



[2022] UKFTT 00035 (TC)

TC 08387

CORPORATION TAX – Capital allowances – s11 Capital Allowances Act 2001 – expenditure incurred on studies relating to the design and construction of offshore windfarms and their component parts including wind turbines and electrical cables – are the windfarms single items of plant – yes – in the alternative the wind turbines and electrical cables are single items of plant – was the expenditure on the studies incurred on the provision of such plant – yes in some cases but no in others – to the extent that it was not so incurred, could it be treated as pre- trading revenue expenditure and deductible under section 61 Corporation Tax Act 2009 – no – in light of the wording of the closure notices and the consequential amendments to the appellants returns, did they have to prove those items of expenditure – yes – were the amounts of qualifying expenditure set out in the appellants returns "finally determined" for the purposes of paragraph 88 of Schedule 18 to the Finance Act 1998 – no – appeal allowed in part.

**FIRST-TIER TRIBUNAL
TAX CHAMBER**

**Appeal numbers: TC/2018/04806
TC/2018/04807
TC/2018/04808
TC/2018/04809**

BETWEEN

**GUNFLEET SANDS LIMITED
GUNFLEET SANDS II LIMITED
WALNEY (UK) OFFSHORE WINDFARMS
LIMITED
ORSTED WEST OF DUDDON SANDS (UK)
LIMITED**

Appellants

-and-

**THE COMMISSIONERS FOR
HER MAJESTY'S REVENUE AND CUSTOMS**

Respondents

TRIBUNAL: JUDGE NIGEL POPPLEWELL

Hearing conducted in public remotely by video on 15-26 November 2021

Michael Jones QC instructed by Herbert Smith Freehills LLP for the Appellants

Elizabeth Wilson QC and Angharad Parry instructed by the General Counsel and Solicitor to HM Revenue & Customs for the Respondents

and that the physical impact to the benthos caught under the feet is likely to result in mortality. There will also be disturbance of sediment including increased suspension and displacement. It then specifies, in more detail, the physical impact on the assumption that a number of visits will be required and that if a tripod foundation was chosen, it is likely to cause more impact than if a monopile foundation was chosen.

(2) The study for Walney considers the studies and mitigation in the context of four configurations of wind turbines (ranging from large numbers of smaller turbines to small numbers of larger turbines) and three layouts of the “Park” (for both phase 1 and phase 2 of Walney). Those layouts describe, diagrammatically, the area of sea and seabed over which, or rather in which, the windfarms can be located, and identify very different areas within that overall area for the location of the windfarms in phases 1 and 2. It describes the impact to the benthos of the preconstruction and construction phases, including physical disturbance and temporary loss of seabed, identifies scour zones and the impact they would have on benthos and concludes that “throughout the development of the Walney windfarm a number of mitigation measures will [be] deployed to reduce any impact of the construction operation and decommissioning of the windfarm on the environment. Such measures will be the result of detailed planning and design of the windfarm itself and of the methods used to decommission it. As no impacts on benthos are assessed to be more than minor, the major mitigation will be to ensure that construction, operation and decommissioning activities take place according to the scheduled work process. In particular it will [be]important to minimise jetting during cable laying operations.”

(3) The study for Gunfleet notes that “for the majority of factors that affect benthic community structure, it is predicted that the Gunfleet Sands windfarm will result in changes that are either within the measurable baseline variation and/or be non-significant effects.” It then identifies a number of possible exceptions including impacts caused by the installation of the monopiles, localised scouring and inputs from contaminants. It states that the overall impacts on benthic invertebrates are considered to be medium-term and slightly positive and that the diversity of benthic invertebrates is expected to increase due to the introduction of hard substrates and no mitigation measures are proposed. Furthermore, once the windfarm is in operation, no mitigation will be required to mitigate the impact on fish and shellfish. But for the construction and decommissioning phases, mitigation is required, the priority being to avoid spawning periods for species which use the site or are especially sensitive to increased sediment in suspension. Consequently “construction must not be undertaken from mid-January to May.”

(4) The study for Gunfleet II notes that there will only be a negligible impact on benthic communities from increased suspended and deposited sediment during the construction phase and so no mitigation is required. The same is true of the impact from the release of contaminants, but mitigation is required to ensure that the potential release of pollutants arising directly from the construction vessels and activities which will be deployed during the construction phase and windfarm operation (including spillages of diesel, anti-foulant and sewage discharges) is minimised. It goes on to state that there are no mitigation measures available to minimise the loss of benthic habitat from the operation of the wind turbines and foundations but only a minor adverse impact upon benthic communities from habitat loss is predicted. The study considers the impact of scour protection which will be used around the base of the wind turbines and predicts there will be a negligible impact upon benthic communities as a result of the use of scour protection. Indeed it may lead to increased biodiversity, as will the colonisation of the wind turbines. It observes that zinc or aluminium anodes will be used to provide cathodic protection for the turbines and suggests that as a

mitigation measure aluminium could be used since it is non-toxic. Its overall conclusion is that although there will be adverse impacts upon benthic communities from the proposed development, these will be localised and have only minor adverse significance.

167. My view in relation to the studies is that where it can be shown that mitigation measures were identified within the EIA, there can potentially be an impact on the necessary design and construction or installation of either the windfarm or the wind turbines.

168. It is self-evident that installing wind turbines is bound to have an impact on the seabed and the organisms which populate it. And installing those wind turbines is bound to throw up sediment which in turn may have an impact on those organisms. But the studies, even if they confirm this, are still an important element of due diligence. As has been identified in the context of Gunfleet, construction should not be undertaken between certain months. This will of course have a direct impact on the construction of the windfarm and reflects the fact that conclusions from these benthic studies might have an impact on the windfarm, the wind turbines, and their design construction and installation. However, as far as installation is concerned, the studies must relate to the safety and effectiveness of installation.

169. As regards WODS, I find that the benthos studies do directly relate to the safe and effective installation of the wind turbines. Safety is not limited to the safety of human beings, but to all animal and plant species. The studies indicate that monopile foundations would affect a smaller area of seabed, and thus destroy fewer benthic communities, than other foundations. Consideration has been given to the impact of the installation vessels on the benthos. I also find that they relate directly to the necessary design of the windfarm and of the wind turbines individually. At the time of the study it is clear that three development options were being considered and the studies indicate that the nature of the foundations would have a significant impact on the benthos. Even though this may simply be endorsing one of the development options, it is still relevant to the necessary design not only of the windfarm itself but also of each wind turbine since the type of foundation of a wind turbine is of fundamental importance to its design and to its ability to generate electricity. However, the high-voltage cables relate to the transmission assets are not the generation assets.

170. As regards Walney, I find that the benthos studies do not relate directly either to the design of either the windfarm or the wind turbines but do directly relate to safe installation. Safe here being safe for the benthos. The impact on the benthos is a consequence of the design of the windfarm, rather than the benthos impacting on that design.

171. The survey for Gunfleet shows that there are no significant adverse impacts to the benthos caused by the windfarm and that no mitigation is required save in respect of the construction of the windfarm taking place outside the spawning period. This therefore has a direct relationship with the safety of the benthic community. I find, therefore, that the surveys did not relate directly to the necessary design of the windfarm nor of the wind turbines, as without them, electricity could have been generated, but did relate directly to the installation of the wind turbines.

172. Similarly, the survey for Gunfleet II shows only negligible impact arising from the construction and operation of the windfarm and the installation of the wind turbines. But it does recognise the impact of pollutants which will be released from vessels during the construction and operational phases, and the impact that these will have on the benthos. It is self-evident that fewer pollutants will result in a safer benthic community. And I find, therefore, that whilst the survey does not directly relate to the necessary design of the windfarm it does directly relate

to the safe installation of the wind turbines. Furthermore it does not relate directly to the design of the wind turbines. Although it identifies cathodic protection being required and the alternatives of aluminium and zinc cathodes, as Miss Wilson observes there is no evidence that such cathodic protection was actually incorporated into the wind turbines themselves at this site, nor that such protection was necessary to ensure the generation of electricity. Whilst I have explained above that simply because there can be no cause and direct effect identified between the surveys on the one hand and their impact on the other, that does not rule out the need for there to be a direct relationship between the survey (and its expenditure) and the design etc of the windfarms or wind turbines. This is a specific matter identified in a survey and for it to have been taken into account in the necessary design of the wind turbines at this location, I would have expected cogent evidence that that was the case. And I have none.

Ornithology and collision risk

173. I find the following additional facts:

(1) The study for WODS states that the study area for the assessment includes the windfarm area and its surrounds. It is based on aerial surveys flown in the east Irish sea, which surveys transected an area of approximately 512 km². It therefore extended way beyond the windfarm site. Boat and radar surveys were also undertaken. The studies consider the impact of the windfarm on migrating bird populations, flight heights and conservation status. It identifies potential effects from noise and vibrations during the construction phase, habitat loss during operation (the impact of this loss is considered to be negligible) disturbance from operation (restricted to highly sensitive species with restricted distributions) collision mortality and barrier effects. A table comprising a summary of the predicted impact magnitudes on a variety of bird species shows that in the vast majority of cases, the foregoing impacts are negligible. As far as mitigation measures are concerned, it notes that the windfarm designs incorporate several features that reduce the potential effect of windfarm construction and operation. “Key amongst those is the location which is within an area of low bird density”. Its main recommendation is that at night, bright lighting during the construction phase and during the operational phase should be avoided.

(2) The study for Gunfleet identifies that birds that nest on land could be disturbed by the export cables for which the prior mitigation measure is to use an underground cable route rather than overhead power line. It notes that the level of lighting proposed for the offshore wind turbines during operation will be a significantly reduced intensity and concentration, remote from the sea surface, and therefore markedly less attractive to marine birds. The windfarm is predicted to have a low or negligible effect on breeding birds of medium sensitivity. Overall, the main mitigation measure on the potential effects on most bird species is the siting of the windfarm remote from their habitat or main flight paths.

(3) The study for Walney considers the site area and its surrounds. It considers the impact on migrating bird populations, the data for this being derived from aerial surveys. These also provided data on flight height patterns. Radar surveys provided data in connection with concerns about the potential for collision of certain bird species with the wind turbines. The ornithological importance of the windfarm area was discussed. The impacts of construction such as noise and vibration causing disturbance was considered to be negligible particularly if cable laying works are confined to the summer months. A table, similar to that in the WODS study which deals with a number of species, their sensitivity, and the magnitude of potential risks from disturbance, displacement, collision, and barrier effects, during construction and operation identified that in the vast majority of cases, those impacts were negligible. The key

mitigation measure was the location of the windfarm site which is within an area of low bird density and which avoids concentration of sensitive species. The relative position and orientation of the windfarms also minimise potential barrier effects. It recommends that bright lighting at night should be avoided.

(4) The study for Gunfleet II. The data for this study was gathered from both aerial and boat surveys in relation not just to the development site but also its surrounds. It considers the various bird populations across that broad area, flight heights to assess the risk of bird collisions with wind turbines, and the ornithological importance of the study area. It identifies that noise and vibration during the construction phase might disturb sensitive bird populations; that disturbance is likely to be temporary and that this disturbance will produce an effect of “negligible magnitude”. The non sensitive species’ numbers are sufficiently low that no impact is predicted as a result of the disturbance caused by construction activities. Loss of habitat during the operational phase is of very low significance. The potential mortality arising from collision with turbines is of negligible magnitude and very low significance. The potential barrier effects are negligible or low/very low significance. There will be no impact due to habitat loss. These impacts are, broadly speaking, the same across all species, and a table identifying various species of birds, their sensitivities, and the overall magnitude of the impacts and their significance identifies those main impacts, in the majority of cases they are negligible and their significance is low or very low. The only mitigation measure identified is that during construction works, which should be undertaken outside the periods when throat divers are present, lighting which is known to minimise the attraction to birds should be used at night.

174. As can be seen from the foregoing, the main mitigation factor is the location of the windfarm. Location is not design, for the reasons I have given above. This is not a case where mitigation drives the design or construction of the windfarm or its components. It is the other way round. The siting of the windfarm and its turbines mitigate the impact of the windfarms on the various bird populations. So I am not able to find that those mitigation measures would have found their way into the computer modelling and thus have any direct or indirect relationship with the necessary design of the windfarm or its components. The recommendation that an export cable is buried deals with an item which is part of the transmission assets and not the generation assets. Although Mr Mechali gave evidence that at two other windfarms, the height of wind turbines had been altered as a result of ornithological studies, he could give no evidence that the same is true of any of the windfarms which are the subject of this appeal. In the vast majority of cases in all four studies, the significance of the impact on bird species was low or very low and the magnitude of that impact was low or negligible. I therefore conclude that the ornithological studies do not directly relate to the design construction or installation of either the windfarm or the wind turbines.

Fish and shellfish studies

175. I find the following additional facts:

(1) The study for WODS considers the impact of the windfarm on commercial fishing in the area which is analysed using information from satellites. It identifies that safety issues will be dealt with during the construction phase by closing the site to fishing vessels and the same will apply when laying the export cable. Construction debris will be removed from the seabed. Commercial fishing might be affected by the potential impact on fish populations. It also considers the impact on a variety of fish and shellfish. Noise and waste generated during the construction phases and surveys is identified as having an impact as, too, is the noise from piling, drilling, scour protection, dumping, release of contaminated sediment and temporary

loss of seabed area. During the operation phase, the lack of commercial fishing in the area would result in reduced impact on juvenile stages of the fish and shellfish which would mean that they would grow to a larger size than might otherwise be the case. Mitigation measures “will be the result of detailed planning and design of the windfarm itself and of the methods used to construct and decommission it”. And under a heading ‘windfarm design’, the study identifies that the “design of the piles has the greatest potential for mitigation in respect of the fish and shellfish populations” and that the lowest area of seabed which would be affected would result from the use of monopiles or suction caissons. Noise mitigation measures could include minimising pile diameter where possible and using “soft start” piling. Reducing levels of suspended solids could include ploughing the majority of the cable route and minimising the number of foundations.

(2) The study for Gunfleet considers physical obstruction, sediment plumes, electromagnetic fields, noise and artificial reef effect. It concludes that once the windfarm is in operation mitigation will not be required. But for the construction and decommissioning phases mitigation is required, the priority being to avoid spawning periods particularly for species which use the site or are especially sensitive to increased sediment in suspension. So the period to avoid for herring is mid-January to May as is true of sole and plaice. Consequently “construction must not be undertaken from mid-January to May.”

(3) The study for Walney considers the impact on fish shellfish and their spawning and breeding grounds. The impacts of construction operation depends on the sensitivities of the various species. It considers the impact of noise, piling, drilling, scour protection dumping, resuspension of sediment, and displacement during the construction phase. During the operational phase it considers loss of soft seabed, changing seabed substrate, changes to the existing fishing areas, noise and electromagnetic fields. As for mitigation, it states that the impact of noise from piling operations and electromagnetic fields have the potential to be more than minor negative impacts, although the possible impact of the latter is uncertain. “Provided that the construction takes place in accordance with the principles described in section 3, in particular avoid jetting of cables and limit the extent of the seabed change due to scour protection, no further need for mitigation measures is foreseen in order to protect the fish and shellfish populations.” A table showing the foregoing issues, and the magnitude and significance of them, shows that in most cases the magnitude will be minor as will the significance. The persistence of some of these will also be temporary and short term (although some will be permanent, for example loss of seabed area).

(4) The study for Gunfleet II considers the impact of a number of issues on the habitats, spawning grounds and migration routes of fish populations. No mitigation measures are required in relation to any increase in suspended sediment arising from construction and decommissioning. Noise is identified as creating a moderate-major adverse impact on the spawning of certain species but is mitigated by a commitment that no piling works would take place from 1 February to 1 June in each construction season. Piling noise is also identified as having a significant impact and mitigation measure using a mechanical “soft start” method is to be used during the piling activity. No mitigation measures are required to mitigate the loss of fisheries habitats caused by the presence of the turbines. Indeed they may have a benefit. No mitigation measures are required for the reef effects. No mitigation was available to offset the potential effects of electromagnetic fields.

176. It is my view that the studies inform and directly relate to the construction of the four windfarms in that it is clear that during the construction phase, noise is likely to have a significant impact on the fish and shellfish populations, and the studies for Gunfleet and

Gunfleet II identify that these should be minimised by undertaking construction at certain times of the year. They therefore directly relate to the safe installation of the wind turbines, that safety being gauged from the point of view of the fish and shellfish populations. The studies for Walney and WODS also consider the way in which the construction should be carried out, in the former recommending soft start piling, and the latter identifying that if construction is carried out in a certain way, the impact on the fish populations will be minimised. The safe construction of the windfarms could not have taken place in the manner in which they did without the information from the studies. However, I do not consider that the studies directly relate either to the necessary design of the windfarms themselves nor to the wind turbines which make up those windfarms. This is notwithstanding that in the study for WODS there is reference to windfarm design and the fact that the lowest area of seabed which would result from the use of monopiles or suction caissons. The study does not go any further and suggest designs for those wind turbines without which the windfarms or the wind turbines could not generate electricity nor to the specific relative positioning of them within the site.

Marine mammal studies

177. I find the following additional facts:

(1) The study for WODS considers the impact on marine mammals such as dolphins seals and porpoises. The construction phase is not expected to have a significant impact on these. It discusses the piling operations required for monopiles and tripods and the time taken for each piling, but in the context that marine mammals are likely to return to the construction site in between piling activities. Noise might have a detrimental impact during the construction phase if no mitigation measures are taken. Such mitigation measures are “expected to include deterrent devices (e.g. pingers or seal scramblers). The exact methodology will be agreed with the authorities in advance of construction.” No mitigation measures are planned during the operation phase.

(2) The study for Gunfleet notes that the windfarm may potentially impact on marine mammals at several stages in its development. Initially during the construction of the wind turbines and the placing of the export cables which might cause both acoustic and physical disturbance. Subsequently, the operation of the windfarm will result in a background level of noise and vibration. The positioning of the turbines will result in a reduction in habitat for feeding, breeding and resting and may affect transit routes. The study focuses on seals. It identifies that no medium or long-term mitigation measures are required but the presence of seals should be monitored while construction work is underway during the pupping or moulting seasons. Construction work should be limited during these periods and where seals are lying on sandbanks, piling should stop until seals move. “This does not prevent piling occurring from June to August but does require observations during construction and the cessation of piling if seals are present.”

(3) The study for Walney deals in the main with dolphins, porpoises and grey seals but refers also to whales and turtles. It notes that underwater noise is a well-documented factor which affects marine mammal distribution during marine construction works. Loudest noises generated during construction are associated with the pile driving and seismic surveys. It notes that the potentially significant impacts on the target species during pile driving operations will require mitigation methods during that phase. As in WODS it notes that mitigation measures are expected to include deterrent devices but that the exact methodology will be agreed with the relevant authorities prior to construction. No mitigation measures are proposed for gravity and bucket foundations.

(4) The study for Gunfleet II notes that no specific surveys have been conducted for this windfarm but the area was covered during the boat and aerial surveys for birds between January 2002 and December 2005. It deals, largely, with dolphins, porpoises and seals. It notes that pile driving produces very loud underwater sounds that can be fatal or acutely injurious to seals and this might be caused by pile driving operations. Mitigation measures during the construction phase include appointing suitably qualified observers to record sightings of marine mammals and undertaking piling activities only after a period has elapsed and they have not been detected. Piling would be undertaken using the soft start procedure, the duration and nature of which should be discussed and agreed with the relevant observer. The piling will start on low power and increased uniformly over a 20-minute period until full operational power is reached. The same mitigation measures are proposed in respect of dolphins and porpoises. No mitigation is proposed as regards the impact of noise and vibration generated during the operation phase nor in respect of the loss of habitat caused by the presence of wind turbines and associated scour protection. It also notes that the significance of effects as a result of the windfarm is predicted to be no greater than minor adverse, and because of the changes in habitat around wind turbine bases, it is expected that a minor benefit could occur for marine mammals.

178. It is clear from the foregoing that these studies have a direct relationship with the construction phase of each windfarm, and I so find. There are clear mitigation measures which will be taken during that phase to reduce the impact of construction noise on the marine mammals. These relate to the safety of the marine mammal population. But I do not accept Mr Jones' submission that they had an impact on the necessary design of the windfarm or of the wind turbines simply because monopiles and tripods require noisy installation whereas other foundation types such as gravity and bucket foundations can be installed without piling operations. This is not a situation, as in previous studies, where it is clear from the study that a number of alternative foundation designs were actively under consideration at the time of the study. The fact that all of the studies dealt comprehensively with noise during the construction phase makes it clear that it had already been concluded at that stage that there was going to be a foundation which required piling operations. Any reference to alternative foundations which did not require such operations is, to my mind, too remote and the costs of the studies do not directly relate either to the necessary design of the windfarm nor of the individual wind turbines.

Archaeology, wrecks and cultural heritage sites

179. I find the following additional facts:

(1) The study for WODS records that the study area contains 115 terrestrial sites and monuments and 61 maritime records including known wrecks and recorded obstructions. It identifies that the construction of the windfarm and cable route may have a number of impacts on archaeological material. That impact arises from foundations, scour protection, the offshore cable route, cable landfall and trenching, anchoring by construction and maintenance vessels and decommissioning. It notes that further investigation is required since without it, it is not possible to assess the significance of the effect of the development upon unidentified seabed features or unidentified wrecks. It proposes as a mitigation measure that all aspects of any further archaeological work are detailed by a written scheme of investigation which would make provision for other forms of archaeological mitigation that might be required in light of preconstruction investigations.

(2) The study for Gunfleet notes that two types of site might be present within the windfarm and along the line of the marine cable route. Drowned prehistoric sites and landscapes, and

shipwrecks and associated material. As in WODS it identifies the main threats arise from foundations, scour protection, internal electrical infrastructure (i.e. the array cables) the export cables, shore landing points, anchoring and decommissioning. It states that there is one confirmed wreck site and five possible wreck sites which might be affected by the windfarm and the export cable. In view of their potential archaeological significance, a mitigation measure is proposed which places exclusionary zones around the five possible wreck sites and the identified wreck site and that exclusion zones with a diameter of 100 metres are suggested for the wind turbine sites to prevent the cable, piles anchors damaging potential artefacts. It also notes that there are nine recorded losses of military aircraft which are recorded as having “ditched off Clacton-on-Sea” whilst in military service or due to military action. It also identifies six vessels which may have sunk in the region while in military service or due to military action.

(3) The study for Walney, as for the two windfarms above, identifies that construction of the windfarm cable route may have a number of impacts upon archaeological material, and the main threats arise from foundations, scour protection, the array cables, export cable installation, cable landfall and trenching, and anchoring. Known sites lie within the windfarm area and for sites lie within 250 metres of the proposed export cable route. Construction might impact upon unknown wrecks both directly and indirectly due to disturbance and destabilisation of the sites. Mitigation to avoid direct impact on important archaeological findings is by minor adjustments to the locations of turbine foundations or the cable route whenever possible. If the plans cannot be altered to avoid an important archaeological site then excavation may be necessary. There is a proposal that archaeological work following the submission of the environmental study will be set out in a written scheme of investigation which will make provision for other forms of archaeological mitigation which might be required in the light of pre-construction investigations. Suggested mitigation to minimise significant effects upon the archaeological resource includes exclusion zones, archaeological analysis, archaeological monitoring and inspection and a protocol for the recording any finds that may come to light during the course of construction.

(4) The study for Gunfleet II also records the loss of military aircraft and vessels recorded in the study for Gunfleet. It notes that three unidentified wrecks and one possible wreck lie within the footprint of the proposed windfarm, although further possible wrecks lie outside the windfarm area but within the marine study area. There were a number of documented losses of vessels between 1633 and 1943 (including those merchant and military vessels and aircraft previously mentioned) and more over the broader area in which the site would be located. Impacts on these archaeological resources or wrecks are identified arising from the installation of the foundations and scour protection, the array cabling, and the anchoring by construction and maintenance vessels. It proposes mitigation measures, including a possible exclusion zone around the three known wrecks, the dimensions of which depend upon obtaining further information. A protocol for unexpected discoveries should be prepared which would deal with items of archaeological importance which are discovered in the course of construction and which would make provision for the institution of temporary exclusion zones around areas of possible archaeological interest. Any such archaeological discoveries should be reported. Further archaeological research should be detailed in a written scheme of investigation which will make provision for such other forms of archaeological mitigation which might be required. It observes that it is an offence to carry out any unauthorised excavations within the immediate vicinity of any remains of military aircraft discovered in the course of construction.

180. Miss Wilson submitted that the studies go to the configuration or layout of the site as a whole, but not to the design of the wind turbines themselves. I agree. They also directly relate

to the installation of the wind turbines since they are vital for safe installation. It would be disastrous for either a foot of the installation vessel or a foundation to be put down on seabed at the site of an unexploded bomb. It is clear from the foregoing findings that items of archaeological importance would be affected by the particular location of the wind turbines and the array cables, and that where those items have been discovered on the site of the windfarms, mitigation measures such as exclusion zones have been discussed and implemented. Mr Mechali's evidence was that metal objects, including unexploded ordnance and fighter aircraft, would be detected during the geophysical studies and that if they were identified, Orsted would not lay a cable through a site where it is likely that the remains of a pilot was still in the cockpit. And although this was in the context of the geophysical studies, I can see the same applying to the data arising from the archaeological studies. I find from the evidence that the expenditure on the studies did have a direct relationship with the design of the windfarm as a whole, and on its construction and the installation of the wind turbines since the particular locations at which the wind turbines were to be installed was influenced by the location of the archaeological items. But this, to my mind is unnecessary design. There is no evidence that even in the positions influenced by the data from these studies, the windfarms could not generate electricity. Nor had it any direct relationship with the necessary design of the individual wind turbines. Whilst the design of each individual turbine depends upon its particular location within a windfarm, it is only once that position has been decided upon that the necessary design can be undertaken. The studies, therefore, related to the position of, rather than to the necessary design of, the wind turbines themselves once those positions had been identified.

Noise assessment

181. I find the following additional facts:

(1) The study for WODS. The study explains that it considers the noise impact of the proposed windfarm during the construction operational and decommissioning phases. It deals with airborne and underwater noise. It notes that noise levels during the construction phase are likely to arise from short periods of intense activity. Noise levels during operation are likely to be minimal. Mitigation measures for reducing noise during the construction phase will be minimised if the construction phase is of short duration. An auger piling technique could be employed which is quieter than the more traditional impact techniques. Operational phase noise is mitigated by selection of latest turbine technology.

(2) The study for Gunfleet. This repeats the impact of noise on marine mammals mentioned in that study. It notes that the noisiest construction activities will be the insertion of the tower support structure for which a number of alternative methods exist including driven monopiles, augered/drilled monopiles and multiple foundations. The first of these contains the highest potential for noise disturbance. It also considers foghorn noise. It deals with the impact of noise on onshore locations and notes that sleep disturbance will not occur during the construction phase even if the pile is driven during nighttime hours. It notes that noise can be lessened by the use of acoustic shield bubble curtains around the work area; acoustic deterrents should be used so that fish and mammals avoid the area; soft start piling should be used; they repeat the mitigation measures in relation to marine mammals as regards the period in which construction should take place.

(3) The study for Walney. This notes that piling will be the noisiest activity and that noise during the operational phase is likely to be of a lower level. With respect to airborne noise the impacts are so insignificant that no mitigation is deemed necessary apart from the normal

requirements regarding the planning of onshore cable trenching. Mitigation of waterborne noise during the construction phase can be minimised by good engineering and using the correct combination of piles and piledriver for the job.

(4) The study for Gunfleet II. This considers noise from general construction activity, noise from construction vessels, noise from cabling and noise from decommissioning. Apart from general construction activity, the noise from the other three activities is deemed to be insignificant. No mitigation measures are identified for noise generated either during the construction or operational phase.

182. The impacts of noise and associated mitigation measures during the construction phase appear to me to be largely replicating those identified in the marine mammal studies where it is clear that mitigation methods to reduce the impact on those animals directly relate to the construction and safe installation of the wind turbines. This is effected by soft start piling, the periods in which construction operations should not take place, and the identification of mammals in the locality when construction operations are proposed. I have allowed these costs in the context of those studies, and there will be an element of double counting if I were to allow them again in respect of the noise studies. It is clear, too, that the studies have no impact on the necessary design of the windfarm or the wind turbines. The costs associated with the noise studies do not attract allowances.

Telecoms and radar interference

183. I find the following additional facts:

(1) The study for WODS. This study notes that within the immediate local area of the windfarm site there are a total of seven submarine telecoms cables, and 10 television and two radio transmitters which might be impacted by the presence of the turbines. “Normally television transmission does not present an issue for offshore windfarms, however, there remains a possibility that transmissions being received on the Isle of Man from the mainland UK transmissions could be affected.” There are also mobile phone facilities and services and two communication links with gas platforms which might be affected. Providing care is taken during the construction phase, the study indicates that there is no perceived impact on communication during construction but the export cable routes will require detailed assessment to check for any need to cross existing telecoms cables. Whilst operation of a windfarm can, potentially, affect radio television and mobile phone signals, the study identifies that it is unlikely that the windfarms will cause any significant impact on radio television or mobile telephone network signals and therefore no mitigation will be required. However the study indicates that in light of the concerns regarding microwave links to offshore infrastructure, a third party organisation was commissioned to calculate the extent of an exclusion zone which would ensure that wind turbines were not situated in the area which would potentially interfere with those links. The study notes that mitigation can be achieved by technical solutions or by design; and to design the issue out, the exclusion zone would be respected and those wind turbine locations presented within three scenarios which breach that zone would be moved between 10 metre and 112 meters to ensure towers and rotors respect the exclusion zone. As a result “the minimum distance between towers may be reduced to 700 m in a few instances. This would be a sufficient mitigation on its own to eliminate the issue.”

(2) The study for Gunfleet II. This study notes that as there are no fixed telecommunication case links existing within the site, there will be no impact during the construction operational or decommissioning phases; so no mitigation measures are required.

(3) The study for Gunfleet notes that the proposed turbine design will cause significant backscatter to radio waves which means that the structures will be visible to many radars in the area around the Thames estuary. However the effects will move as the observer moves (for example on a ship) and so can be ignored by radar operators. The turbines will indicate shallow water and thus might be an aid to navigation. Limited shadowing to land radar caused by the windfarms might be mitigated by moving onshore radar. There is expected to be no impact on terrestrial television and radio reception.

(4) The study for Walney. This identifies that there are 10 television and two radio transmitters in the region that could be impacted as well as seven submarine telecommunication cables. It identifies the potential impacts and declares that it is not foreseen that there will be any impact with regard interference of communication links during construction. “Full attention will be given to the BT cable. All vessels working in the area will receive detailed instruction on cable coordinates and safety zones. No impacts are foreseen during operation.”

184. In the case of WODS it is clear that the overall configuration of the windfarm was considered, and a suggestion was made to design out an issue relating to interference with microwave links to offshore infrastructure. I find, therefore, that this study has a direct link with the design of the overall windfarm. But this is a link to unnecessary design rather than to necessary design. There is no evidence that if that designing out had not been undertaken, the windfarm would not have been capable of generating electricity. There is nothing in the evidence that suggests to me that the studies had any impact on the configuration of the other three windfarms and I so find. I find, too, that the studies had no impact on the necessary design of the wind turbines nor on their construction or installation. There is no evidence that without the studies, the wind turbines would not have been able to generate electricity. I can see nothing in these studies which directly relate to the safe and effective installation of the wind turbines.

Traffic, transport and tourism

185. I find the following additional facts:

(1) The study for WODS. Marine traffic was tracked not just across the site but over a broader area. This included recreational as well as commercial maritime traffic. It identified that there would be an impact on commercial shipping routes, one of which currently passes through the proposed windfarm site boundary and was used by a large proportion of ferries. Other routes passed very close to the site with the fringe of each route passing over the site boundary. Impacts on recreational vessels can be mitigated by a plan for a marked channel through the area. The “subsea cable” will be buried to a safe depth and subject to periodic inspection to ensure that “it” does not become exposed. The windfarm will have an impact on visual navigation, collisions, search and rescue, which can be mitigated by marine navigational marking as well as a consideration to the use of safety zones which will be established and define an area in which all vessels other than those authorised or those vessels seeking to refuge in an emergency situation or the emergency services are allowed to enter. The study summarises the proposed safety zones including a 500 metre safety zone around the perimeter of the site, 50 metre safety zones around each wind turbine and a safety zone of 500 metres for merchant shipping and vessels whose specific activities represent a risk to the structure and the cables. The study also includes a table identifying mitigation measures “Adopted in principle by WODS Project”. This includes navigational aids (lights and fog horns) on selected turbines; towers painted yellow from the HAT up to the level of the navigation lights; navigational buoys installed in the area as required by Trinity House; individual lights and numbering on the turbines; emergency shutdown system for turbines/blades; Nacelle hatches capable of being

opened from the outside; blade tip clearance at a minimum 22 m above Mean High Water Springs; cables buried 1-2 metres where feasible. The study also deals with tourism (a mitigation measure being the consideration of placement of information boards at suitable onshore locations); Leisure (mitigation being the aforesaid safety zones); military (mitigation being ongoing liaison with the Ministry of Defence); aviation (mitigation comprising ongoing discussions with the National Air Traffic Services); offshore development & infrastructure (mitigation including the routing and positioning of any potential crossing points for cables or pipelines will be discussed with other infrastructure owners and operators); to reduce the impact of helicopters which move into the area certain measures will be taken (which largely concern the approaches which those helicopters would make to the site); transportation of the components (mitigation for heavy goods vehicles for the delivery of parts and equipment is largely limited to timing).

(2) The study for Gunfleet. The study states that there will be temporary exclusion zones of 500 metres around the works during construction or large-scale maintenance for commercial fishing, but those zones will fall away once the windfarm is operational. However, there will be a permanent 500 metre exclusion zone around the offshore substation. The study notes that the development area is a natural hazard to vessels and so will generally be avoided and minimum disruption can be ensured through various methods including consideration of navigation routes during construction and notification to those who might use the area of the construction and ongoing operation of the windfarm. There will be little impact on commercial aviation or military activity. To assist navigation, aviation lights will be required on certain wind turbines which will consist of two continuous red lights on each such wind turbines of a certain intensity and which will be shielded so that they are not visible by shipping. Navigation lights are to be placed on each corner of the windfarm development and midway along each side of the windfarm. These will be yellow flashing lights located at least 12 metres above HAT. They will be visible for two nautical miles. All wind turbines will be painted with high visibility yellow paint and fitted with retro reflective material up to the equivalent height of the lights. Foghorns will be positioned on each corner of the windfarm.

(3) The study for Walney. This study also tracks commercial and recreational vehicle activity over the site and the broader area. It identifies many of the same impacts as are set out in the study for WODS (which is unsurprising since they are located adjacent to each other). Safety zones are proposed in relation to the construction and operation of this windfarm as were proposed in the WODS study. And like the study in WODS, this study includes a table entitled “Mitigation Measures proposed by MCA and under consideration by the Walney Project”. This table sets out many of the same mitigation measures as are set out in the WODS table including emergency shutdown system; painting towers yellow; cables buried 1 to 2 metres; a 500 metre safety zone during construction activities; individual lights and numbering on turbines; nacelle hatches capable of being opened from the outside and blade tip clearance. The impact on local fishing was identified as being loss to the fishing area and increased steaming distances. Most fishermen consulted thought that it would not be safe for trawlers to operate within the windfarm sites and would respect the safety zones mentioned above. The construction and operation of the windfarm will create a number of local jobs. The impact on aviation was limited. However it is clear that helicopter flight paths might be impacted outside normal operations and so “the boundary of Walney offshore windfarm has subsequently been amended slightly further west compared to the original coordinates proposed to the Crown Estate.....”

(4) The study for Gunfleet II. This tracks marine vehicle traffic density over the site and an area beyond the site. It also considers the impact on aviation. Mitigation measures to reduce the impact on these are set out in tables and include; fitting the windfarm with navigational

aids as required by, amongst others, Trinity House; establishing safety zones of 500 metres around each offshore structure during construction; vertical clearance zones above construction vessels; 22 metre clearance of blades; turbine blades having the capacity to stop turning when ice forms; staff training; notification of relevant parties; most of the windfarm site being accessible to medium and large vessels; installation of aviation lighting in a suitable and appropriate manner.

186. It is clear from the discussion and imposition of safety zones during the construction phase which is identified in the studies for all four windfarms that these studies relate directly to the construction of the windfarms and the installation of the wind turbines. In order for the installation to be safe, there must be exclusion or safety zones. Furthermore, the fact that safety zones were also considered in the context of the operational phase, even if they were not adopted as in the two Gunfleet sites is an indication that they are relevant to the overall design and configuration of the sites. Permanent safety zones during the operational phase were adopted in the cases of Walney and WODS and I have no doubt that the necessity for those safety zones would have been fed into the computer model on which the design of the sites was based. Furthermore, it is clear from the foregoing evidence that the boundary at Walney was altered to take into account helicopter traffic, and it was Mr Mechali's evidence that at WODS the originally planned northern and southern boundaries of the windfarm were significantly altered to minimise impacts on shipping navigation.

187. However, in my view this is unnecessary design as regards the windfarms. I have seen no evidence that without the safety zones, there would have been any detrimental impact on the profitability of the windfarms. It is my view that even if these safety zones had not been imposed or implemented, the windfarms would still have been able to generate electricity.

188. Miss Wilson submits that the appellants had not flagged any instance where navigation or aviation issues caused amendments to designs of individual wind turbines. And that lighting, yellow paint, blade tip clearance height, installation of fenders and cable burial depths which might have an impact on individual design are not free choices on the part of the appellants and are standardised across all wind turbines. She observes that all wind turbines in the UK have yellow transition pieces. All turbines will have lights. The appellants are obliged to follow applicable standards of navigational and aviation safety rules. Safety features are requisite across all wind turbines and it is not an individual design choice for each individual location.

189. I agree with certain of these submissions. As I have mentioned before, painting parts of the wind turbine yellow which is required by, for example, Trinity House, does not in my view go to the necessary design of a wind turbine. And I appreciate her point that lighting is undoubtedly something with which the turbines are equipped with when they are supplied by the manufacturer.

190. The studies illustrate that bespoke lighting is required on certain wind turbines on the Gunfleet sites but not on all; similarly foghorns are required on certain wind turbines but not on all; blade tips must have a certain clearance; in the case of WODS and Walney, nacelles must be capable of being opened from the outside and the turbines must have emergency shutdown systems; for Gunfleet II the blades must have the capability to stop turning when ice forms.

191. I appreciate that at first glance these might appear to have a direct relationship with the necessary design of the wind turbine since they identify a number of characteristics which those wind turbines should have. But it is my view that this is not the case. Information regarding

lighting relates to unnecessary design. Blade tip clearance is something that will need to be factored into the height of the wind turbines which will need to have emergency shutdown systems, and nacelles which open from the outside. I appreciate that these characteristics will need to be factored into the design of the wind turbines, but I have seen no evidence that wind turbines which do not demonstrate these characteristics would not have been capable of generating electricity. Even if the turbines arrived from the manufacturer without emergency shutdown systems or nacelles which opened from the outside, there is no evidence that they could not have operated to generate electricity. And this is the case even if these features were inputted into the computer model on which the design of the individual wind turbines was based. So even if those wind turbines which were installed in the particular positions where particular navigational or aviation lights were required have different characteristics to those in other positions, the studies which inform that do not relate to necessary design.

Socio-economic and tourism

192. I find the following additional facts:

(1) The study for WODS. This considers the impact of the construction and operation of the windfarm on the human environment both local, regional and nationwide. It notes that the windfarm has the potential to generate a range of economic and social impacts, the key economic impact being on the creation and support of employment. No mitigation measures are considered necessary as the proposed windfarm is likely to have an overall positive economic impact.

(2) The study for Walney. This notes that the construction and operation of the windfarm will have social and economic impacts in the region. Construction and operation of the windfarm will create a number of jobs. The windfarm may act as a tourist attraction. No mitigation measures are proposed.

(3) The study for Gunfleet. This notes that the project has potential to generate a range of economic and social impacts which are direct and indirect and which relate mainly to employment. These are positive effects of low/moderate significance. There will be a positive effect on local spend of low/moderate significance. Subject to the safety zone, the area may still be used for recreation and leisure purposes and may benefit such activities.

(4) The study for Gunfleet II. This study largely mirrors the study for Gunfleet. It notes the potential for direct and indirect impacts on employment; it notes minor benefits and that no mitigation measures are required; the same is true on the impact on the local economy. A minor beneficial impact is predicted upon tourism and no mitigation measures are required.

193. In light of the fact that the studies show that the windfarm and its construction is likely to be marginally beneficial to the local communities and that no mitigation measures are required to mitigate the impact of the windfarms, I find that they do not directly relate to the design of the windfarm, or of the wind turbines, and have no impact on the construction of the windfarm and installation of the wind turbines. Expenditure on these studies does not attract allowances.

Metoccean studies

194. I find the following additional facts:

General

(1) Following the gathering of data modelling, the results of the metocean studies are evaluated and an input to design basis paper is prepared for each windfarm. These documents deal with wind turbine and windfarm design. There are a number of different editions of each document.

Gunfleet and Gunfleet II-primary facts

(2) The final metocean report was submitted in January 2007.

(3) The input to design basis papers for Gunfleet and Gunfleet II windfarms as a whole include the following:

(a) Introductions which make clear that the documents describe the wind and wave conditions used in the windfarms and provide background for the site assessment of wind conditions relevant for the design basis for wind turbine support structures at the sites.

(b) Sections dealing with inter alia wind data, wind distribution direction, turbulence, wind speeds, extreme wind conditions, wave conditions, extreme wave conditions, maximum wave height and steepness, fatigue conditions, water levels, tidal and surge conditions.

(c) Diagrams in which the foregoing elements are shown impacting on the array of wind turbines at each windfarm.

(d) A list of each wind turbine and its location at each windfarm, an indication of the slope of the seabed in each location and the impact of wind and waves on the wind turbines at each location. They also include summaries of operational design conditions and the impact of wind and waves on design (“For design calculations a shear exponent of 0.11 is used”).

(4) The Foundations Tender Documents Design Basis for Gunfleet of August 2009, includes the following:

(a) A statement that the document is to be used by the Foundation Designer in connection with foundation design including appurtenances, temporary structures etc on the Gunfleet Sands Project, Phase 1.

(b) A further statement that the Design Basis includes a level of detail sufficient for the detailed design foundation, design of appurtenances, specification of safety levels and development of O & M specifications related to assumptions made in the design basis.

(c) Sections dealing with site conditions, structural layout, design loads for the primary and secondary structures, natural frequencies, steel structure design parameters including steel thicknesses, interface levels between the foundation and the transition piece and the tower and the secondary structures It includes a table of design load cases with load safety factors and scour protection.

(d) Monopile and transition piece primary structure drawings were produced on various dates in 2007 and 2008. There is a separate drawing for the monopile and transition pieces for each wind turbine which sets out the dimensions for the monopiles

and transition pieces along with the steel quality which is required for both. They also deal with welding.

Secondary facts

(5) It appears that some documents for Gunfleet and Gunfleet II are common to both windfarms, which is unsurprising since they are located next to each other. So, for example, the metocean evaluation, input to design basis amendment document of July 2008 describes the metocean conditions for Gunfleet Sands “Round 2” and that since “Round 2 is placed right next to Round 1.....Where there are no changes relative to Round 1, reference is made to the metocean report for the GFS Round 1.” So where the studies refer only to Gunfleet or to Gunfleet II I take the view that they apply equally to the other Gunfleet windfarm.

Walney

(6) The final metocean report was submitted in January 2006.

(7) The document for Walney entitled Site Assessment, Design Basis-Part A of May 2009 notes that the document gives the site assessment for Walney, and “covers Wind conditions, Met-ocean conditions, Seabed conditions, and Other conditions.” It goes on to say that the site assessment can be used when designing structures for Wind Turbines and Wind Turbine Foundations.

(8) It notes that the windfarm consists of 42 positions which are to be chosen between the positions listed in a table set out in the document. It goes on to deal with wave, current and water levels, operational design conditions arising therefrom including extreme design conditions as well as scour and other conditions.

(9) The document of May 2008 entitled Walney Offshore Wind Farm, Design Basis Part C-Foundation Structures outlines and describes the design basis to be used for the detailed design of the foundation structures for Walney. Together with two other documents made by “the client” and the wind turbine manufacturer, the document forms the design basis for the design and includes the detailed design of the main steel of the monopile foundation structures suitable for all 42 planned wind turbines in the wind park.

(10) It goes on to note that the foundation design must be appropriate to suit each and all locations in the windfarm and that dynamic interaction between foundations and turbine/towers must be taken into account as well as dynamic response from environmental conditions. It observes that when designing support structures natural frequencies must be considered and catered for. It notes there is dynamic simulation of combined wind and wave action on structure which is modelled by an external contractor following which a separate contractor combines various pieces of information and produces a model “to determine the loading on the foundation and then perform the design optimisation.”

(11) Monopile and transition piece primary structure drawings were produced on various dates in 2010. There is a separate drawing for the monopile and transition pieces for each wind turbine which sets out the dimensions for the monopiles and transition pieces along with the steel quality which is required for both.

WODS

(12) There are two documents described as Metocean final report, one in December 2010, the second in February 2011.

(13) The document of December 2010 "Site layout Basis of Design" states that it "serves as the basis of design for the site layout in the [WODS] project." It notes that the layout must consider a number of restrictions which include soil data but no mention is made of wind, wave or other metocean data save that "the water depths vary from about 18 metres... in the South Eastern part of the site to about 23 metres...in the North Western part of the site according to Metocean evaluation November 2010".

(14) Monopile and transition piece primary structure drawings were produced on various dates in 2012. There is a separate drawing for the monopile and transition pieces for each wind turbine which sets out the dimensions for the monopiles and transition pieces along with the steel quality which is required for both. They also deal with welding.

Discussion

195. It is clear to me from the foregoing evidence (and the facts that I have found from it) that the detailed metocean studies directly relate to the necessary design of both the windfarms as a whole and to the wind turbines located in each position on those sites. This windfarm specific evidence corroborates the more general evidence given by the oral witnesses which was that the data from the metocean studies was used for the computer models which generated the necessary designs both for the configuration of the windfarms and for the wind turbines.

196. Without these metocean studies the specific design of the wind turbines could not be undertaken and so they could not have been fabricated. They would have been useless for the purpose for which they were intended namely the generation of electricity. So, the expenditure on the studies directly relates to the necessary design of the wind turbines. It follows that they also directly relate to the necessary design of the windfarms, as a whole, (or rather to the generation assets as a whole) since the specific design of each wind turbine means that it must be positioned at a specific site at each windfarm. Without positioning it at that specific site, it would not be capable of carrying out its function of generating electricity. If it was positioned at a different site, it would not have the characteristics required to generate electricity at that particular site. I appreciate that this is slightly circular, in that one cannot design a wind turbine unless one knows the site at which it will be positioned within the overall windfarm site, and so it is the specific position on the overall site which drives necessary design. But once that wind turbine has been specifically designed for that specific position, its installation at that position is a necessary design of the windfarm. If it was located in another position I do not believe the windfarm could generate electricity.

197. The evidence in respect of WODS is less comprehensive than for the other three windfarm sites. However I come to the foregoing conclusion in respect of WODS for the following reasons. Firstly, it is clear that there were two detailed metocean studies compiled. Secondly there were detailed drawings for the foundations and the transition pieces, which, whilst it reflected input from the geophysical and geotechnical studies, I am content to find also reflected input from the metocean studies given the oral evidence to that effect. Thirdly no point was taken by Miss Wilson that the evidence for WODS was inadequate to justify the appellants' submissions in respect of that windfarm even if it might have been adequate to justify their submissions in respect of the others. And I cannot see that the witnesses of fact were challenged on this point. Although I have not been specifically asked to do this by Mr Jones, I suspect because he considers that evidence in respect of WODS to be overwhelming,

I am content to draw the inference that the data from the metocean studies for WODS was used for the computer models which generated the necessary designs both for the configuration of the windfarm and for the wind turbines at WODS on the basis that it is more probable than not that the use of that data in that way is probably the only available inference that can properly be drawn.

198. However, as regards the desktop metocean studies, the evidence is that these were undertaken as part of the EIA and initial yield analysis which provides an expected electricity production figure by combining the wind data with the expected turbine type. The studies at this point mainly used existing information from public available sources such as previous studies in the same area by third parties or Orsted's studies in connection with other projects in the area. But unlike the evidence of the reconnaissance geophysical and geotechnical studies (with which I deal below and where the evidence is that those studies did provide data on which the design of the windfarms and the wind turbines was based) I cannot see any such evidential link between the desk top metocean studies, and the design of the windfarms and the wind turbines. Whilst that evidential link is robust in the context of the detailed metocean studies, the only evidence that there is a link with the desktop metocean studies is the assertion that the studies, and the data they throw up, is iterative, and that (by implication) the detailed metocean studies build on the information in the desktop metocean studies, and since the former influence design, so must the latter. I am afraid this is not good enough for me. In the absence of clear evidence that the desktop metocean studies provided data which was then used in the necessary design of the windfarms or the wind turbines, I cannot find that the costs incurred on those desktop studies directly relates to the design of either.

199. So it is my conclusion that the expenditure on the detailed metocean studies does qualify for allowances since it directly relates to the necessary design of the windfarms as a whole and to the individual wind turbines. It also directly relates to the construction of the windfarms and the effective installation of each individual wind turbine. However, the costs incurred on the desktop metocean studies do not qualify for allowances.

Geophysical and geotechnical studies

200. I find the following additional facts:

- (1) The reconnaissance surveys were designed to get a general impression of the whole polygon or the whole site area selected within that polygon.
- (2) They were carried out using geophysical and/or geotechnical methods and followed geological desk top studies. They allowed a first direct assessment of site topography, seabed features, geology and variability.
- (3) The primary purpose of these investigations was to inform the windfarm layout and turbine and foundation design.
- (4) They also fed into the second round or more detailed studies enabling those studies to be more focused.
- (5) For each of the windfarms, Orsted undertook two rounds of geophysical and geotechnical investigations, the aim of which was to build up an accurate ground model of the seabed at each site. The first round was undertaken at the development stage and the second round was undertaken in preparation for the manufacture and construction of the wind turbines and windfarms.

(6) Finally, a third round of geophysical and geotechnical investigations were carried out after FID, just before the construction phase. The purpose of these was partly to check whether there had been any changes to the shape of the seabed since the first investigations and to obtain a detailed soil profile of each individual location into which the foundations will be installed and partly to obtain the final geological data input to the 3D ground model.

(7) The data acquired during the first two rounds of these investigations was evaluated and formed an input into the overall design basis for each windfarm. The results of these investigations were essential to determining the design and specification of the windfarms (including the foundations).

(8) The data was interpreted and formulated into geotechnical design parameters for the windfarms and was reflected in Geotechnical Evaluation Input to Design Basis (“GIDB”) documents.

(9) The GIDB for Walney includes a number of geophysical, hydrographic and geotechnical investigations of the site and declares that it assesses the soil conditions for Walney, the design of the foundations shall be performed in accordance with “DNV(1)”; and that the soil conditions over the site vary considerably and the geotechnical foundation design shall be based upon the individual soil profiles for all locations. The investigation data enabled geological models of the soil layers to be built up which in turn enabled the soil strength parameters, soil profiles, soil design parameters and soil structure interaction to be ascertained for each wind turbine location. Formulae could then be applied to the data to determine the pile diameter and a minimum wall thickness that will be needed at each location.

(10) The GIDB for WODS includes a number of geophysical hydrographic and geotechnical investigations of site. It also notes that the design of the foundations shall be performed in accordance with DNV and that the geotechnical foundation design shall be based upon the individual soil profiles for all locations. It also notes that during the borehole campaign, hard igneous rock was encountered in the centre of the site and further work was undertaken, the outcome of which was a precise definition of where to expect this igneous rock and resulted in a revised layout where positions with less than 25 meters to the igneous rock were avoided. Furthermore, the number of wind turbines for the site was reduced from 118 to 108. The investigation data enabled geological models of the soil layers to be built up which in turn enabled the soil strength parameters, soil profiles, soil design parameters and soil structure interaction to be ascertained for each wind turbine location. Formulae could then be applied to the data to determine the pile diameter and a minimum wall thickness that will be needed at each location.

(11) The Foundations Tender Documents Design Basis for Gunfleet of August 2009, includes the following:

(a) A statement that the document is to be used by the Foundation Designer in connection with foundation design including appurtenances, temporary structures etc on the Gunfleet Sands Project, Phase 1.

(b) A further statement that the Design Basis includes a level of detail sufficient for the detailed design foundation, design of appurtenances, specification of safety levels and development of O & M specifications related to assumptions made in the design basis.

(c) Sections dealing with site conditions, structural layout, design loads for the primary and secondary structures, natural frequencies, steel structure design parameters including steel thicknesses, interface levels between the foundation, the transition piece, the tower and the secondary structures, a table of design load cases with load safety factors and scour protection.

(12) The investigations at Gunfleet revealed that the seabed was exceptionally mobile and led to a change to the design of the foundations for the wind turbines at this site. The foundations were designed without scour protection. The geotechnical investigations at this site also revealed that it was very unfavourable for jack-up operations (which relate to installation) and it was decided that additional site investigations should be carried out.

(13) Monopile and transition piece primary structure drawings were produced for the wind turbines for all four sites. There is a separate drawing for the monopile and transition pieces for each wind turbine which sets out the dimensions for the monopiles and transition pieces along with the steel quality which is required for both.

Discussion

201. I have no doubt that the evidence, both oral and documentary, and the findings of fact I have made in respect of that evidence, clearly demonstrate that, as submitted by the appellants, the geophysical and geotechnical studies directly relate to the necessary design of both the windfarms as a whole, and to the design of the individual wind turbines. This is the case for both the detailed to geophysical and geotechnical studies and the reconnaissance studies. I say this for the same reasons as to why I have found that the expenditure on the detailed metocean studies qualifies for allowances. The purpose or function of the wind turbines was to generate electricity. To fulfil that purpose or function, the wind turbines had to be specifically designed to take into account the metocean and geotechnical and geophysical conditions which applied at the specific positions at which those wind turbines were to be installed in the windfarms. Without that data, the wind turbines could not be specifically designed and this, in my opinion, would have rendered them useless and unable to fulfil their function of generating electricity. And once they had been so designed, each wind turbine had to be installed at a specific position in each windfarm. And so these studies directly related to the necessary design of the windfarms as a whole.

202. I appreciate Miss Wilson's submissions that, essentially, the purpose of the reconnaissance studies was to assist in coming to a decision as to whether the windfarms were economically viable, rather than to their design or the design of the component wind turbines. And that they were undertaken at a time when the appellants had made no firm commitment, nor come to any decision, that the projects would be followed through to their conclusion.

203. But the acid test is whether the expenditure on these products and studies directly relates to the necessary design of the windfarms or the wind turbines, and it is the effect of that expenditure, rather than its purpose, which is the legal test. The evidence in connection with the reconnaissance studies is that whilst they might have had an impact on the layout of the site within the options presented by the Crown Estate, the information gleaned from them was factored into the computer models which ultimately formed the basis of the necessary design of the configuration of the windfarms and to the design of each particular wind turbine.

204. Miss Wilson suggested that the studies had no impact on the choice of turbine, accepting however that they did influence the design of the foundations and the transition pieces. I accept that the turbines were not individually designed (which was the case for the foundations). But

I do not agree with her that this means the studies did not directly relate to the necessary design of the wind turbines. The design of each wind turbine evolved as additional data was fed into the computer modelling, and the impact of the data relating to the seabed had, as the evidence shows, an impact on the structure of the wind turbine as a whole, and not just to the foundations and transition piece. And even if it did only affect the necessary design of the foundations and transition piece, then that is sufficient, even if it had no impact on choice of turbine which was to be used for the wind turbines. It affected the necessary design of those two component parts of the wind turbines and in my view, therefore, the expenditure incurred on each round of these studies qualifies for allowances.

PRELIMINARIES

The studies

205. In *JD Weatherspoon Sc* the special commissioners said, at [86] “the entitlement to capital allowances under s 24 depends on the taxpayer having incurred expenditure on the provision of plant or machinery. Such expenditure includes site-related overheads, project overheads and other expenditure treated as preliminaries provided such expenditure can be properly attributed or apportioned to plant or machinery.....”

206. Mr Jones submits that the extent that expenditure on the foregoing studies is not itself on the provision of plant, then in the alternative the expenditure is on preliminaries which are a project overhead and are attributable to the windfarm as a single item of plant or to its component parts (i.e. the generation assets).

207. Miss Wilson submits that this is to misunderstand the nature of preliminaries, which are not intended to extend the ambit of the concept of “on the provision of”. It simply applies to apportion expenditure of a capital nature which cannot be directly attributed to plant on which allowances are due, between that expenditure (on the one hand) and to items which do not qualify for allowances (on the other).

208. I agree with Miss Wilson. The expenditure on these studies, cannot be described as a project overhead. They are specifically attributable to each windfarm. Whether that expenditure should attract allowances stands or falls on whether it is on the provision of plant. I have decided, for reasons given above, that expenditure on a number of studies does not attract allowances since it is not on the provision of plant. I cannot see how that expenditure then changes its spots and becomes a project overhead. It is not in the nature of the sort of preliminaries which are discussed in the relevant cases and in HMRC’s Manuals namely items like insurance, site management, scaffolding, and photographing work in progress. Whilst project management costs (see below) are to my mind, capable of comprising preliminaries since they can be apportioned between the studies to which I consider allowances to be due and to those on which I consider allowances not to be due, the same cannot be said of the costs of those studies for which I have found allowances are not due. To take an example. I have decided that the ornithology study costs are not on the provision of plant. I do not see how I can then re-apportion them across the windfarms on the basis that they are a general overhead of the costs of the windfarms or the wind turbines, nor to those studies on which I have decided that allowances are due. The essence of preliminaries is that they are overheads which cannot be specifically attributed to a particular item of qualifying plant. In the case of the studies, they can be specifically attributed to an item of plant. To the extent that it is qualifying plant, then the costs of those studies attract allowances. To the extent that it is not qualifying plant, they do not.

Project management

209. Mr Jones describes these management costs as costs of procuring and carrying out reporting on the various surveys; analysing the data from the surveys; generally managing the EIA and geo-studies processes; costs of designing the windfarms and procuring the windfarms including contract negotiation with turbine and foundation providers; incidental costs of the studies and to the foregoing activities.

210. As a matter of principle, I consider that these can comprise preliminaries. They are in the nature of general overheads and provided they can be apportioned between those matters which attract allowances and those which do not, then to the extent that they can be apportioned to the former, they should attract allowances themselves.

211. The difficulty I have is, that as a matter of evidence, I simply cannot undertake that apportionment myself. Mr Fraser's evidence, which I deal with below, is inadequate to enable me to undertake that forensic analysis. But I am comforted by the fact that the parties' submissions on the numbers are that I should come to a decision in principle, and it will then be up to the appellants to satisfy HMRC of the amounts of expenditure on the studies which I have decided should attract allowances. I consider this in a bit more detail below, but as far as the project management fees are concerned, my decision in principle is that to the extent that the appellants can satisfy HMRC of the amount of expenditure which they have incurred on:

(1) The costs of negotiating contracts with the manufacturers of the component parts of the wind turbines and with the installation vessel providers, and of overseeing the fabrication of those component parts and the installation of the wind turbines into their specific positions in the windfarms; and/or

(2) the costs firstly of procuring, managing the persons commissioned to produce those studies on which I have decided allowances are available and reporting on them, and secondly the evaluation and analysis of the data provided by those studies;

then allowances are available on those costs as I consider them to be preliminaries.

THE NUMBERS AND MR FRASERS EVIDENCE

212. Mr Fraser is currently the Senior CAPEX Budget Manager at Orsted, a role he has occupied since February 2019. Prior to that he had been involved in the Walney project and prior to that in the WODS project. Exhibited to his witness statement was a compendious volume of financial information on which he was cross examined with skill and determination by Miss Parry.

213. That information included reconciliation tables. These set out different categories of expenditure for each windfarm. But as Miss Parry says in her notes on evidence, the appellants have adopted a categorisation that renders it impossible to ascertain what was spent on which investigations. Furthermore, even were the reconciliation tables and the appellants' primary documents to be of any assistance at all, it is impossible to match any of the mentioned investigations to the actual dates on which they were undertaken. She suggests that the accounting primary documents and the reconciliations may have no value whatsoever.

214. I wholeheartedly agree with her. In doing so I make no criticism of Mr Fraser who attempted, manfully, to assist the Tribunal in going through documents which, as I understand his evidence, he was considering for the first time in cross examination.

215. I have derived little help from these documents when coming to the conclusions earlier in this decision regarding the availability of allowances on the expenditure on the various studies.

216. Furthermore, this evidence was led by the appellants. Yet they made no positive case that the amounts set out in the documentary evidence, and in particular in the reconciliation tables, were the specific amounts incurred on the various studies such that having come to the conclusions as to whether allowances are available on some or all of those studies, I can then go on to determine their cost and thus the parties can determine the allowances which arise therefrom.

217. I am also perplexed by the inclusion of this evidence given that it was the parties submissions that, subject to the quantum and closure notice issues, I should make a decision in principle and that it would then be up to the appellants to justify to HMRC the particular amounts of expenditure which they have incurred on the various studies which attract allowances. And that is what I have done. The numerical evidence submitted gave me no assistance in coming to those conclusions.

CONCLUSION ON THE STUDIES AND PROJECT MANAGEMENT COSTS

218. In conclusion, the expenditure on the studies which qualifies for allowances, and the reasons for that are set out below. For the avoidance of doubt expenditure on any studies which are not so identified do not qualify for allowances. “Windfarm” means the generation assets.:

(1) Benthos studies. WODS - design of windfarm/design of wind turbines/installation of the wind turbines/construction of the windfarm. Gunfleet, Gunfleet II and Walney - installation of the wind turbines/construction of the windfarm.

(2) Fish and shellfish studies. All four appellants - installation of the wind turbines/construction of the windfarm.

(3) Marine mammal studies. All four appellants-installation of the wind turbines/construction of the windfarm.

(4) Archaeology, wrecks and cultural heritage studies. All four appellants - installation of the wind turbines/construction of the windfarm

(5) Traffic, transport and tourism studies. All four appellants-installation of the wind turbines/construction of the windfarm.

(6) Detailed metocean studies. All four appellants - design of windfarm/design of wind turbines/installation of the wind turbines/construction of the windfarm.

(7) Reconnaissance and detailed geophysical and geotechnical studies. All four appellants - design of windfarm/design of wind turbines/installation of the wind turbines/construction of the windfarm.

(8) Project management. As per [211] above.

ISSUE 4 – THE REVENUE DEDUCTION ISSUE

Whether the appellants are otherwise entitled to relief for the expenditure claimed as a revenue deduction pursuant to s 61 CTA 2009.

219. The appellants raise this an alternative argument to their primary contention that the expenditure on the studies was incurred on the provision of plant. I have mentioned above that at the hearing it became apparent that there was a procedural point in issue, namely whether HMRC had conceded that the accounting preconditions in section 46 CTA 2009 had been met or whether the appellants had to prove that they had been met.

220. I have decided that the appellants' claim for relief under section 61 CTA 2009 does not succeed. It falls within section 53 CTA 2009 as it is capital expenditure. I therefore do not have to decide the section 61 proof point.

221. Section 53 is set out below:

53 Capital expenditure

(1) In calculating the profits of a trade, no deduction is allowed for items of a capital nature.

(2) Subsection (1) is subject to provision to the contrary in the Corporation Tax Acts

222. Mr Jones essentially submits that for a payment to be of a capital nature, you need to identify a capital asset on or in respect of which the payment is made. The windfarm and the wind turbines are capital assets, as too are the studies, the leases, the agreements for leases, the consents and other assets which the appellants have acquired in these projects. They are all assets with an enduring benefit to the appellants. If the appellants' primary argument is wrong and the payments for the studies do not attract allowances as they were not on the provision of a capital asset, then, he asks rhetorically, what were they spent on? It cannot have been on the capital assets previously identified to the extent that I have found that expenditure not to have been on the provision of a capital asset. Case law shows that if no capital asset can be identified, then a payment on it cannot be a payment of capital. And since this is the case in respect of the studies on which I have not given allowances, those payments must fall outside section 53 CTA 2009.

223. Miss Wilson says that the payments on the studies are clearly of a capital nature. There is no evidence that they are items of revenue expenditure. If the payments are capital expenditure, then they cannot be revenue expenditure and to be revenue expenditure the appellants need to link the payments to an asset which is not capital in nature. And all of the foregoing assets identified and which the appellants have acquired as part of these projects, are capital in nature. They have an enduring benefit for the appellants. She observes that there are many examples of capital expenditure being incurred which is not incurred on the provision of a capital asset, yet does not qualify as revenue expenditure.

224. In my view there is a logical fallacy with Mr Jones' position. I have found the expenditure on some of the studies not to have been on the provision of either the generation assets or the single item of plant, or the wind turbines and array cables as items of plant. But I have done so on the basis of the highly specific wording that appears in the capital allowances legislation. I have not done so on the basis that the foregoing assets are not capital assets. It is to clear to me that the expenditure on the studies is expenditure on or in respect of assets which are capital in nature, namely the assets identified in [216] above. So there are identifiable capital assets on

which the expenditure has been incurred. The expenditure is therefore on items of a capital nature and so is not deductible under section 61 CTA 2009 as pre-trading revenue expenditure. I appreciate that this has the effect, as Miss Wilson observes, that no deduction is available on these items of expenditure, an odd result as Mr Jones in turn observes. But this is an example of a tax nothing of which there are many examples in the tax code. It is an item of expenditure for which neither a revenue deduction nor capital allowances are available. Simply because it falls out of the arms of the capital allowance legislation does not mean that it falls into the lap of the trading deduction legislation. This is what has happened here, and, unfortunately for the appellants, means that the expenditure on the studies does not qualify for relief under section 61 CTA 2009.

ISSUE 5 - THE QUANTUM ISSUE

Whether it is open for the respondents to put the appellants to proof on the amounts and categories of the disputed expenditure in circumstances where:

- (1) Whether such expenditure has been incurred in such amounts and in such categories of expenditure as the appellants claim did not form part of the respondent's enquiries; and*
- (2) The respondents have closed the enquiries based on the figures provided by the appellants.*

225. This issue (which to my mind should more appropriately be called the closure notice issue, but that is by the by) arises in respect of two issues. The first applies to only three of the four windfarms. It does not apply to WODS. It arises because following the closure notices which closed enquiries into the corporation tax returns for the other three windfarms for certain years, and which closure notices rejected the appellants' contention that expenditure on the studies qualified for capital allowances, adjusted not the amount of qualifying expenditure set out in those returns, but the amount of writing down allowances. It is in a nutshell HMRC's position that this is a simple transcriptional error, it is clear to both parties what has happened, and both parties are equally clear that the closure notices were rejecting the appellants' contention that expenditure on the studies qualified for allowances. They are not, therefore, fixed with that error and it is still for the appellants to prove, on the balance of probabilities, that the amounts so claimed as qualifying expenditure are correct. The second issue which applies to all four windfarms is, as the appellants submit, that the scope and subject matter of the appeal is defined by the conclusions set out in the closure notices and by the amendments required to give effect to those conclusions. Those conclusions were that the amount of expenditure incurred before a given decision can attract allowances. There was however no dispute as to the amounts or categories of the expenditure (save as to whether it was incurred before or after the date of the particular decision), and so it is not open to HMRC to argue that the appellants must prove the amounts or categories of the disputed expenditure.

Findings of fact

226. From the documentary evidence I make the following additional findings of fact on this issue:

- (1) Between the dates on which the enquiries were opened and the 3 August 2017 email, a great deal of information was sent to HMRC by or on behalf of the appellants which concerned the costs which they had incurred in respect of the windfarm projects and asserted that these costs were qualifying expenditure on plant and machinery.

(2) This information included contracts for the geotechnical and geophysical work for Walney as well as detailed breakdowns of capital expenditure incurred by the appellants.

(3) In correspondence, and in particular in an email dated 1 December 2014, HMRC accepted that the vast majority of the expenditure was capital but that certain elements of the expenditure did not directly relate to the provision of plant and machinery (for example expenditure incurred on the provision of planning, consents and design).

(4) In an email dated 20 January 2015 HMRC suggested that all pre-FID expenditure should be treated as non-qualifying.

(5) In an email dated 16 March 2015 to HMRC, it was the view of Dong Energy (Orsted's predecessor) that most of the development costs incurred pre-FID were capital but were also necessary to construct the windfarm assets and therefore qualified for allowances.

(6) On 22 November 2016 Dong sent HMRC (Mr Seawright) a table of expenditure which summarised Dong's view as to why certain categories of expenditure were necessary for the provision of the plant and machinery.

(7) The 3 August 2017 email set out HMRC's view of planning and preparation costs for an offshore windfarm. HMRC's conclusion was that an offshore windfarm is constructed at the end of an iterative process which comprises 5 stages. It was HMRC's view that the expenditure on phases 1 and 2 were too remote for capital allowances and expenditure on stages 4 and 5 attracted allowances, but there was doubt regarding expenditure at stage 3. Stages 1 and 2 related to identifying the appropriate piece of seabed and designing the windfarm. Stages 4 and 5 related to obtaining consents and building and commissioning the windfarm. Stage 3 involved collection of data from the studies in deciding on the type of foundation and turbine for each wind turbine, and their precise locations within the windfarm.

(8) On 20 February 2018, Orsted sent HMRC figures reflecting the total capitalised development expenditure incurred up to FID, indicating that they were showing willingness to move the process along. It also stated that it did not agree with HMRC's view that it is only when the number, type and layout of the turbines is decided that the development expenditure starts to qualify as being on the provision of plant and machinery. Orsted went on to say that it did not consider that any of the amounts disclosed were too remote to qualify for capital allowances and maintained that the capital allowance claims under enquiry were correct in their then present submitted form. Orsted was providing figures to assist HMRC in issuing closure notices.

(9) The closure notices for the windfarms other than WODS indicate that "I have completed my enquiries into the company tax return and show my conclusions in the following figures and computation of tax payable. This notice amends the return to give effect to my conclusions." There then followed a table of figures, below which is the statement "amended as per communication with Graham Seawright of the 3rd August 2017"

(10) Instead of amending the amount of qualifying expenditure that was claimed by these appellants for the relevant periods, these closure notices adjusted the writing down allowances by the amount of the development costs for which those appellants had claimed qualified for capital allowances.

(11) The closure notice for WODS for the years under enquiry was issued on 28 February 2018. The conclusion was that the returns were incorrect because "the company was not due

capital allowances on the amounts of pre-Fid expenditure as per HMRC’s stance as stated in the correspondence sent to you on 3 August 2017 by Graham Seawright.” It then went on to indicate that the returns required amendment to reflect that the amount on which allowances had been claimed as additions to the plant pool were not allowable, which thus reduced the tax written down value carried forward. It also meant that the years following those periods were also incorrect and required amendment.

(12) The “categories of expenditure” referred to in this issue is a reference to categories of expenditure set out in an appendix to the reply to HMRC’s statement of case submitted by the appellants on 6 August 2019. The appendix identifies categories of expenditure, its nature, and its impact on the design of a windfarm. The categories are all those categories of expenditure which are the subject of the appellants’ appeals, including scoping, the EIA studies, the metocean, geophysical and geotechnical studies, and project management.

Discussion

227. Mr Jones submits that the relevant legal principles can be found in *Fidex v HMRC* [2016] STC 1920, and *Daarasp LLP v HMRC* [2021] UKUT 87 (“*Daarasp*”). The scope and subject matter of an appeal are defined by the conclusion stated in the closure notice and by the amendments required to give effect to that conclusion. The closure notice must be read in context in order to properly understand its meaning. When construing a closure notice it is appropriate to consider how the reasonable recipient of the notice, standing in the shoes of the taxpayer, would have construed it. It is not open for HMRC to amend the closure notices once issued. HMRC have incorrectly amended the returns by adjusting the allowances rather than the qualifying expenditure (in the case of three of the windfarms). They cannot depart from these amendments which have been implemented to give effect to the conclusions in the closure notices. The closure notices for all four windfarms reflect the conclusions reached by Mr Seawright in the 3 August 2017 email. That email reflects HMRC’s position that spending before the decision about the number and type of specific turbines is too remote but thereafter allowances would no longer be too remote, is a binary distinction; expenditure incurred before the number, type and location of the wind turbines are settled cannot attract allowances; expenditure incurred after that date can. It was no part of HMRC’s enquiry, nor of the closure notices that there was an issue about the quantum or categorisation of expenditure, that categorisation reflecting the categorisation set out in the appendix to the reply. The reasonable recipient of the closure notices would not construe them as dealing with the question of quantum or categorisation of expenditure, merely with the question of whether expenditure attracted allowances depending on whether they were incurred before or after a point in time. The numerical information on which the amendments to the returns was based was sent by the appellants to HMRC on 20 February 2018 which noted the distinction between two particular periods, and then, because the appellant had no records regarding turbine location, provided information on the basis of post and pre-FID expenditure. HMRC enquired no further. However, the conclusions in the closure notice and their reflection in the amendments to the returns was based on this distinction between two time periods and not on any conclusions or amendments which related to quantum or categories of expenditure. These define the scope and subject matter of the appeals, and it is thus not open to HMRC to argue that there is a quantum issue or put the appellants to proof of the amounts or categories of the disputed expenditure.

228. He also submits that HMRC accept that they have amended the wrong parts of the appellants’ returns and agrees that the amendments do not reflect the conclusions and indeed make no sense. But that does not change the fact that amendments have actually been made,

and that those amendments have effect. It is not right that HMRC's amendments make no sense at all. It is not a question of construction. It is a question of fact. They have amended the writing down allowances and not the qualifying expenditure. And in contrast to Miss Wilson's submission that section 50 of the Taxes Management Act 1970 ("TMA") is statutory authority which enables me to determine these appeals by giving effect to such necessary adjustments pursuant to section 50(6) and (7) TMA as the case may be, that only applies to assessments and not to amendments, and it is the amendments to the returns against which the appellants have appealed in these cases.

229. Miss Wilson also relies on *Daarasp*. She accepted that the amendments to the tax returns for the three windfarms had inaccurately reflected the conclusions and should have amended the qualifying expenditure and not the writing down allowances. But this was simply a transcriptional error which was obvious to everyone, as, too, was the transcriptional error which HMRC had made in confusing the expenditure incurred by the two Gunfleet companies and so making incorrect adjustments to their returns. A reasonable recipient of the closure notices would consider the eligibility of the disputed expenditure to be squarely in issue and would not consider it to be a binary question, as contended, of whether the expenditure was incurred before or after a point in time. Quantum and categories of expenditure were clearly an issue as the correspondence between the parties during the enquiry, and the 3 August 2017 email on which the closure notices were based, shows. A large amount of information had been provided to HMRC on quantum and categories during their enquiry and the use of the words "remoteness" or "remote" in the 3 August 2017 email clearly demonstrate that the conclusion was not restricted to whether the qualifying expenditure was incurred before or after a point in time. Nothing turns on the fact that the appellants provided post and pre-FID numbers to HMRC. This is a conventional appeal in which the onus is on the appellants to show why the disputed expenditure meets the relevant statutory test and thus can be put to proof on the amounts of that disputed expenditure. There is nothing in the closure notices nor in HMRC's behaviour to justify any submission that they should not be put to proof, and indeed their pleadings, evidence, and submissions at the hearing, reflect recognition that it is up to them to show that the expenditure is not too remote. I should also be alive to the venerable principle, the taxpayer should pay the right amount of tax, and a narrow confinement of the subject matter of the appeal is not intended to be one of the protections which form one of the checks and balances in the closure notice, amendment and appeal regime which is designed to protect the taxpayer.

230. On the section 50 TMA point, Miss Wilson's submits that it does apply by dint of section 117 Finance Act 1998 and that it applies to amended returns since such returns includes a self-assessment. She cites the decision in *R (Archer) v HMRC* [2018] STC 38 ("*Archer*") as authority for that proposition. In her view the appellants' appeals extend not just to the correctness of the conclusion in the closure notices but also to whether the conclusion stated has been reflected in the amendments to the returns. My determination of these appeals must be given effect by making all necessary adjustments pursuant to section 50 TMA and that is clearly within the policy of the venerable principle set out above.

231. It is my decision that it is open for HMRC to put the appellants to proof on the amounts and categories of the disputed expenditure. I say this for a number of reasons.

232. The reasonable recipient of the closure notices which referred to the 3 August 2017 email would have concluded that they deal with the quantum and categories of expense and are not restricted, as submitted by the appellants, to a timing issue. That email refers to the basic question as being "is the expenditure related to the plant and machinery". It goes on to identify

five stages in the process of constructing an offshore windfarm and then sets out HMRC's view that expenditure incurred at certain stages is too remote and thus does not qualify for allowances. This is wholly consistent with the context in which that email was drafted and with the previous communications between the parties, in which the appellants had provided a substantial amount of information to justify their position, namely that the development expenditure attracted capital allowances, and the parties' assertions that the expenditure was, or was not, directly related to or necessary for the construction of the windfarm and its component parts. As far as I can see, all that happened in the 3 August 2017 email was that these principles of "remoteness", "directly related to", and "necessary", were applied to the stages in the construction of an offshore windfarm, and HMRC came to the view that expenditure in the early stages did not attract allowances, whilst those in the later stages did.

233. The position was then blurred by the request by HMRC to provide numerical information for periods before and after the design and layout of the turbines, and the appellants' provision of information for the periods pre-and post-FID, as they did not have the records pre-and post-wind turbine design/layout. In this they were seeking to be helpful, and the information was submitted on a without prejudice basis to the appellants' contention that none of the claimed expenditure was too remote and all of it qualified for allowances.

234. So at that stage the appellants were not accepting HMRC's (in the appellants' view) artificial distinction between two periods of time. They were still maintaining that none of the disclosed expenditure was too remote to qualify for allowances.

235. HMRC then amended the writing down allowances rather than the qualifying expenditure in the tax returns for the three windfarms other than WODS. This was a simple transcriptional error (and I will deal with the consequences below) but as far as the reasonable recipient of the closure notices was concerned, in light of the foregoing correspondence, it is inconceivable that the reasonable recipient would have thought those amendments restricted the ambit of the closure notices in the way suggested by the appellants. In the same way that was a mix-up over the numbers for the two Gunfleet sites, the recipient would have concluded that HMRC had simply made a secretarial error.

236. I agree however with Mr Jones that that error has real consequences and that Miss Wilson needs to point to a specific statutory provision to show that I have statutory power to adjust the amendments pursuant to section 50 TMA. Mr Jones submits that I have no such power since that statutory provision applies to assessments and not to amendments. However, I think the answer lies in [22] and [26] of *Archer*. In [22] Lewison LJ said "the self-assessment that the taxpayer is required to file as part of his return must state the amount of tax for which the taxpayer is liable. One would naturally expect that an amendment to that assessment must likewise state the amended amount of tax for which he is liable...." and in [26]: "...it is true that the self-assessment regime places the burden on the taxpayer, at least in the first instance, to work out the amount of tax for which he is liable and to state it in his return. It is also true that for some purposes, including time limits, an amendment to a self-assessment is not an "assessment". But in functional terms an amended self-assessment is still a variety of assessment (even if preceded by the prefix "self")...."

237. The appellants have appealed against the conclusions in the closure notices and to the amendments to their corporation tax returns. Those corporation tax returns contained self-assessments. Those amended self-assessments are, on the authority of *Archer*, self-assessments and thus within the ambit of section 50 TMA.

238. So, to the extent that I have found that expenditure on the studies qualifies for allowances, the appellants must prove, on the balance of probabilities, the amounts of such expenditure. They will also have to show that it is they, and not another person, who has incurred that expenditure given that HMRC have contended that as regards the expenditure on certain of the studies, that expenditure was not incurred by the appellants but by other persons.

ISSUE 6 - THE CLOSURE NOTICE ISSUE

Whether the amounts of qualifying expenditure in the returns of Gunfleet II (the appellant in TC/2018/04806), Gunfleet (the Appellant in TC/2018/04807) and Walney (the appellant in TC/2018/04809) for the periods ended 31 December 2009, 31 December 2009 and 31 December 2011 respectively (as not amended by the closure notices) have been conclusively determined for the purposes of paragraph 88 of Schedule 18 to the Finance Act 1998.

239. This issue, which does not affect WODS, has been neatly explained by Miss Wilson in her skeleton argument and I can do no better than to set out that explanation below:

“Taking Walney as an example, the Appellants contend that because the company included the amount of £15,576,689 in its aggregate amount of “*qualifying expenditure*”) in the relevant box on the company’s return and because the HMRC officer made a mistake and deducted that amount from the total figure in the WDA box, rather than the QE box, that “*amount*” of £15,576,689 is now “*conclusively determined*” for subsequent or consequential periods because it “*can no longer be altered*” within the meaning of paragraph 88(2) of Schedule 18 to the Finance Act 1998. In other words, they say, that amount of £15,576,689 can be carried forward and used to reduce profits for later APes even if this Tribunal decides that the amount is not “*qualifying expenditure*”.”

240. In her view this reflects a misreading of paragraph 88, and I agree with her.

241. Paragraph 88 is set out below:

(1) This paragraph applies to an amount stated in a company tax return for an accounting period which is required to be included in the return and which affects or may affect—

(a) the tax payable by the company making the return for another accounting period,
or

(b) the tax liability of another company for any accounting period.

(2) If such an amount can no longer be altered it is taken to be conclusively determined for the purposes of the Corporation Tax Acts in relation to that other period or other company.

Sub-paragraphs (3) to (5) explain what is meant by “can no longer be altered”.

(3) An amount is regarded as one that can no longer be altered if—

(a) the period specified in paragraph 15(4) (general period for amendment by company) has ended,

(b) any enquiry into the return has been completed (or is completed so far as relating to the matters to which the amount relates by the issue of a partial closure notice),

- (c) if an officer of Revenue and Customs amends the return under paragraph 34, the period within which an appeal may be brought against that amendment has ended, and
- (d) if an appeal is brought, the appeal has been finally determined.

242. She submits that these tests are cumulative and whilst the first three have been met, subparagraph (d) has not been met since an appeal has been brought which has not been finally determined (namely this appeal). So as matters stand at the moment, the amount can be altered. And for the reasons given in respect of the quantum issue, I have jurisdiction to do so.

243. Mr Jones suggests in his skeleton argument that HMRC's point is that the amended returns have not been finally determined and points out that it is not the returns but the amounts with which paragraph 88 deals. He suggests that since the closure notices cannot be altered once issued and that they define the scope and subject matter of the appeals, there is no mechanism to alter the unamended amounts stated in the returns following the closure of the enquiries. Amendment in paragraph 88 should be read as referring to an amendment to the relevant amount set out in the returns. He also submitted that the sub paragraphs in paragraph 88 should be read sequentially and as soon as one comes to a subparagraph which deals with the facts of a particular case one goes no further. So in this case one would stop at subparagraph (b). The "amount" referred to in the sub paragraphs is the amount set out in a return, and for the reasons given in his submissions on the closure notice issue, this amount has not been amended. Accordingly, the enquiries into the returns which relates to the amount has been completed and one goes no further to consider the remaining sub paragraphs. Since that enquiry resulted in a closure notice which amended the writing down allowances and not the qualifying expenditure, the qualifying expenditure has therefore been conclusively determined.

244. I disagree with these submissions. I prefer Miss Wilson's interpretation of the legislation which accords with the plain words of paragraph 88. On the facts of this case, sub paragraphs (a)-(c) have been met. The period for amendment has ended, an enquiry has been completed, the returns have been amended. Those returns might have been amended incorrectly, as both parties accept, and the mistakes were made in reflecting the conclusions in the closure notices in the amendments to the returns. But the plain fact is that the returns were amended under paragraph 34 even if they were incorrectly amended. However, subparagraph (d) has not been met to date since the appeal against those amended returns has not been finally determined.

245. Miss Wilson also prays in aid paragraph 34 (2A) of Schedule 18 which gives HMRC power to make consequential amendments to other returns to give effect to conclusions in a closure notice. Since the closure notices reduced the amounts of qualifying expenditure, and HMRC have power to give effect to those reductions by amending other returns of the appellants, any such amendments would only be finally determined once appeals against any amounts in those amendments were finally determined.

246. Mr Jones responds that that might very well be so, but in this appeal, the amounts referred to in paragraph 88, namely the qualifying expenditure, can no longer be altered.

247. In respect of the quantum issue I have found against Mr Jones, and that the amount of qualifying expenditure is something which the appellants must prove in accordance with section 50 TMA. And it would seem most odd to me in those circumstances that the appellants have no need to do so under paragraph 88 by dint of the qualifying expenditure claimed in the returns having been finally determined. For the technical reasons set out above, it is my view that the amounts of qualifying expenditure in those returns have not been finally determined. Such a conclusion also accords with the venerable principle that the taxpayer should pay the

right amount of tax. I do not believe that the appellants should be able to avoid the reach of this principle simply by dint of a transcriptional error by HMRC.

248. My conclusion on the closure notice issue, therefore, is that the qualifying expenditure set out in the returns referred to have not been conclusively determined for the purposes of paragraph 88.

DECISION

249. To draw all these conclusions together, I have concluded, and it is my decision in these appeals that, in principle:

(1) On the single/multiple plant issue, each windfarm, meaning in this context, the generation assets, comprises a single item of plant and machinery for the purposes of the capital allowances legislation. If I am wrong on this, then each wind turbine, and each array cable, comprises a single item of plant for the purposes of that legislation.

(2) On the qualifying expenditure issue, the expenditure on the studies and project management qualifies for capital allowances to the extent and for the reasons summarised at [218] above.

(3) On the revenue deduction issue, the appellants are not entitled to relief for expenditure claimed as pre-trading revenue expenditure pursuant to section 61 CTA 2009 on expenditure on the studies and project management which does not qualify for capital allowances.

(4) On the quantum issue, it is open to HMRC to put the appellants to proof on the amounts and categories of the disputed expenditure.

(5) On the closure notice issue, the amounts in the returns of Gunfleet, Gunfleet II and Walney have not been conclusively determined for the purposes of paragraph 88.

RIGHT TO APPLY FOR PERMISSION TO APPEAL

250. This document contains full findings of fact and reasons for the decision. Any party dissatisfied with this decision has a right to apply for permission to appeal against it pursuant to Rule 39 of the Tribunal Procedure (First-tier Tribunal) (Tax Chamber) Rules 2009. The application must be received by this Tribunal not later than 56 days after this decision is sent to that party. The parties are referred to “Guidance to accompany a Decision from the First-tier Tribunal (Tax Chamber)” which accompanies and forms part of this decision notice.

NIGEL POPPLEWELL
TRIBUNAL JUDGE
Release date: 03 FEBRUARY 2022

Appendix 1

1. There shall be a hearing to determine the following issues in principle (“the Issues”):
 - (a) Whether or to what extent the particular offshore windfarms in issue in this case constitute a single item of “plant or machinery” for the purposes of s 11 CAA 2001 or setting; and if not plant, what is the “plant and machinery” for the purposes of s 11 CAA 2001 (“single/multiple plant issue”).
 - (b) In respect of that plant so identified, whether or to what extent the expenditure satisfies the conditions of s 11(4)(a) CAA 2001 and is “qualifying expenditure” incurred “on the provision of” the plant and machinery. (“qualifying expenditure issue”).
 - (c) Whether the Appellants satisfy the conditions of s 11(4)(b) (“the person incurring the expenditure owns the plant or machinery as a result of incurring it”) (“ownership issue”).
 - (d) Whether the Appellants are otherwise entitled to relief for the expenditure claimed as a revenue deduction pursuant to s 61 CTA 2009 (“revenue deduction issue”).
 - (e) Whether it is open for the Respondents to put the Appellants to proof on the amounts and categories of the disputed expenditure in circumstances where:
 - i. whether such expenditure has been incurred in such amounts and in such Categories of Expenditure as the Appellants claim did not form part of the Respondent’s enquiries; and
 - ii. the Respondents have closed the enquiries based on the figures provided by the Appellants (the "quantum issue"); and
 - (f) Whether the amounts of qualifying expenditure in the returns of Gunfleet II (the Appellant in TC/2018/04806), Gunfleet (the Appellant in TC/2018/04807) and Walney (the Appellant in TC/2018/04809) for the periods ended 31 December 2009, 31 December 2009 and 31 December 2011 respectively (as not amended by the closure notices) have been conclusively determined for the purposes of paragraph 88 of Schedule 18 to the Finance Act 1998 (the "closure notice issue").

Appendix 2

THE RELEVANT STATUTORY PROVISIONS

Capital Allowances

1. Section 1(2)(a) of CAA 2001 provides allowances in respect of capital expenditure in respect of, inter alia, plant and machinery.

2. Section 11 of the Act sets out the general conditions as to the availability of plant and machinery allowances. It provides:

11 General conditions as to availability of plant and machinery allowances

- (1) Allowances are available under this Part if a person carries on a qualifying activity and incurs qualifying expenditure.
- (2) “Qualifying activity” has the meaning given by Chapter 2.
- (3) Allowances under this Part must be calculated separately for each qualifying activity which a person carries on.
- (4) The general rule is that expenditure is qualifying expenditure if—
 - (a) it is capital expenditure on the provision of plant or machinery wholly or partly for the purposes of the qualifying activity carried on by the person incurring the expenditure, and
 - (b) the person incurring the expenditure owns the plant or machinery as a result of incurring it.
- (5) But the general rule is affected by other provisions of this Act, and in particular by Chapter 3.

3. The term “qualifying activity” is defined in Chapter 2 of Part 2 of CAA 2001 and includes a trade.

4. Chapter 3 of Part 2 of CAA 2001 qualifies the general rule set out in section 11(4) (as stated by section 11(5)). In particular, section 21 provides that expenditure on the provision of plant or machinery does not include expenditure on the provision of a building; and section 22 provides that expenditure on the provision of plant or machinery does not include expenditure on (a) the provision of a structure or other asset in list B in section 22, or (b) any works involving the alteration of land. Both of these sections are subject to section 3, which provides that they do not affect the question of whether expenditure on any item described in list C in section 23 is expenditure on the provision of plant or machinery. Item 1 in list C is “Machinery (including devices for providing motive power) not within any other item in this list”.

Pre-trading expenses

5. Section 61 of the Corporation Tax Act 2009 (“**CTA 2009**”) makes provision for the deduction of expenses incurred for the purposes of a trade before that trade is commenced. It provides, so far as is material, that:

61 Pre-trading expenses

(1) This section applies if a company incurs expenses for the purposes of a trade before (but not more than 7 years before) the date on which the company starts to carry on the trade (“the start date”).

(2) If, in calculating the profits of the trade—

(a) no deduction would otherwise be allowed for the expenses, but

(b) a deduction would be allowed for them if they were incurred on the start date,

the expenses are treated as if they were incurred on the start date (and therefore a deduction is allowed for them).

(3)

6. The profits of the trade have to be computed in accordance with generally accepted accounting practice (“GAAP”) subject to certain adjustments. This is set out in section 46 CTA 2009

46 Generally accepted accounting practice

(1) The profits of a trade must be calculated in accordance with generally accepted accounting practice, subject to any adjustment required or authorised by law in calculating profits for corporation tax purposes.

7. There are two relevant provisions which might warrant such adjustment in the circumstances of this appeal. These are set out in sections 53 and 54 CTA 2009.

53 Capital expenditure

(1) In calculating the profits of a trade, no deduction is allowed for items of a capital nature.

(2) Subsection (1) is subject to provision to the contrary in the Corporation Tax Acts

54 Expenses not wholly and exclusively for trade and unconnected losses

(1) In calculating the profits of a trade, no deduction is allowed for—

(a) expenses not incurred wholly and exclusively for the purposes of the trade,
or

(b) losses not connected with or arising out of the trade.

(2) If an expense is incurred for more than one purpose, this section does not prohibit a deduction for any identifiable part or identifiable proportion of the expense which is incurred wholly and exclusively for the purposes of the trade.

Tax Returns and Closure Notices

8. Schedule 18 to the Finance Act 1998 (“**FA 1998**”) contains a set of detailed provisions dealing with company tax returns, assessments and related matters including enquiries by HMRC into a company's tax returns.

9. Paragraph 3(1) of Schedule 18 provides that an officer of HMRC may by notice require a company to deliver a return (a “*company tax return*”) of such information, accounts, statements and report (a) relevant to the tax liability of the company, or (b) otherwise relevant to the application of the Corporation Tax Acts to the company, as may reasonably be required by the notice.

10. Paragraph 24 of Schedule 18 provides that HMRC may, if they give notice, enquire into a company's tax return. Such an enquiry is concluded by the issue of a closure notice, as provided for by paragraph 32(1) of Schedule 18:

An enquiry is completed when [HMRC] by notice (a "closure notice") inform the company that they have completed their enquiry and state their conclusions.

11. More detailed requirements as to the form and contents of a closure notice are set out in paragraph 34 of Schedule 18 of FA 1998, which provides, so far as is relevant:¹

(1) This paragraph applies where a closure notice is given to a company by an officer.

(2) The closure notice must—

(a) state that, in the officer's opinion, no amendment is required of the return that was the subject of the enquiry, or

(b) make the amendments of that return that are required—

(i) to give effect to the conclusions stated in the notice, and

(ii) in the case of a return for the wrong period, to make it a return appropriate to the designated period.

(2A) The officer may by further notice to the company make any amendments of other company tax returns delivered by the company that are required to give effect to the conclusions stated in the closure notice.

(3) An appeal may be brought against an amendment of a company's return under subparagraph (2) or (2A).

12. Part IX of Schedule 18 to FA 1998 makes provision for how and when claims to capital allowances, which must be made in a tax return (section 3 CAA 2001), are to be made.

¹ Paragraphs 32 and 34 of Schedule 18 were each in a different form prior to 1 April 2010 but their effect was materially the same for the purposes of these appeals.

13. Part XI of Schedule 18 to FA 1998 contains certain “*supplementary provisions*”, one of which, paragraph 88 (“**paragraph 88**”) governs the conclusiveness of amounts stated in the return.

The paragraph provides, so far as is relevant:

(1) This paragraph applies to an amount stated in a company tax return for an accounting period which is required to be included in the return and which affects or may affect—

(a) the tax payable by the company making the return for another accounting period, or

(b) the tax liability of another company for any accounting period.

(2) If such an amount can no longer be altered it is taken to be conclusively determined for the purposes of the Corporation Tax Acts in relation to that other period or other company.

Sub-paragraphs (3) to (5) explain what is meant by “can no longer be altered”.

(3) An amount is regarded as one that can no longer be altered if—

(e) the period specified in paragraph 15(4) (general period for amendment by company) has ended,

(f) any enquiry into the return has been completed (or is completed so far as relating to the matters to which the amount relates by the issue of a partial closure notice),

(g) if an officer of Revenue and Customs amends the return under paragraph 34, the period within which an appeal may be brought against that amendment has ended, and

(h) if an appeal is brought, the appeal has been finally determined.

(4) If the return is amended by the company under a provision that allows an amendment after the end of the period specified in paragraph 15(4), an amount affected by the amendment ceases to be regarded as one that can no longer be altered until after whichever is the last of the following—

(a) the end of the period within which notice of enquiry into the return may be given in consequence of the amendment;

(b) if such a notice is given, the completion of the enquiry (or the completion of the enquiry so far as relating to the matters to which the amount relates by the issue of a partial closure notice);

(c) if an officer of Revenue and Customs amends the return under paragraph 34, the end of the period within which an appeal against that amendment may be brought;

(d) if an appeal is brought, the date on which the appeal is finally determined.

(5) If the return is amended by an officer of Revenue and Customs under paragraph 83(3) (consequential amendment of return where amount available by way of capital allowances is reduced), an amount affected by the amendment ceases to be regarded as one that can no longer altered until after—

(a) the end of the period within which an appeal against that amendment may be brought, or

(b) if an appeal is brought, the date on which the appeal is finally determined.

14. Section 50 of the Taxes Management Act 1970 (“**section 50 TMA**”) states relevantly:

50 Procedure

(1)

(2)

(3)

(4)

(5)

(6) If, on an appeal, it appears to the majority of the Commissioners present at the hearing, by examination of the appellant on oath or affirmation, or by other lawful evidence, that the appellant is overcharged by any assessment, the assessment shall be reduced accordingly, but otherwise every such assessment shall stand good.

(7) If on any appeal it appears to the Commissioners that the person assessed ought to be charged in an amount exceeding the amount contained in the assessment, the assessment shall be increased accordingly.