



## Meeting note

<b>Project reference</b>	EN070001 – Yorkshire and Humber CCS Cross Country Pipeline
<b>Status</b>	Final
<b>Author</b>	Hannah Pratt
<b>Date</b>	13 June 2014
<b>Meeting with</b>	National Grid and Natural England
<b>Venue</b>	Teleconference
<b>Attendees</b>	<p><b>Applicant</b> Richard Gwilliam (National Grid) John Hartley (Hartley Anderson Limited) Nigel Pilkington (Aecom) Charlotte Clinton (Aecom)</p> <p><b>Natural England</b> Deborah Hall James Bussell Emma Brown James Walsh</p> <p><b>Planning Inspectorate</b> Tom Carpen (Infrastructure Planning Lead) Iwan Davies (Case Lead) David Price (EIA Manager) Hannah Pratt (EIA and Land Rights Advisor) Richard Kent (EIA and Land Rights Advisor)</p>
<b>Meeting Objectives</b>	To discuss the Habitats Regulations Assessment (HRA)
<b>Circulation</b>	Meeting attendees

### Summary of Key Points and Advice Given:

The Planning Inspectorate (PINS) advised on its openness policy. Any advice given will be recorded and placed on the National Infrastructure Portal website under section 51 of the Planning Act 2008 (as amended) and that any advice given under section 51 does not constitute legal advice upon which applicants (or others) can rely.

The Planning Inspectorate ('the Inspectorate') noted that they were copied into correspondence between Natural England and the applicant regarding the Habitat Regulations draft No Significant Effects Report (NSER). The correspondence is

attached to this meeting note. Both Natural England and the applicant verbally outlined their positions as detailed in the correspondence.

The applicant and Natural England both acknowledged that the development subject to a Development Consent Order under the Planning Act 2008 is one part of a wider scheme which includes offshore elements that are due to be considered in accordance with the Petroleum Act 1998 and the Energy Act 2008 respectively. The applicant explained that the applications for offshore development under the Petroleum Act 1998 and the Energy Act 2008 had not yet been submitted to Department for Energy and Climate Change (DECC), however this is due to take place during the course of the examination for the Nationally Significant Infrastructure Project (NSIP).

Natural England advised that they do not consider the NSIP proposal will have a likely significant effect on European sites when considered in isolation; however they consider that in order to satisfy the requirements of the Habitat Regulations the scheme should be considered as whole i.e. along with the offshore development subject to Petroleum Act and Energy Act applications. Natural England explained that they do not consider sufficient information has been provided in the draft NSER for them to agree that there would be no likely significant effect on European sites resulting from the scheme when considered as a whole.

The applicant explained that they are still undertaking the assessment for the offshore development applications and they would be able to make information available during the examination of the NSIP on the potential impacts on European sites from the offshore elements of the scheme, as and when it becomes available.

The Inspectorate advised that in accordance with regulation 5(2)(g) of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, the applicant must ensure that they provide a report identifying any European site which may be affected by the proposed development, together with sufficient information for the competent authority to make an appropriate assessment of the implications for the site if required. The Inspectorate acknowledged that it is not uncommon for there to be outstanding issues on HRA matters and differing opinions between applicants and the statutory nature conservation bodies at the time of submission and that these are capable of being explored during the examination, should the application be accepted for examination.

The applicant and Natural England agreed to discuss the issues outside of the teleconference in order to agree a roadmap for resolution of the offshore HRA issues.

**Post meeting note:** Following on from the meeting Natural England and the applicant both sent correspondence to the Inspectorate setting out their comments on the meeting. The correspondence is attached to this meeting note.

### **Enclosed**

Annex A - Natural England letter to Aecom - 3 June 2014

Annex B - Aecom letter to Natural England - 9 June 2014

Annex C - National Grid letter to the Planning Inspectorate – 16 June 2014

Annex D - Natural England letter to the Planning Inspectorate - 17 June 2014

**Annex A - Natural England letter to Aecom - 3 June 2014**

Date: 03 June 2014  
Our ref: 120369



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Dear Nigel

## **Yorkshire and Humber CCS Cross Country Pipeline: No Significant Effects Report and Statement of Combined Effects**

Thank you for your consultation on the above dated 6<sup>th</sup> May 2014. This advice is being provided as part of Natural England's Discretionary Advice Service in accordance with the Quotation and Agreement dated 6<sup>th</sup> May 2014.

### **1. ONSHORE SCHEME**

We note the information that has been provided regarding mitigation measures relating to the pumping station construction work that will take place during winter, as detailed in Table 7.1 of the No Significant Effects Report. We consider that, given the distance from both the Humber Estuary and Lower Derwent Valley SPAs, the relatively low numbers of golden plover using the fields around the pumping station location and the mitigation measures to be put in place, there is not likely to be a significant effect on the interest features of these sites as a result of the onshore works.

We also note the information in Section 4.6 of the No Significant Effects Report, and we are satisfied that the construction works at the landfall are not likely to have a significant effect on the interest features of the Humber Estuary SAC.

### **2. OFFSHORE SCHEME**

We welcome the further information that has been provided in the Statement of Combined Effects regarding the offshore scheme, and we are pleased to note that the pipeline route has been designed to avoid impacts on offshore SPAs and SACs. However, as there remains some uncertainty as to the detail of the offshore pipeline construction and potential impacts on designated sites, we do not consider that likely significant effect can be ruled out at this stage for the project as a whole either alone or in-combination. We advise that additional information is required on construction techniques and materials, operation of the pipeline and decommissioning as detailed below.

#### **Sediment Transport**

We acknowledge that information has been provided on the marine pipeline construction in sections 5.2.9 and 5.2.10 of the Statement of Combined Effects. However, we advise that further detail is provided in order to determine whether there will be significant changes to sediment transport which could impact on the Humber Estuary SAC / SPA. This should include the following:

- The depth of offshore pipeline burial, and the method of storage of backfill material from the nearshore excavation trench.
- The degree of seabed scour that will result from pipeline construction.
- The quantity and type of material used for any rock placement, concrete or frond matting used to protect the pipeline from exposure and subsequent scour, and any effect this may have

- on water quality and therefore on the marine ecology of the Humber Estuary.
- The longevity of the pipeline, and any likely maintenance requirements for the pipeline and Normally Unmanned Installation which may affect sediment flow.

### **Disturbance effects**

We note from the information in Table 4 of the SoCE that the offshore scheme has the potential to impact on seabirds which are interest features of Flamborough Head pSPA, and grey seals which are an interest feature of the Humber Estuary SAC. We advise that further information is provided on the following:

- Details and duration of installation activities such as vessel movements, and the distance of these activities from Flamborough Head pSPA.
- Details and duration of any activities (either during construction, operation or decommissioning) causing noise and vibration which may impact on grey seals. It should be noted that noise effects in combination may have a greater impact than the sum of individual effects.
- Water quality impacts as noted above.

If this information can be provided, it may be possible to provide the certainty that is required to determine whether there will be likely significant effects on SPA / SAC interest features. It should be noted that under the Planning Act 2008, if it is determined that an NSIP is likely to have a significant effect on a European site and / or a European marine site, the applicant must provide a report with the application showing the site(s) that may be affected together with sufficient information to enable the competent authority to make an Appropriate Assessment (AA). Evidence will need to be provided to give confidence to the Planning Inspectorate (PINs) that, in the absence of further information, effective mitigation measures (which could include a range of options) can be called upon during construction, operation and maintenance which are appropriate to the nature of the development. Additionally where there is no evidence for the technology being implemented, it will need to be demonstrated that the safeguards and monitoring is sufficient to satisfy PINs that there will be no adverse effect on the integrity of any European site, either alone or in combination with other plans or projects.

It should be noted that should an Appropriate Assessment Report be required, much of the information in the Statement of Combined Effects, in particular the information in Section 5.4, can be used to inform the report together with additional information as detailed above.

Natural England would be happy to provide advice on any further information submitted through our Discretionary Advice Service.

The advice provided in this letter has been through Natural England's Quality Assurance process.

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

Yours sincerely

James Walsh  
Yorkshire & Northern Lincolnshire Team

**Annex B - Aecom letter to Natural England - 9 June 2014**



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9<sup>th</sup> June 2014

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### **Yorkshire and Humber CCS Cross-Country Pipeline – No Significant Effects Report (NSER)**

Dear James,

Thank you for your response to the NSER and Statement of Combined Effects (SoCE) dated 3<sup>rd</sup> June 2014. The following response has been prepared to provide clarification on the points raised.

The NSER has been updated with the additional information requested in support of its conclusions.

#### **The Offshore Scheme**

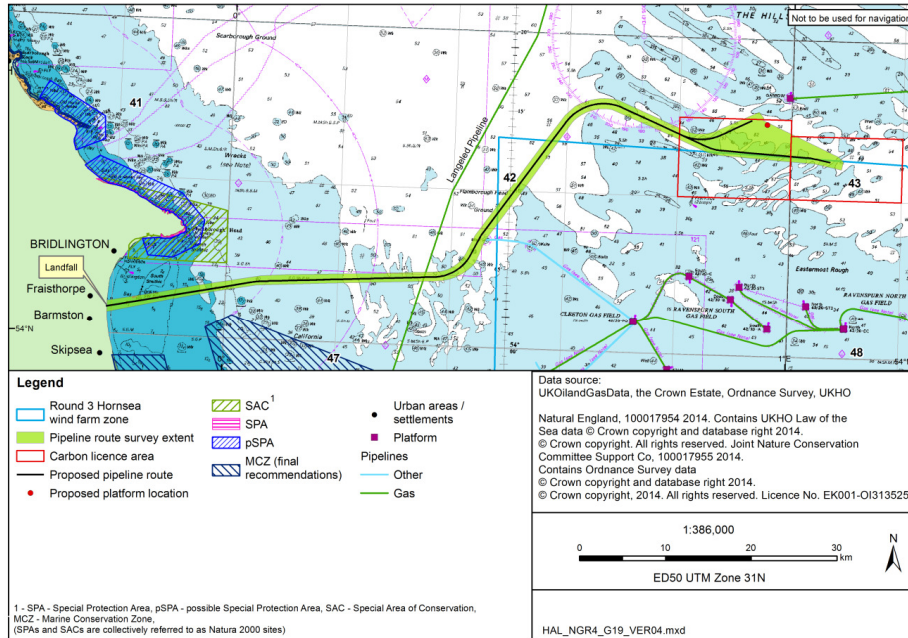
A description of the Offshore Scheme has been included in Section 4.8 of the NSER.

Certain elements of the Offshore Scheme are subject to ongoing options appraisal, and the Project in its entirety is at a pre-Front End Engineering Design (FEED) stage. The description below and used in the NSER is a “worst case” development scenario, for instance the footprint of the final Offshore Scheme is unlikely to be larger than that presented.

The Offshore Scheme comprises a Pipeline linking the landfall to a Normally Unmanned Installation (NUI) and related infrastructure (e.g. wells, platform power generation facilities etc.) and is illustrated on Figure 1 below:



**Figure 1: Storage area location, indicative offshore pipeline route and landfall**



**Offshore Pipeline**

The offshore Pipeline will comprise of approximately 90 km of up to 610 mm concrete coated carbon steel Pipeline and will be laid from the landfall to a NUI located at the geological storage site.

The proposed Pipeline route has been selected on the basis of desk-based options appraisal and subsequent offshore survey, and has been optimised based on, for instance, the occurrence and orientation of large sand ridges, the avoidance of outcropping bedrock, and the avoidance of conservation sites, including Natura 2000 sites and Marine Conservation Zones.

Analysis of Particle Size Distribution (PSD) patterns from grab samples collected during the entire pipeline route survey indicates that the dominant textural groups are gravelly sand to sand, with muddy sandy gravel present in some nearshore samples. Geotechnical cores reveal that the material to be excavated during trenching would be a combination of such surficial sands and underlying boulder clay, the latter being part of the Bolders Bank Formation, the offshore extension of the tills found to comprise much of the cliffs and beach of Holderness.

The proposal is for the pipeline to be buried in the nearshore out to the 30 m depth contour and subsequently surface laid to the offshore platform (NUI) at the storage site. A geophysical survey and subsequent geotechnical survey of the pipeline route indicate that there are no obstructions which would prevent such an approach to installation, and similar techniques have been employed for existing pipelines associated with the Easington gas terminal, such as York and Langeled.

**Offshore Pipeline Installation**

The Offshore Pipeline installation is not expected to exceed 4 months in duration and will include the following activities:

- Dredging of an access channel, followed by cutting a nearshore pipeline trench to the 30 m depth contour (approximately 15 km offshore);
- Nearshore and offshore pipeline vessel movements;
- Backfilling of nearshore trench; and
- Post-lay survey.

The installation of the nearshore Pipeline will require up to four vessels 1 x dredger, 1 x lay barge and 2 x anchor handlers. The installation of the offshore Pipeline will require up to three vessels 1 x lay barge and 2 x anchor handlers, however an additional pipe supply vessel may be required (when required) depending on the amount of pipe which can be stored on the lay barge.

#### *Buried Nearshore Pipeline*

The depth and width of the trench into which the Pipeline will be laid is yet to be finalised, though other similar installations have used trenches of dimensions up to 15 m wide and 2.5 m deep. Assuming a continuous trench from the cofferdam end to the 30 m depth contour, this would result in the sidecasting of approximately 562,500 m<sup>3</sup> of material.

In addition to the nearshore Pipeline trench, there is likely to be the requirement to cut an access channel for the shallow water lay vessel to be able to get sufficiently close to the shore. Previous experience (e.g. in relation to Langeled) has shown that such a channel may need to be approximately 6 m at its deepest point (e.g. at the interface with the cofferdam (if used) and reflecting the operating depth of the barge), have a length to meet the 6 m depth contour (approximately 640 m at Easington) and a width of approximately 160 m. This would result in an additional movement of up to 614,000 m<sup>3</sup> of primarily boulder clay.

In the nearshore area the likely depth of the surficial sediment (sand) cover over the length of the trench is thin, and nearshore survey results indicate that the underlying boulder clay is often exposed from the shore out to approximately 8-9 km where there is a layer of sand up to approximately 8 m thick. Further offshore from this point, the seabed surface has numerous boulders and surface undulations interpreted to reflect sub-cropping or outcropping boulder clay to 15 km offshore, confirmed through the collection of clay material from surface grab samples the majority of excavated material is likely to be of this sediment type.

The sidecast material would be left on the seabed and backfilled as soon as possible following Pipeline installation. Given the nature of the principal substrate being excavated (cohesive boulder clay), much of the sidecast material is not expected to significantly break down over the duration of operations. A conservative estimate (not expected to be exceeded) of sediment lost to the water column for the Langeled pipeline installation on this section of coast was 10%. Assuming the above trenched volume, this may amount up to a maximum in-combination amount with the 600 m<sup>3</sup> contribution from the Cofferdam (please refer to Section 4.6.9 of the NSER) of 118,560 m<sup>3</sup> being transported in suspension away from the pipeline location and the access channel. This represents a small additional input of sediment in the context of wider erosion of fine-grained (i.e. very fine sand, silt and clay) sediment from the Holderness coast (approximately 2.5 million m<sup>3</sup> per year, or 3 million m<sup>3</sup> including coarser sediment fractions). Resuspension of material during such activities would be in the context of existing high levels of suspended sediments experienced during storm events, and would therefore not represent significantly higher levels of turbidity than that seasonally experienced.

Additionally, the work will be undertaken in summer months at which time natural sediment movement will be at a minimum, and the potential for loss of sidecast sediment will be reduced. Seasonal turbidity from sediment movement will also be at a minimum, and therefore any contribution to this

variable by the trench excavation and sediment loss will similarly be minimised (note that the sediment plume from the Humber Estuary mouth maintains a naturally highly turbid environment). It should be noted that the excavation will take place over a number of weeks, and any resuspended sediment will not become available in a single event. In addition this contribution will be temporary during one six month period and not be repeated in consecutive years.

Due to the depth of pipeline burial, and that the majority of sidecast material would be retained and backfilled, it is not proposed that rock dump, concrete or frond matting will be required for the nearshore section of Pipeline.

Once the nearshore pipeline trench has been backfilled it is not expected that there will be any continued interference with the natural transport of such material along the Holderness Coast during the operation of the Offshore Pipeline.

#### *Offshore Pipeline*

The Offshore Pipeline will be surface laid from the 30 m depth contour mark to the NUI. The surface laid offshore section will have a progressively thickening concrete coat to provide pipeline stability.

#### *Programme*

Overall the duration of pipelay activities for the nearshore and offshore Pipeline are not expected to exceed 4 months. The pipelay activities are transient, the lay rate of the nearshore installation out to the 30 m depth contour is approximately 500m/day and the offshore surface lay Pipeline up to 4 km a day.

#### The Normally Unmanned Installation (NUI)

The Carbon Dioxide storage site (5/42) comprises a saline aquifer within a domed structure which is part of the wider Triassic Bunter Sandstone Formation.

The NUI is located approximately 70 km from the coast and will comprise of a steel jacket platform which will either be piled to the seabed, or alternatively drill and grout fixing may be required due to hard seabed conditions (e.g. where chalk and limestone bedrock are in close proximity to, or at, the seabed). The platform will have a control system, refuge and life support facilities, a helideck, boat landing deck, diesel power generation and facilities for diesel, chemical and hydraulic fluid storage. There will also be facilities for chemical injection and hydraulic control. There will be no drilling facilities on the platform and drilling will be undertaken by a mobile "jack-up" rig.

Three wells are to be drilled for Carbon Dioxide injection in the first phase of operations, with a further two being kept spare for future injection and one to be used for monitoring or water production.

The area within which the Offshore Scheme is proposed to be installed has been subject to survey. At the storage site location, survey was undertaken towards two notional platform locations, with an area between them infilled using the same survey methods as the Pipeline route. This provides sufficient data for a range of potential platform and well site locations and pipeline approaches to be considered through FEED.

#### Operation of the Offshore Scheme

An as-laid Pipeline survey will be undertaken following Pipeline installation. During operation it is standard practice for a Pipeline inspection survey to be undertaken at 1-2 yearly intervals as part of routine maintenance activity. This is undertaken for safety reasons to minimise any snagging hazards.

The burial of the nearshore pipeline will be at a sufficient depth to avoid exposure out to the 30 m depth contour. There is the potential for scour to occur around the exposed offshore Pipeline during the operational term of the project. The degree of scour is related to seabed current velocity, direction and sediment type. The peak orbital velocity at the seabed associated with the one year maximum calculated wave height for shallow depths (16 m) in the offshore Easington area is 3.57 m/s. If the tidal current is aligned with the wave direction then bottom current velocities in the shallow waters could reach up to 5 m/s during a storm surge (Statoil 2004). This value is however, significantly higher than those predicted for combined extreme tidal, wind and surge induced velocities (>2 m/s) at the York gas platform (42 m water depth) reflecting the influence that water depth has on especially extreme wind, wave and surge forced velocities. Based on bottom currents in the area, it was concluded that scour effects would not be present at depths below 50 m for Langeded (a surface laid 44" pipeline). This is consistent with data collected during the pipeline route survey for the Offshore Scheme, which did not reveal any noticeable scour in the vicinity of the Langeded pipeline, recorded at a depth of 50-51 m below lowest astronomical tide. Any potential scour would be restricted to the exposed length of pipe between the exit of the trench and a depth of at least 50 m. Interpreted sonar data from the Pipeline route survey indicates that numerous large boulders up to 4.4 m in diameter are located on the seabed increasing in number seawards of 9 km from the shore and are probably associated with the exposure of underlying boulder clay. Should Pipeline monitoring reveal a requirement for stabilisation materials between the exit of the trench and the 50 m contour the use of stabilisation materials would not be usual within this area of the seabed.

The platform will be operated from a control room onshore. Regular supply trips are not envisaged and the platform is expected to be unmanned for 6-7 weeks at a time. In keeping with other project elements, the platform is expected to have a 40 year lifespan.

### **Sediment Transport – changes to sediment transport which could impact on the Humber SAC/SPA**

The installation of the Offshore Pipeline could theoretically result in effects on the physical regime or structure of a site, in two ways:

- 1) Reduction or increase of the down drift sediment supply during construction as a result of the trenching and creation of an access channel for the nearshore Pipeline
- 2) Interference with down drift sediment supplies during operation.

The shore duration of the construction works means that there is no potential for a reduction in sediment supply. The nearshore pipeline will be buried and will therefore not interfere with the sediment supply along the Holderness Coast in the long term. Any potential effect on the physical regime / structure to the Humber SAC / SPA to the south (which is the direction of sediment supply along the Holderness Coast) could therefore only be associated with the supply of *additional* sediment during the temporary trenching operations.

During trenching of the nearshore pipeline the sidecast material would be left on the seabed and backfilled as soon as possible following pipeline installation. The principal substrate being excavated is cohesive boulder clay. The cohesiveness of the clay means that very little of the excavated material is expected to break down over the duration of the temporary trenching operations. In addition the trenching operations will be undertaken in the summer months at which time natural sediment movement, and the erosive power of the waves and currents will be at a minimum. A worst case estimate for the loss of sidecast material to the water column is 10% (Royal Haskoning (2011)). This represents a small additional input of sediment in the context of wider erosion of fine-grained (i.e. very

fine sand, silt and clay) sediment from the Holderness coast (approximately 2.5 million m<sup>3</sup> per year, or 3 million m<sup>3</sup> including coarser sediment fractions).

Seabed scour is only possible on the exposed length of pipe between the exit of the trench and a depth of at least 50m. It is not anticipated that any scour will occur and rock placement is not proposed. However, should monitoring surveys reveal any localised scour, localised placement of stabilisation materials will be considered. Interpreted sonar data from the pipeline route survey indicates that numerous large boulders up to 4.4m in diameter are located on the seabed, increasing in number seawards of 9km from the shore, and are probably associated with exposure of underlying boulder clay. The effects of locally placed scour protection would be no different from these naturally occurring boulders.

It is estimated that only 3% of material eroded from the Holderness Coast is deposited at Spurn Head each year, and this mainly comprises of the coarse fraction of the eroded sediment. Of the 3% deposited, the material is primarily derived from the southern portion of the Holderness Coast (from Barmston southwards). Longshore transport rates have previously been estimated at Barmston for which it was noted that sediment transport was minimal and confined to peak spring flows. Therefore of the 3% contribution of sediment to Spurn Head from erosion of the Holderness Coast, the amount contributed from the section of coastline where the Onshore and Offshore Schemes are located is likely to be negligible.

The fact that work will be undertaken in the summer months, that the principal substrate excavated will be cohesive boulder clay, and that any contribution to sediment supply from trenching will be temporary mean that the supply of additional sediment is likely to be minimal. Coupled with the fact that very little material from this part of the Holderness coast contributes to the 3% supply to Spurn Head the Offshore Scheme, it is considered to be very unlikely that significant effects will result due to an alteration in the physical regime or structure of Spurn Head or the Humber SAC/SPA.

Section 5.3 of the NSER has been updated to reflect the above.

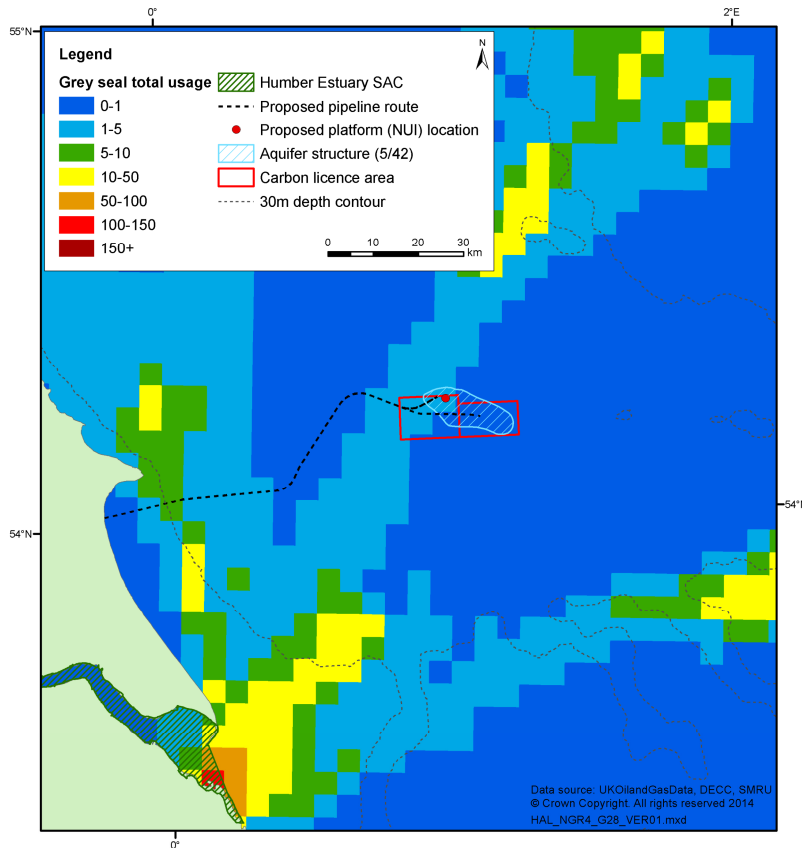
### **Disturbance Effects**

#### Disturbance in relation to grey seal an interest feature of the Humber Estuary SAC

Once installed the Offshore Scheme will be operated remotely. A Pipeline inspection survey will be undertaken at 1-2 yearly intervals for safety reasons and to minimise snagging hazards. The NUI will be unmanned and maintenance vessel transits to the NUI are expected to have a frequency of once every 6-7 weeks. Therefore due to the limited potential the Offshore Scheme is not likely to result in a significant adverse effect from disturbance during the operation of the Offshore Scheme.

The Humber SAC is approximately 50 km from the Offshore Scheme at its closest point. The nearest seal haul out site is Donna Nook on the entrance to the Humber Estuary (approximately 70 km to the south). A Grey seal usage map is presented in Figure 2 below which is derived based on seal tag telemetry data indicates limited usage of the Offshore Scheme area.

**Figure 2 – Estimated total at sea use of grey seals**



There is no mechanism for the Offshore Scheme to directly affect this interest feature within the Humber SAC, as it is located 50 km from the Offshore Scheme, the installation will be temporary, being limited to a 4 month period and there is limited usage of the Offshore Scheme area by this interest feature. Grey seal usage of the Offshore Scheme area is very low, with the majority of the 5km squares monitored showing number in the range of 0-1 and 1-5, compared to 10-50 and 50-100 individuals per 5km square closer to the estuary.

Section 5.3 and Table 5.4 of the NSER have been updated to reflect the above.

Disturbance in relation to Flamborough Head SPA

Once installed the Offshore Scheme will be operated remotely. A Pipeline inspection survey will be undertaken at 1-2 yearly intervals for safety reasons and to minimise snagging hazards. The NUI will be unmanned and maintenance vessel transits to the NUI are expected to have a frequency of once every 6-7 weeks. Therefore due to the limited potential the Offshore Scheme is not likely to result in a significant adverse effect from disturbance during the operation of the Offshore Scheme.

The Offshore Scheme is located 4 km from the site at its closest point. The installation of the Offshore Scheme will be temporary and transient and at the closest point will be installed at a rate of approximately 500 m / day and very limited in duration. In total the Offshore Pipeline will take 4 months to install, using up to four vessels for the nearshore Pipeline and up to three vessels, plus a supply vessel (when required) for the offshore Pipeline.



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There is no mechanism for the Offshore Scheme to affect this interest feature as the Offshore Scheme is outside of the SPA, the installation will be temporary and discrete to the Offshore Pipeline Route and therefore will not result in a likely significant effect on the SPA population of this species.

Section 5.3 and Table 5.4 of the NSER have been update to reflect the above.

We hope the updated NSER satisfies the points raised by Natural England with regards to provision of additional information on the Offshore Scheme to support the conclusions of reached.

Yours sincerely,



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**Figure 1**





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**Figure 2**

**Annex C - National Grid letter to the Planning Inspectorate – 16 June 2014**

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16 June 2014

## **Yorkshire and Humber CCS Cross Country Pipeline: No Significant Environmental Effects Report**

Dear Mr Davies

Thank you for organising the teleconference with Natural England on 13<sup>th</sup> June 2014 to discuss National Grid's No Significant Environmental Effects Report (NSER). The NSER is to be submitted as part of our proposed application for a Development Consent Order for the Yorkshire and Humber CCS Cross Country Pipeline. As requested, this letter sets out National Grid's notes from the meeting along with some further observations and detail on how progress will be made.

The teleconference was arranged specifically to discuss the letter received by National Grid from Natural England on the 3<sup>rd</sup> June 2014 in response to a request to review National Grid's draft NSER under Natural England's discretionary advice service. I have since provided you with a copy of Natural England's letter and National Grid's reply (dated 9<sup>th</sup> June 2014) which included further information to answer Natural England's queries. Our teleconference therefore focused on Natural England's verbal comments on National Grid's response.

### **Approach to Consenting**

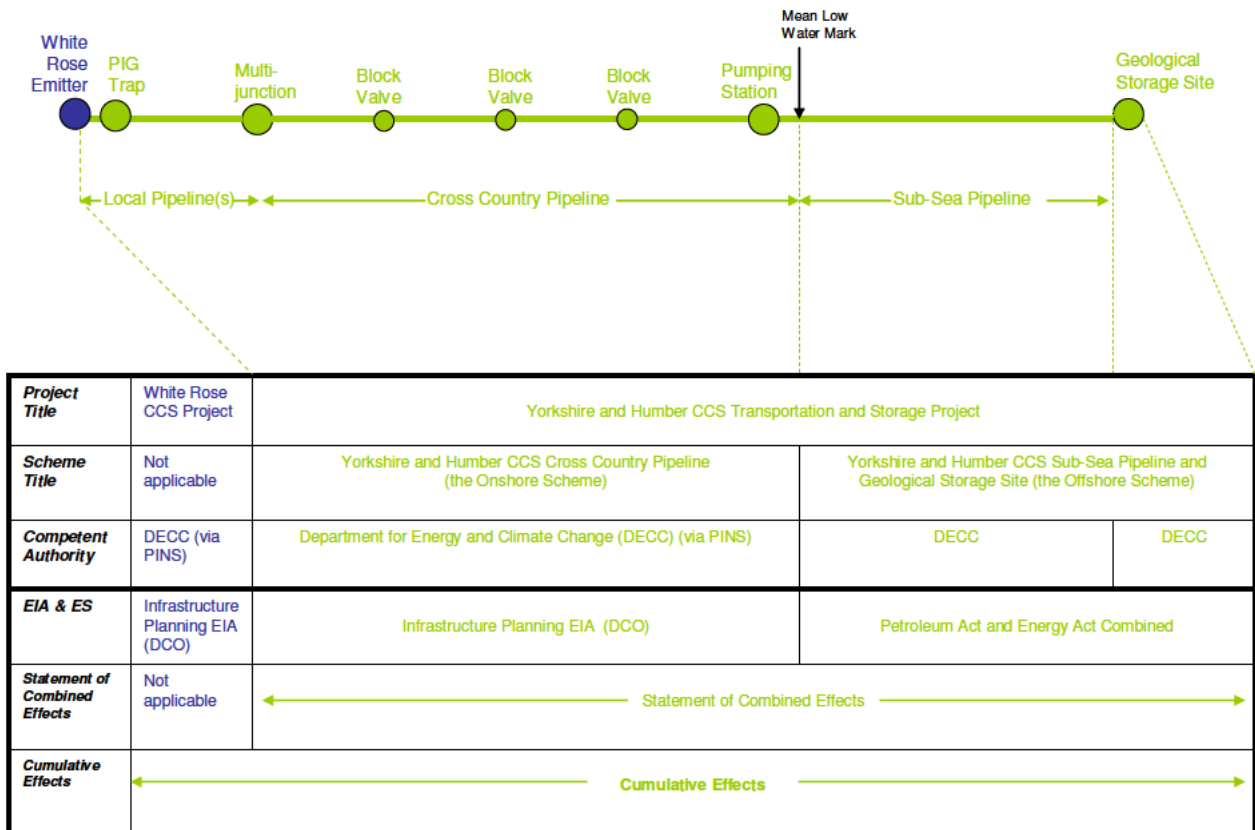
At the start of the call I explained the background to National Grid's consenting strategy. As you are aware the Yorkshire and Humber CCS Cross Country Pipeline DCO (described as the "Onshore Scheme") application forms part of a wider project to demonstrate the full chain of CCS at a commercial scale. In its entirety, the project incorporates an offshore sub-sea pipeline and geological storage site promoted separately by National Grid and consented in accordance with the Petroleum Act 1998 and Energy Act 2008 respectively (and collectively described as the "Offshore Scheme"); and a new CCS ready Oxyfuel Power Station known as the White Rose CCS Project which is a Nationally Significant Infrastructure Project being promoted separately by Capture Power Limited.

**Securing our energy supply for future generations.**



An illustration of the respective project components along with how each issue is being assessed in terms of Environmental Impact Assessment (EIA) is illustrated below:

**Yorkshire and Humber CCS Cross Country Pipeline Interface Diagram**



During the call I outlined the respective timescales for determining the different applications. As discussed, it is anticipated that it will take around 15 months from submission for the Secretary of State (SoS) to issue a decision on the DCO application, but the timescales for the offshore consents are considerably shorter and are anticipated to take around 3 months from application submission.

The project needs to take a Final Investment Decision (FID) by the end of 2015. To substantially reduce the risk around this decision, all National Grid consents need to be in place prior to FID being taken. This requires National Grid to apply for a DCO in June 2014, with the application for the Offshore Scheme being made in 2015. The timing of the respective application submissions has dictated the critical path for the project's development and reflects the nature and availability of information and the progress of the various onshore and offshore investigations.

All necessary environmental information will be provided with each application in that each application will be accompanied by an Environmental Statement pursuant to the respective EIA regulations and a NSER or information to support the completion of an Appropriate Assessment pursuant to the Habitat Regulations as appropriate. Regardless of jurisdictional regimes National Grid is providing a 'Statement of Combined Effects' with both onshore and offshore applications to explain to the respective competent authorities the overall likely effects that would be experienced as a result of the implementation of both Onshore and Offshore Schemes. Whilst the likely effects of the Onshore Scheme are known and documented in the Environmental Statement which will accompany the DCO, surveys and engineering design work are still being completed for the Offshore Scheme which means the Statement of Combined Effects presents a considered worst case view of likely effects.

## **No Significant Environmental Effects Report**

### *Onshore Scheme*

National Grid has prepared a NSER to accompany its application for a DCO. In the NSER evidence is presented to demonstrate that the Onshore Scheme is not likely to affect the interest features of any Natura 2000 sites. This point is agreed with Natural England.

### *In Combination Effects*

Natural England's response of 3<sup>rd</sup> June raised concerns on the level of information provided for the Offshore Scheme to rule out a likely significant effect on the Humber Estuary Special Area of Conservation (SAC) / Special Protection Area (SPA) in terms of sediment transport and Flamborough Head SPA and the Humber Estuary SAC in terms of disturbance.

The conclusion of no likely significant effects can be reached if either a) there is no mechanism (i.e. stage 1b of the NSER methodology where there is no source or pathway for effects) or b) the effect is completely avoided e.g. by the timing of works (i.e. stage 1c of the NSER methodology).

The NSER for the Onshore Scheme has ruled out the potential for a likely significant effect on both the Humber Estuary SAC (at Stage 1c) and Flamborough Head SPA (at Stage 1b). Therefore neither of these sites were taken through to the in-combination test, as it was concluded that there was no mechanism for the Onshore Scheme to result in a likely significant effect. Regarding the Humber Estuary, this position is supported by Natural England in their response of the 3<sup>rd</sup> June:

*We also note the information in Section 4.6 of the No Significant Effects Report, and we are satisfied that the construction works at the landfall are not likely to have a significant effect on the interest features of the Humber Estuary SAC.*

The NSER report ruled out the potential for a likely significant effect with regards to Flamborough Head SPA at Stage 1b as the interest features of this site do not use habitat within the proposed Order Limits for breeding or foraging. Therefore, again, there is no mechanism for the Onshore Scheme to affect this site and as such this site was not taken through to the in-combination test.

The report concludes that the Onshore Scheme does not have a mechanism to result in a likely significant effect on these sites; therefore there is no potential for an in-combination effect with the Offshore Scheme. Irrespective of this conclusion, further information on the Offshore Scheme has been provided in the NSER in response to Natural England's comments.

### *Offshore Scheme*

During the teleconference, there was agreement between all parties that the Offshore Scheme alone or in-combination with the Onshore Scheme appears to carry a low risk of affecting the interest features of any Natura 2000 sites. But it is understood that Natural England is reluctant to state that there are no likely significant effects on Natura 2000 sites from the Offshore Scheme due to the lack of specific detail about the construction of the Offshore Scheme in the NSER.

The Offshore Scheme is at a pre-Front End Engineering Design (FEED) stage. Accordingly, final options selection with regards to the approach to pipeline installation has not yet been made, however the project feasibility is at an advanced stage as reflected in the NSER and the Statement of Combined Effects. As additional information becomes available from ongoing surveys and as FEED progresses, greater definition in the parameters of the Offshore Scheme will be known. It is anticipated that this information would be available for consideration during the examination of the Onshore Scheme.

As set out above, the Offshore Scheme is subject to a separate consent and permitting process from the Onshore Scheme, and falls under the primary legislation set out in the Energy Act 2008 and Petroleum Act 1998, and with regards to EIA, the Offshore Petroleum Production and Pipe-lines (Assessment of Environmental Effects) Regulations 1999. The Offshore Petroleum Activities (Conservation of Habitats) Regulations 2001 (as amended) (OPAR 2001) implement the requirements of Article 6(3) and Article 6(4) of the Habitats Directive (92/43/EEC) with respect to oil and gas, and

carbon dioxide transport and storage<sup>1</sup> activities in UK waters. On current programme, an EIA scoping report for the Offshore Scheme will be issued to relevant statutory bodies and stakeholders in mid-2014, with a view to drafting and submitting an Environmental Statement to DECC in late 2014.

The Offshore Scheme Environmental Statement will contain sufficient information to allow DECC to be able to fulfil their obligations with regards to the HRA process, in relation to the Offshore Scheme and then, together with the information accompanying the DCO application, the project overall. As statutory advisors to Government, both Natural England and the JNCC will be consulted on the content of the Offshore Scheme Environmental Statement, and have input to the HRA process at that stage.

The fact that the Offshore Scheme will be subject to a separate consenting process and be determined by the same SoS as the Onshore Scheme should give comfort that a thorough assessment of the environmental effects has been and will continue to be undertaken for each Scheme. Additionally, as further information from the ongoing FEED for the Offshore Scheme will become available in time for the examination of the Onshore Scheme this will ensure that the SoS has all necessary information for both the Schemes together at the point of decision. National Grid considers that the submission of an application for the Onshore Scheme now does not prejudice the need for further assessment and enables the project to move forward.

The consequence of waiting to submit an application for the Onshore Scheme at a point when detailed parameters have been set for the Offshore Scheme would mean a significant delay to the submission, the FID and commissioning of the whole end to end project.

### **Proposed Plan of Action**

Our teleconference provided further evidence of the value of continued and regular dialogue. Accordingly, and following on from our collective discussion we have noted the below as an agreed plan of action:

- 1) On Wednesday 18<sup>th</sup> June 2014 National Grid will make its application for a DCO to PINS for the Onshore Scheme which will include a copy of the NSER, acknowledging that Natural England consider there to be uncertainty regarding aspects relating to the Offshore Scheme.
- 2) National Grid will continue to develop details about the construction of the Offshore Scheme as it is progressed towards full EIA.
- 3) National Grid will maintain regular dialogue with Natural England commencing with a face to face meeting in the next few weeks to agree an approach to addressing any detailed technical issues and to agree an approach to reporting the findings for the Offshore Scheme.
- 4) National Grid will continue to generate information on the Offshore Scheme through the completion of surveys and commencement of FEED and will share results with Natural England to further support conclusions set out in the NSER.
- 5) National Grid will provide evidence to either screen out likely significant effects or provide a basis for an Appropriate Assessment to be undertaken by DECC for the Offshore Scheme at or prior to making an application for the Offshore Scheme.

I hope this letter provides a clear understanding of our discussions. If would you like to talk in more detail about any aspect of this letter please do not hesitate to contact me using the details above.

Yours sincerely,



**Richard Gwilliam**  
Senior Consents Officer, National Grid

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<sup>1</sup> *The Energy Act (Consequential Modifications) (Offshore Environmental Protection) Order 2010*



**Annex D - Natural England letter to the Planning Inspectorate - 17 June 2014**



Date: 17 June 2014  
Our ref: Case 5076



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**BY EMAIL ONLY**

T 0300 060 3900

Dear Iwan

### **Yorkshire & Humber Carbon Capture & Storage Project: Habitats Regulations Assessment**

Thank you for arranging the telephone meeting on Friday 12 June to discuss the above. This letter is to confirm Natural England's advice with regard to the Conservation of Habitats and Species Regulations 2010 (the Habitats Regulations) as discussed on the teleconference.

We have been in discussion with National Grid and their consultants since we raised the issues around the No Likely Significant Effects Report (NLSEER) in our response of 5<sup>th</sup> February 2014. This issue appears to have arisen due to some confusion over the details provided regarding the offshore aspects of this project, which are to be consented under a separate regime. While consenting aspects of the same project under different regimes is not unprecedented, indeed the National Policy Statement EN1 provides for such a situation (section 4.9 refers to grid connections), it is uncommon enough to generate confusion. We have agreed previously with both PINS and National Grid that in Habitats Regulations terminology that both the pipeline application onshore and offshore are part of the same project, despite them being consented under different regimes.

As we have previously stated in our letter of 3 June 2014, we are satisfied that the onshore elements of the proposal are not likely to have significant effects on European sites.

However, as stated in our email of 11 June, following the provision of additional information, we confirmed on the call on Friday that as there remains some uncertainty as to the detail of the offshore pipeline construction and potential impacts on designated sites, we do not consider that sufficient information has been submitted to determine that likely significant effects of the offshore element of the scheme can be ruled out, either alone or in-combination with other plans and projects. We therefore advise that the proposal should proceed to the second stage of the Habitats Regulations Assessment process and that a Habitats Regulations Assessment report is produced in order to inform an Appropriate Assessment.

#### **The 'likely significant' effect test**

Guidance on how to interpret the 'likely significant effect' test can be found in both case law and European Commission guidance.

It was established in Waddenzee (Case C- 127/02) that the trigger of the appropriate assessment mechanism in Article 6(3) of the Habitats Directive is a mere probability of a significant effect on a site – a probability or a risk is enough (see paragraphs 41, 44). Therefore, a risk of an effect is sufficient. It was also established that such a risk exists if it cannot be excluded on the basis of objective information that the plan or project will have significant effects on the site concerned (paragraph 45). The decision should be made on a precautionary basis. Therefore, there must be an appropriate

assessment unless, on the basis of objective information, it can be excluded that the plan or project will have a significant effect on the site, either individually or in combination with other plans or projects (paragraph 45).

Further guidance on this test can be found in the Advocate General's Opinion in the recent 'Sweetman' case (Case C-258/11), see paragraphs 46 to 49, and in the CJEU decision, see paras 28 to 30. This confirms the principles established in Waddenzee.

Therefore the possibility of an effect on a site will trigger an appropriate assessment. As the Advocate General states in her opinion in the 'Sweetman' case:

*'The requirement that an effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans and projects that have no appreciable effect on the site are thereby excluded. If all plans and projects capable of having any effect whatsoever on the site were caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill'. (paragraph 48)*

*'The threshold at the first stage of Article (3) is thus a very low one. It operates merely as a trigger, in order to determine whether an appropriate assessment must be undertaken of the implications of the plan or project for the conservation objectives for the site. The purpose of that assessment is that the plan or project in question should be considered thoroughly, on the basis of what the Court has termed 'the best scientific knowledge in the field'...(paragraph 49)*

Also see paragraphs 4.4.1 to 4.4.3 of the European Commission's Managing Natura 2000 Sites guidance.

In accordance with the CJEU approach in the 'Sweetman' case, questions as to the potential impact on site integrity are considered in light of the detailed appropriate assessment. It is at this point that the risk of lasting harm to the ecological characteristics of sites can be considered, once all available/obtainable and relevant information is collated.

**Natural England has not advised that potential impacts are certain, but that there is currently not enough certainty to rule out potential impacts. Indeed on the call of the 12<sup>th</sup> June we referred to the relatively low risk of the offshore element of the project and that we thought it 'unlikely that adverse effects' would result.**

### **What is required**

Under the Planning Act 2008, if it is determined that an NSIP is likely to have a significant effect on a European site and / or a European marine site, the applicant must provide a report with the application showing the site(s) that may be affected together with sufficient information to enable the competent authority to make an Appropriate Assessment (AA). Evidence will need to be provided to give confidence to the Planning Inspectorate (PINs) that, in the absence of further information, effective mitigation measures (which could include a range of options) can be called upon during construction, operation and maintenance which are appropriate to the nature of the development.

Additionally where there is no evidence for the technology being implemented, it will need to be demonstrated that the safeguards and monitoring is sufficient to satisfy PINs that there will be no adverse effect on the integrity of any European site, either alone or in combination with other plans or projects. It should be noted that to compile such a report, much of the information in the Statement of Combined Effects, in particular the information in Section 5.4, can be used to inform it along with the additional information provided more recently.

The in-combination assessment can relate to different aspects of one project, or the combined effects of individual projects. Interlinked projects are often essentially segments or elements of one overall project and division into individual segments can occur for a number of reasons, commonly because of the need for multiple authorisations in order to fully implement the overall project as in this case

Regulation 61 of the Habitats Regulations sets out the requirements for the step by step process of assessing the impacts of plans and projects, and refers to the need for appropriate assessment of those projects that are likely to have a significant effect, either alone or in-combination with other plans or projects. So it will also be important if significant effects are ruled out on their own that a consideration is made to in-combination assessment with other offshore plans or projects.

Section 4.4.3 of the Managing Natura 2000 guidance advises that *“It is important to note that the underlying intention of this combination provision is to take account of cumulative impacts, and these will often only occur over time. In that context, one can consider plans or projects which are **completed, approved but uncompleted, or not yet proposed.**”*

#### **Next Steps**

- We have provided this letter to the Planning Inspectorate and National Grid to clarify our advice given in the teleconference on Friday as requested
- We discussed on the call that whilst not ideal, it is quite normal practice for an HRA to be provided with the submission for the DCO that all parties may not have agreed at the beginning of the process. It is recognised that further information will be provided in reasonable timescales, by National Grid, on the offshore elements of the scheme that may well enable issues to be resolved. Indeed, National Grid indicated that consenting the offshore element of the project will begin to coincide more closely with the onshore application as it progresses through the PINs examination timetable. There is, therefore, a clear ‘roadmap’ here to see the resolution of the offshore issues.
- In order to facilitate this further, Natural England also agreed to consider the additional information provided by National Grid on 9<sup>th</sup> June 2014 and will provide further advice via a face to face meeting with the Applicant.

We would be happy to comment further should the need arise but if in the meantime you have any queries, please contact James Walsh on 0300 060 1832.

Yours sincerely

Deborah Hall  
Sustainable Development