded in relation to the tenancy to be entered into by the Guarantor pursuant to paragraph 3 of the Second Schedule; and
 - (d) where the statutory declaration was made by a person other than the Guarantor the declarant was duly authorised by the Guarantor to make the statutory declaration on the Guarantor's behalf
- (3) ABP and the Guarantor confirm that:
 - (a) ABP served a notice on the Guarantor as required by section 38A(3)(a) of the Landlord and Tenant Act 1954 and which applies to the tenancy to be entered into by the Guarantor pursuant to paragraph 4 of the Second Schedule before this Lease was entered into; and
 - (b) the Guarantor made a statutory declaration dated [] in accordance with the requirements of section 38A(3)(b) of the Landlord and Tenant Act 1954; and
 - (c) ABP and the Guarantor agree that the provisions of Sections 24-28 inclusive of the Landlord and Tenant Act 1954 shall be excluded in relation to the tenancy to be entered into by the Guarantor pursuant to paragraph 4 of the Second Schedule; and
 - (d) where the statutory declaration was made by a person other than the Guarantor the declarant was duly authorised by the Guarantor to make the statutory declaration on

the Guarantor's behalf

Notices

12. ANY notice in writing that under the terms of these presents is to be given to ABP shall only be deemed effectively served if delivered by hand or sent by recorded delivery post addressed to ABP's Regional Property Manager – Hull and Goole at Riverside House King George Dock Hull HU9 5PS or upon such other person as ABP may from time to time appoint for that purpose And any notice in writing that is to be given by ABP to the Lessee shall be deemed effectively served if delivered by hand or sent by recorded delivery post addressed to the Lessee at the demised premises or its last known place of business or abode in the United Kingdom or (if the Lessee shall be a company) to its Secretary at its registered office as the case may require

IN WITNESS whereof the parties hereto have duly executed this document as a Deed and delivered it upon its dating

THE FIRST SCHEDULE hereinbefore referred to:-

THIS GUARANTEE is made the _____ day of _____ Two thousand {and _____ }

BETWEEN:-

- (1) { _____ } {of} {whose registered office is at} { _____ } {(Company Registration Number { _____ })} ("the Guarantor") and
- (2) {ASSOCIATED BRITISH PORTS} of {{Aldwych House 71-91 Aldwych London WC2B 4HN} ("ABP")

WHEREAS:-

- (1) Lease

By a lease ("the Lease") made the { _____ } day of { _____ } Two thousand {and _____ } between (1) ABP and (2) [_____] the premises { _____ } ("the demised premises") were demised for a term of { _____ } years from the { _____ } day of { _____ } Two thousand {and _____ } ("the

Contractual Term") subject to the payment of the rents reserved by and the observance and performance of the covenants on the tenant's part and the conditions contained in the Lease

(2) Consent to Assignment

The Lease contains provisions prohibiting the tenant from assigning the demised premises without the consent of the landlord and {ABP} has agreed at the request of the Guarantor to grant such consent upon the terms hereinafter set out to enable the Guarantor to assign the demised premises to { } ("the Assignee")

(3) Agreement to enter into Guarantee

The Guarantor has agreed with {ABP} to enter into this deed of guarantee as a condition of {ABP}'s permitting the assignment of the Lease to the Assignee and as required by the Lease

NOW THIS DEED WITNESSES that:-

1. The Guarantor covenants with {ABP} and without the need for any express assignment with all its successors in title that:-

(1) from the date of the assignment of the demised premises to the Assignee and until such time as the Assignee shall be released from liability therefor by an assignment of the demised premises in accordance with the terms of the Lease the Assignee shall punctually pay the rents and observe and perform the covenants and other terms of the Lease and if the Assignee shall make any default in payment of the rents or in observing or performing any of the covenants or other terms of the Lease the Guarantor will pay the rents and observe and perform the covenants or terms in respect of which the Assignee shall be in default and make good to {ABP} on demand and indemnify {ABP} against all losses damages costs and expenses arising or incurred by {ABP} as a result of such non-payment non-performance or non-observance notwithstanding:-

(a) any time or indulgence granted by {ABP} to the Assignee or any neglect or forbearance of {ABP} in enforcing the payment of the rents or the observance or performance of the covenants or other terms of the Lease or any refusal by {ABP} to accept rents tendered by or on behalf of the Assignee at a time when {ABP} was entitled (or would after the service of a notice under the Law of Property Act 1925 Section 146 have been entitled)

to re-enter the demised premises

- (b) that the terms of the Lease may have been varied by agreement between the parties
- (c) that the Assignee shall have surrendered part of the demised premises in which event the liability of the Guarantor under the Lease shall continue in respect of the part of the demised premises not so surrendered after making any necessary apportionments under the Law of Property Act 1925 Section 140 and
- (d) any other act or thing by which but for this provision the Guarantor would have been released

(2) it will pay to {ABP} on demand and indemnify {ABP} against all costs charges fees disbursements and expenses including those of professional advisers and agents and including in each case VAT incurred by {ABP} in connection with this deed of guarantee

2. The Guarantor covenants with {ABP} and without the need for any express assignment with all its successors in title that if at any time during the Liability Period the Lease is disclaimed under any Enactment or other power or the Lease shall be forfeited under the provisions of the Lease or the Assignee shall cease to exist the Guarantor will take from {ABP} (but only if so required by {ABP} by written notice to the Guarantor within six months after such disclaimer or forfeiture or ceasing to exist (as the case may be and as to which time shall be of the essence)) a grant of a new lease of the demised premises for the residue of the Contractual Term unexpired at the date of such disclaimer or forfeiture or ceasing to exist (as the case may be) at rents the same as are then reserved by the Lease and subject to the like covenants conditions and provisos (including the provisions for rent review) as are contained in the Lease (mutatis mutandis) and the Guarantor will on the grant of such new lease execute and deliver to {ABP} a counterpart thereof and will pay the reasonable and proper legal costs and disbursements of {ABP} in connection with the preparation and completion of such new lease and the counterpart thereof

3. The Guarantor covenants with {ABP} and without the need for any express assignment with all its successors in title that if {ABP} shall not require the Guarantor to take a new lease of the demised premises pursuant to Clause 2 of this deed of guarantee the Guarantor shall

nevertheless within fourteen days of written demand pay to {ABP} a sum equal to the rents and all other outgoings that would have been payable under the Lease but for the disclaimer or forfeiture or ceasing to exist as aforesaid in respect of the period from and including the date of the disclaimer or forfeiture or ceasing to exist (as the case may be) until the expiration of six months therefrom or until the demised premises shall have been re-let by {ABP} (whichever shall first occur)

4. The Guarantor waives any right to participate in any review of rents under the Lease

5. All payments to be made by the Guarantor under the provisions of this deed of guarantee shall be made without deduction set-off or counterclaim

6. These covenants on the part of the Guarantor are given:-

(a) as a primary obligation; and

(b) with the intent that they shall enure for the benefit of all persons who are from time to time entitled to the reversion immediately expectant on the determination of the term created by the Lease

7. Where there are two or more persons included at any time in the expression "the Guarantor" covenants made by the Guarantor shall be deemed to be made by such persons jointly and severally

8.(1) Unless the right of enforcement is expressly provided it is not intended that any third party is to have the right to enforce any of the terms of this deed of guarantee pursuant to the Contracts (Rights of Third Parties) Act 1999 but this provision does not affect any rights which are available apart from that Act

(2) The parties to this deed of guarantee may determine or vary this deed of guarantee without the consent of any third party to whom an express right to enforce any of its terms may have been provided

9. In this deed of guarantee the terms defined in this Clause shall for all the purposes hereof have the meanings specified unless the context otherwise requires:

(a) "Enactment" means any Act of Parliament law statute rule regulation treaty directive bye-law code of practice circular guidance note and any notice order direction or

requirement given or made pursuant thereto for the time being in force

- (b) "Liability Period" means the period from and including the date of the assignment of the demised premises to the Assignee until such time as the Assignee shall be released from liability therefor by an assignment of the demised premises in accordance with the terms of the Lease

IN WITNESS whereof the parties hereto have duly executed this document as a deed and delivered it upon its dating

EXECUTED (but not delivered
until the date hereof) AS A DEED by

{ }

affixing its Common Seal

hereunto in the presence of:-

Director

Secretary

SIGNED (but not delivered
until the date hereof) AS A DEED by

the said { }

in the presence of:-

EXECUTED (but not delivered
until the date hereof) AS A DEED by

{Associated British Ports}

affixing its Common Seal

hereunto in the presence of:-

{Assistant Secretary}

(END OF SCHEDULE)

THE SECOND SCHEDULE hereinbefore referred to:-

(Covenants by Guarantor)

1. The Guarantor hereby covenants with ABP:
 - 1.1 during the Initial Liability Period the Lessee will duly pay the Rents with interest thereon at the prescribed rate (if applicable) on the days and in the manner hereinbefore appointed for payment and will duly perform and observe all the covenants and conditions on the part of the Lessee contained in this Lease and
 - 1.2 during the Further Liability Period the Lessee will duly perform and observe the covenants and conditions on the part of the Lessee contained in the Authorised Guarantee Agreement made by itand in either circumstance in case of default in such payment or in the performance or observance of any of the covenants and conditions as aforesaid the Guarantor will indemnify and will pay and make good to ABP on written demand all losses damages costs and expenses thereby arising or incurred by ABP
2. It is hereby agreed and declared that (subject to the provisions of the Landlord and Tenant (Covenants) Act 1995) any neglect or forbearance of ABP in endeavouring to obtain payment of the Rents when the same become due and payable or to enforce performance or observance of any of the covenants and conditions as referred to in paragraph 1 of this Schedule and any time or other concessions which may be given by ABP to the Lessee or the taking or holding of or varying realising releasing or not enforcing any other security for the liabilities of the Lessee or any variation in the terms of this Lease (including any consent given hereunder or any reviews of any of the Rents) or the transfer of ABP's reversion or the assignment of this Lease or the invalidity or unenforceability of the obligations of the Lessee

or any legal limitation or incapacity relating to the Lessee or the release of any one of the persons acting as the Guarantor (if more than one) from liability under this Lease or any other act omission matter or thing whatsoever whereby (but for this provision) the Guarantor would be released or exonerated either wholly or in part from the covenants and indemnity in this Schedule (other than a release by deed given by ABP) shall not release or exonerate or in any way affect the liability of the Guarantor under the covenants and indemnity in this Schedule

3. If at any time during the Initial Liability Period this Lease is disclaimed under any Enactment or other power or the Lease shall be forfeited or the Lessee shall cease to exist the Guarantor will take from ABP (but only if so required by ABP by written notice to the Guarantor within six months after such disclaimer or forfeiture or ceasing to exist (as the case may be)) a grant of a new lease of the demised premises for the residue of the Contractual Term unexpired at the date of such disclaimer or forfeiture or ceasing to exist (as the case may be) at Rents the same as all those which are then reserved by this Lease and subject to the like covenants conditions and provisos (including the provisions for rent review) as are contained in this Lease mutatis mutandis and the Guarantor will on the grant of such new lease execute and deliver to ABP a counterpart thereof and will pay ABP's reasonable and proper legal costs and disbursements in connection with the preparation and completion of such new lease and the counterpart thereof

4. If during the Further Liability Period this Lease is disclaimed under any Enactment or other power or the Lease is forfeited or the lessee in whom this Lease is then vested shall cease to exist and if the Lessee shall then be required by ABP pursuant to the Authorised Guarantee Agreement made by it to take from ABP a new lease of the demised premises in accordance with that Authorised Guarantee Agreement:-

4.1 the Guarantor will on the grant of such new lease to the Lessee execute and deliver to ABP a deed of covenant and guarantee in respect of the obligations of the Lessee under such new lease or arising therefrom such deed of covenant and guarantee to contain covenants and other provisions in the form of those contained in this

Schedule mutatis mutandis or

- 4.2 then should the Lessee fail to complete such new lease of the demised premises in accordance with the Authorised Guarantee Agreement made by it the Guarantor will take from ABP (but only if so required by ABP by written notice to the Guarantor within three months after such failure by the Lessee) a grant of a new lease of the demised premises for the residue of the Contractual Term unexpired at the date of such disclaimer or forfeiture or ceasing to exist (as the case may be) at Rents the same as all those which are then reserved by this Lease and subject to the like covenants conditions and provisos (including the provisions for rent review) as are contained in this Lease mutatis mutandis and the Guarantor will on the grant of such new lease execute and deliver to ABP a counterpart thereof
- and in either case the Guarantor will pay ABP's reasonable and proper legal costs and disbursements in connection with the preparation and completion of such deed of covenant and guarantee or new lease (as the case may be) and the counterpart thereof
5. If ABP shall not require the Guarantor to take a new lease of the demised premises pursuant to paragraphs 3 or 4.2 of this Schedule the Guarantor shall nevertheless within 21 days of written demand pay to ABP a sum equal to the Rents and all other outgoings that would have been payable under this Lease but for the disclaimer or forfeiture or ceasing to exist as aforesaid in respect of the period from and including the date of the disclaimer or forfeiture or ceasing to exist (as the case may be) until the expiration of six months therefrom or until the date on which the demised premises are re-let (if earlier)
6. The Guarantor waives any right to participate in any review of any of the Rents under this Lease
7. ABP shall be entitled to enforce this guarantee and the covenants on the part of the Guarantor without first making demand of or taking any proceedings against the Lessee
8. All payments to be made by the Guarantor under this Schedule shall be made without deduction set-off or counterclaim

9. These covenants on the part of the Guarantor are given:-
- 9.1 as a primary obligation and as principal debtor and
- 9.2 with the intent that they shall be for the benefit of ABP and its successors in title without the need for any express assignment
10. Where there are two or more persons included at any time in the expression "the Guarantor" covenants made by the Guarantor shall be deemed to be made by such persons jointly and severally

THE THIRD SCHEDULE hereinbefore referred to:-

1. The Head Lease

[]

THE FOURTH SCHEDULE hereinbefore referred to:-

[]

EXECUTED (but not delivered
until the date hereof) AS A DEED by
Associated British Ports
affixing its Common Seal
hereunto in the presence of:-

Assistant Secretary

EXECUTED (but not delivered
until the date hereof) AS A DEED by
Able Humber Ports Limited
affixing its Common Seal
hereunto in the presence of:-

Director

Secretary

EXECUTED (but not delivered
until the date hereof) AS A DEED by
[]
affixing its Common Seal
hereunto in the presence of:-

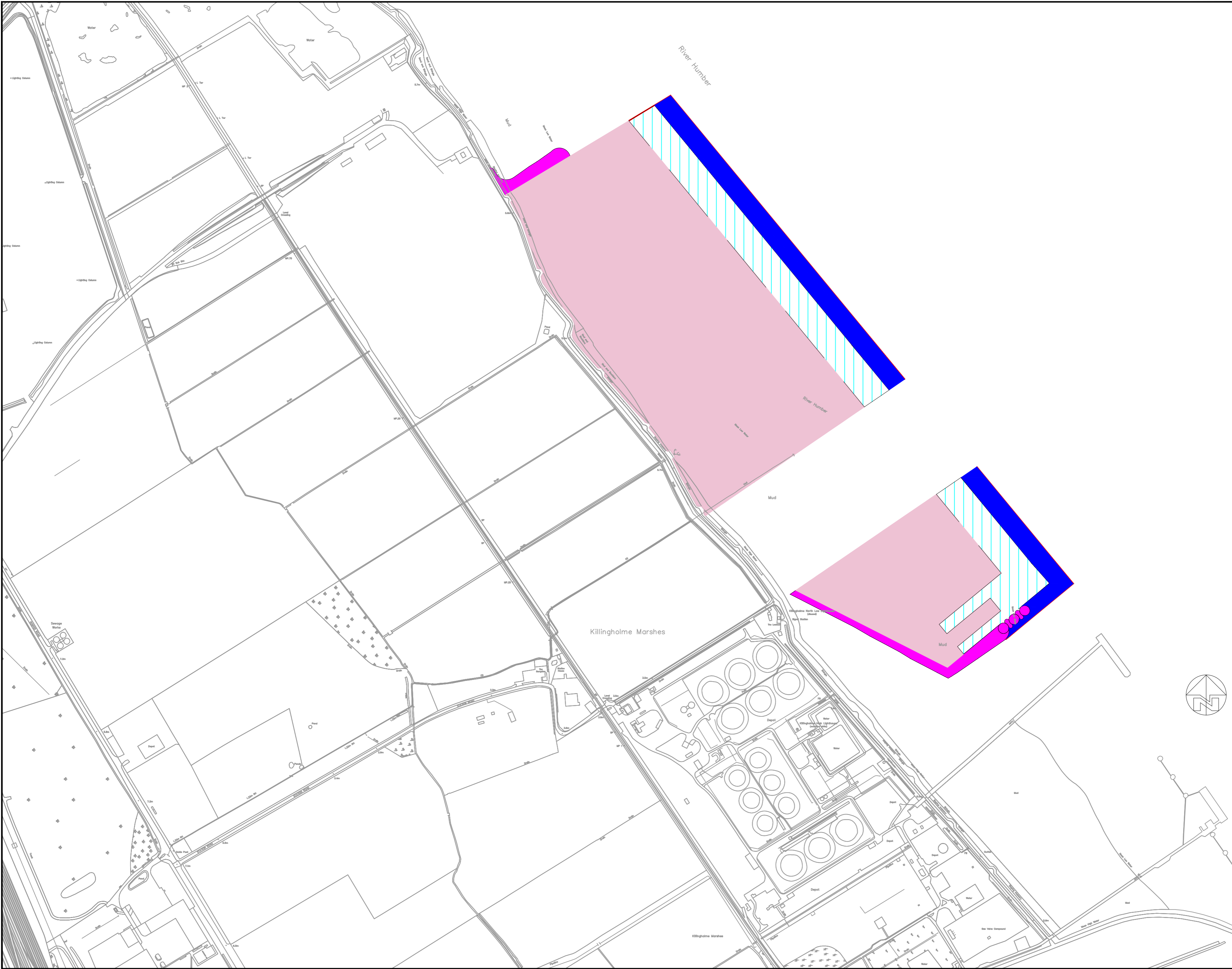
Director

Secretary

	<p>ABLE HUMBER PORTS CROWN FORESHORE Summary</p>	<p>Date: 20-Nov-2012</p>
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APPENDIX 7

Draft Underlease Plan



Revision		Date
Reproduced from Ordnance Survey Landline Data © Crown copyright 1999		
 ASSOCIATED BRITISH PORTS HULL & GOOLE		
Regional Property Department Riverside House King George Dock, Hull Tel: (01482) 327171 Fax: (01482) 714505		
Drawing Title: Port of Immingham Able UK Limited		
NO DIMENSIONS TO BE SCALED FROM THIS DRAWING		
Date: 18.10.12	Drawn by: C. Robson	
Scale: 1:5000	CAD Ref: IssB	Revision:
REF: Plan 2		