

**NORTH LINCOLNSHIRE COUNCIL**

# **LOCAL IMPACT REPORT**

**Planning Act 2008 (as amended)**

**Infrastructure Planning (Examination Procedure) Rules 2010**

**SUBJECT: APPLICATION FOR AN ORDER GRANTING DEVELOPMENT  
CONSENT FOR THE KEADBY 3 LOW CARBON GAS POWER STATION  
PROJECT**

**APPLICANT: KEADBY GENERATION LIMITED**

**SITE: LAND AT AND IN THE VICINITY OF THE EXISTING KEADBY POWER  
STATIONS (KEADBY 1 AND KEADBY 2), KEADBY, NEAR SCUNTHORPE,  
NORTH LINCOLNSHIRE**

**Planning Inspectorate's Reference: EN010114**

December 2021

## **1. INTRODUCTION**

- 1.1 This report has been prepared by North Lincolnshire Council in accordance with the advice and requirements set out in the Planning Act 2008 and Advice Note One: Local Impact Reports (Version 2) issued by the Infrastructure Planning Commission in April 2012.
- 1.2 The Advice Note states that a Local Impact Report (LIR) is a 'Report in writing giving detail of the likely impact of the proposed development on the authority's area'.
- 1.3 The Advice Note states that when the Commission decides to accept an application it will ask the relevant local authorities to prepare a LIR. Its preparation should be prioritised and indicate where the local authority considers the development would have a positive, negative or neutral effect on the area. The Report may include any topics that they consider to be relevant to the impact of the development on their area as a means by which their existing body of knowledge and evidence on local issues can be fully and robustly reported to the Commission.
- 1.4 The Advice Note indicates that topics addressed in the Local Impact Report may include:
- site description and surroundings/location;
  - details of the proposal;
  - relevant planning history and any issues arising;
  - relevant development plan policies, supplementary planning guidance or documents, development briefs or approved master plans and an appraisal of their relationship and relevance to the proposals;

- relevant development proposals under consideration or granted permission but not commenced or completed;
- local area characteristics such as urban and landscape qualities and nature
- conservation sites;
- local transport patterns and issues;
- site and area constraints;
- designated sites;
- socio-economic and community matters;
- consideration of the impact of the proposed provisions and requirements within the draft Order in respect of all of the above;
- development consent obligations and their impact on the local authority's area.

1.5 The Local Impact Report may also comment on the development consent obligations and the requirements and also any relevant representations.

1.6 In producing the LIR the council has not sought the views of local parish councils and local interest groups because the parish councils and other local groups have the opportunity, through the consultation process, to make their observations direct to the Planning Inspectorate.

1.7 The LIR is intended to be used by the local authority as a means by which the existing body of local knowledge and evidence on local issues is fully and robustly reported to the appointed Examining Authority.

- 1.8 Set out below is the LIR of North Lincolnshire Council. It identifies the most relevant policies and the main issues that concern this Council.

## **2. LOCATION**

- 2.1 It is considered that the Application documents clearly and robustly set out the context for the site. This includes identification of the existing development that makes up the Keadby Power Station Site and identification of the nearest settlements and sensitive receptors.
- 2.2 The application site is located close to the western bank of the River Trent and adjacent to the Keadby and Stainforth Canal and number of drainage ditches, which are subject to Local Wildlife Site designations. The River Trent immediately to the east of the application site forms part of the designated RAMSAR, SSI and SAC designations of the Humber Estuary. It is also noted that the Stainforth and Keadby Canal is locally designated as a Local Wildlife Site.
- 2.3 The site (other than part of the Water Discharge Corridor) is located outside of any defined development limit and is 'white land', being unallocated for any specific land use as part of the Development Plan for North Lincolnshire. Notwithstanding this, the immediate surroundings of the site are characterised by energy generation and transmission infrastructure including the existing Keadby Power Station site, Keadby Windfarm, a National grid 400kV substation and electricity pylons and associated power lines.
- 2.4 The existing Keadby Power Station Site comprises the operational Keadby 1 Power Station and the Keadby 2 Power Station which is currently under construction. Both of these power stations are fuelled by natural gas.
- 2.4 The proposed Power and Carbon Capture Site (PCC) covers an area of approximately 18.7ha of the Keadby Power Station Site, to the west of the Keadby 2 Power Station and to the east of the former Keadby Ash Tip.

2.5 The nearest settlement is the village of Keadby which is approximately 1km east of the 'main' PCC Site. Other nearby settlements include the village of Ealand (2.2km) and the market town of Crowle (3.6km) to the west; the village of Althorpe approximately 1.7km to the south east and the village of Gunness located on the eastern bank of the River Trent. There are a number of individual residential properties that sit closer to the proposed PCC Site and the LPA is content that the Application documents appropriately identifies these individual receptors.

2.6 The wider area is rural in nature and is characterised by flat, low lying, farmland delineated by drainage ditches and relatively open field boundaries.

### **3. POLICY FRAMEWORK**

#### **3.1 NATIONAL POLICY STATEMENTS**

3.1.1 In accordance with Section 104 of the Planning Act 2008, in determining applications for development consent decision makers must have regard to:

- (a) any national policy statement which has effect in relation to development of the description to which the application relates;
- (aa) the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009;
- (b) any local impact report submitted to the Secretary of State before the deadline specified in a notice under section 60(2);
- (c) any matters prescribed in relation to development of the description to which the application relates; and
- (d) any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision.

Paragraph 4.1.5 of the Overarching National Policy Statement (NPS) for Energy (NPS EN-1) clarifies that along with NPS's:

*“Other matters that the IPC (now replaced by the Planning Inspectorate) may consider both important and relevant to its decision-making may include Development Plan Documents or other documents in the Local Development Framework. In the event of a conflict between these or any other documents and an NPS, the NPS prevails for the purposes of NID decision making given the national significance of the infrastructure.”*

3.2.2 The overarching National Policy Statement for Energy (NPS EN-1) sets out the Government's energy policy, and explains the need for new energy infrastructure and instructs the Planning Inspectorate on how to assess the impacts of energy infrastructure development in general. It sets out the urgency for new energy infrastructure and provides that the Secretary of State should start with a presumption in favour of granting a Development Consent Order (DCO) for energy Nationally Significant Infrastructure Projects unless any more specific and relevant policies set out within the NPS's clearly indicate that consent should be refused; or that Section 104 of the Planning Act 2008 applies. Section 104 states that an application for energy infrastructure must be decided in accordance with the relevant NPS's except where in doing so it would cause one or more of the following:

- lead to the UK being in breach of its international obligations;
- be in breach of any statutory duty that applies to the Secretary of State;
- be unlawful;
- result in adverse impacts from the development outweighing the benefits; or
- be contrary to regulations about how decisions are to be taken.

3.2.3 In considering proposals, and particularly when weighing up adverse impacts and benefits, the Secretary of State should take in to account the proposals:

- potential benefits, including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and
- potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.

3.2.4 Paragraphs 3.6.4 to 3.6.7 explains the role that Carbon Capture and Storage can have in meeting emissions targets, whilst maintaining security of supply.

3.2.5 National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (NPS EN-2) specifically relates to fossil fuel generating stations. It states *“Fossil fuel generating stations play a vital role in providing reliable electricity supplies and a secure and diverse energy mix as the UK makes the transition to a low carbon economy”*.

3.2.6 National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (NPS EN-4) provides guidance on the assessment of applications for new gas and oil pipelines. Key technology specific considerations for gas pipelines include proximity to sensitive land uses when planning routes; pipeline safety; noise and vibration; biodiversity; landscape and visual; water quality and resources; and soils and geology.

3.2.7 National Policy Statement for Electricity Networks Infrastructure (NPS EN-5) outline the principles on which the Secretary of State will apply to the consideration of applications for new electricity transmission lines as well as associated infrastructure, such as substations. Considerations to be taken into account include biodiversity and geological conservation, landscape and visual, noise and vibration and the impacts of electric and magnetic fields.

3.2.8 In addition to the adopted energy NPS's referred to above, between 6 September 2021 and 29 November 2021 the Government ran a consultation on a suite of draft revised energy NPS's. Whilst the existing NPS's form the statutory framework for determining nationally significant infrastructure projects relating to energy, the draft revised NPS's may be deemed to be "important and relevant" considerations by the determining Secretary of State.

3.2.9 The Governments draft revised policies focus on the desire to decarbonise and ensuring that there is security of energy supply in the UK and that the cost of energy is affordable for the end-users. It is stated that the need for new energy infrastructure is "urgent" and proposes that the UK's energy infrastructure be made up of a mix of energy sources including renewables, nuclear, low carbon hydrogen, residual use of unabated natural gas and crude oil fuels.

2.2.10 Whilst the Government identifies a clear role for "known technologies", it states that other "nascent technologies, data and innovative infrastructure projects" will be needed and confirms that planning decision makers should give "substantial weight" to "novel technologies or processes" that emerge during the lifetime of the NPS's.

2.2.11 One technology that is specifically referred to is carbon capture and storage (CCS). Draft revised NPS EN-1 states that "there do not appear to be any realistic alternatives to new CCS infrastructure for delivering net zero by 2050" and proposes to revise policy so that the Secretary of State gives "substantial weight" to their need when reviewing proposed developments of national significance.

2.1.12 In terms of the assessment of new infrastructure, changes have been made which align with the Environment Bill. New sections have also been added on marine considerations and biodiversity net gain and further detail added on environmental principles.

### 3.3 *MARINE POLICY STATEMENT*

- 3.3.1 The UK Marine Policy Statement sets out the framework for preparing Marine Plans and taking decisions affecting the marine environment. While the Proposed Development does not directly affect the wider marine environment, some temporary activities (Work 10B) and permanent minor components (parts of Works 4B and 5) of the Proposed Development are proposed within the estuarine waters of the river Trent and therefore the MPS needs to be considered.
- 3.3.2 Relevant objectives set out in the MPS are “achieving a sustainable marine economy”, “ensuring a strong, healthy and just society” and “living within environmental limits”. On the whole the MPS seeks to balance the economic, social and environmental considerations that will deliver these objectives and secure sustainable development of the UK marine area.
- 3.3.3 The relevant Marine Plans for this application are the East Inshore and East Offshore Marine Plans.

### 3.4 *NATIONAL PLANNING POLICY FRAMEWORK*

- 3.4.1 The National Planning Policy Framework (NPPF) sets out the Government’s planning policies for England and how these are to be applied. Paragraph 5 of the NPPF makes it clear that the document does not contain specific policies for NSIP’s and that NSIP applications should be determined in accordance with the decision making framework set out in the Planning Act 2008 and relevant NPS’s, as well as other matters that are considered both important and relevant. Paragraph 5 clarifies that matters considered both important and relevant to NSIP’s may include the NPPF.
- 3.4.2 Paragraph 7 of the NPPF recognises the purpose of the planning system as contributing to the achievement of sustainable development. Paragraph 8 goes on to identify three dimensions of sustainable development: economic, social and environmental. Paragraph 9 goes on to stress that these three

roles are mutually dependent and should not be undertaken in isolation. The NPPF also introduces a presumption in favour of sustainable development.

3.4.3 The following sections of the NPPF are considered to be relevant to the consideration of this application:

- Achieving sustainable development
- Decision making
- Building a strong, competitive economy
- Promoting healthy and safe communities;
- Promoting sustainable transport;
- Achieving well-designed places;
- Meeting the challenge of climate change, flooding and coastal change;
- Conserving and enhancing the natural environment; and
- Conserving and enhancing the historic environment.

3.4.4 The policies contained within the NPPF are expanded upon and supported by the Planning Practice Guidance (PPG). The sections of the PPG most relevant to the consideration of this application are:

- Air Quality;
- Climate Change;
- Design;
- Environmental Impact Assessment;
- Flood Risk and Coastal Change;
- Healthy and safe communities;
- Historic Environment;
- Land affected by contamination;

- Light Pollution;
- Natural Environment;
- Noise; and
- Travel plans, Transport Assessments and Statements.

### 3.5 *LOCAL DEVELOPMENT PLAN*

3.5.1 The current Development Plan for North Lincolnshire comprises the saved policies of the North Lincolnshire Local Plan (2003); the North Lincolnshire Core Strategy (2011); and the North Lincolnshire Housing and Employment Land Allocations Development Plan Document (2016). There are no Neighbourhood Plans relevant to the determination of this application. It is considered that these Development Plan documents are “important and relevant” considerations as defined in the Planning Act 2008.

3.5.2 The Development Plan policies relevant to the consideration of this application are set out below.

#### 3.5.3 **North Lincolnshire Local Plan (2003):**

- IN10 – Wharves;
- RD2 – Development in the Open Countryside;
- T1 – Location of Development;
- T2 – Access to Development;
- T5 – Green Travel Plans;
- T6 – Pedestrian Routes and Footpaths;
- T8 - Cyclists and Development
- T14 – The North Lincolnshire Strategic Road Network (NLSRN);
- T18 – Traffic Management;

- T19 – Car Parking Provision & Standards;
- T23 – Water Freight;
- T24 – Road Freight;
- LC1 – Special Protection Areas, Special Areas of Conservation and Ramsar Sites;
- LC2 – Sites of Special Scientific Interest and National Nature Reserves;
- LC4 – Development Affecting Sites of Local Nature Conservation Importance;
- LC5 – Species Protection;
- LC6 – Habitat Creation;
- LC7 – Landscape Protection;
- LC12 – Protection of Trees, Woodland and Hedgerows;
- HE5 – Development affecting Listed Buildings;
- HE9 – Archaeological Excavation;
- DS1 – General Requirements;
- DS7 – Contaminated Land;
- DS10 – New hazardous installations and pipelines;
- DS11 – Polluting Activities;
- DS12 – Light Pollution;
- DS13 – Groundwater Protection and Land Drainage;
- DS14 – Foul Sewage and Surface Water Drainage;
- DS15 – Water Resources;
- DS16 – Flood Risk; and

- DS17 – Overhead Power Lines and High-Powered Electrical Installations.

#### **3.5.4 North Lincolnshire Core Strategy (2011):**

- CS1 – Spatial Strategy for North Lincolnshire;
- CS2 – Delivering More Sustainable Development;
- CS3 – Development Limits;
- CS5 – Delivering Quality Design in North Lincolnshire;
- CS6 – Historic Environment;
- CS11 – Provision and Distribution of Employment Land;
- CS16 – North Lincolnshire's Landscape, Greenspace and Waterscape;
- CS17 – Biodiversity;
- CS18 – Sustainable Resource Use and Climate Change;
- CS19 – Flood Risk;
- CS20 – Sustainable Waste Management;
- CS25 – Promoting Sustainable Transport; and

#### **3.5.5 North Lincolnshire Housing and Employment Land Allocations Development Plan Document:**

- PS1 – Presumption in favour of sustainable development

### **3.6 *EMERGING NORTH LINCOLNSHIRE LOCAL PLAN***

3.6.1 North Lincolnshire Council is currently in the process of preparing a new Local Plan to 2038. Once formally agreed this document will replace the current North Lincolnshire Local Plan (2003), North Lincolnshire Core Strategy (2011) and Housing and Employment Land Allocations DPD (2016).

- 3.6.2 Most Recently the NLC undertook the Regulation 19 'Publication Draft' consultation between 15 October and 3 December. NLC are currently reviewing the consultations received prior to submission to the Planning Inspectorate.
- 3.6.3 The currently anticipated timeframe for adoption of the new Local Plan is 12-18 months and it is unlikely that the document will have been subject to formal examination prior to the expiry of the statutory 6 month examination period in respect of this application. As such it is considered that the emerging Local Plan is not a relevant consideration in the determination of this DCO application.

### 3.7 *PLANNING POLICY OVERVIEW*

- 3.7.1 The local Development Plan does not make specific allocation of land for energy generation purposes. The application site is located predominantly outside of defined development limits and as such policies RD2 of the North Lincolnshire Local Plan and CS2 and CS3 are relevant in assessing the principle of development. These policies seek to generally direct development within defined development limits and to previously developed sites. However Policy RD2 does allow employment related development appropriate to the open countryside provided that the open countryside is the only appropriate location and that the development cannot reasonably be accommodated within development boundaries. Policies CS2 and CS3 similarly make allowance for uses that require a countryside location.
- 3.7.2 In this instance the proposal seeks to construct a new power station within and immediately adjacent to the existing Keadby Power Station site. Given the scale and nature of the development proposed it would not be possible to be located within existing development boundaries and as such there is a need to located the development within the open countryside (i.e. outside of development limits). Notwithstanding this, large parts of the application site constitute brownfield land, being previously developed.

- 3.7.3 With regards to the appropriateness of the location, both the application site and the local area has a history of power generation and associated infrastructure. The site also offers access to electrical and gas connections that are essential to the proposed development and the siting adjacent to the existing power stations provides synergies in terms of key infrastructure, services, operations and maintenance. Furthermore the siting of the proposed development also means that it will be viewed in the context of existing large-scale industrial structures and energy infrastructure. For these reasons it is considered that the proposed development is an appropriate form of development in this location subject to it complying with the relevant policies contained in the Development Plan.
- 3.7.4 Policy CS11 of the Core Strategy seeks to identify strategic sites for future employment related development. The application site is not identified as a strategic employment site. With regards to other locations policy CS11 seeks to support development that would meet local employment needs and maximise other special locations. There is no further definition of special locations within the policy; however it does confirm that in North Lincolnshire the main business sectors are defined as “clusters” as there are a number of companies working in one particular or related industry, this includes the energy industry. Given the existing 2 power stations and other energy related infrastructure (wind farms, National Grid substation, transmission lines etc.) in the area the application could be deemed an appropriate location for the proposed development as it forms an energy “cluster” and as such constitutes a special location in accordance with policy CS11.
- 3.7.5 Overall it is considered that the proposed development generally accords with the aims of the Development Plan and that the principle of development is acceptable subject to conformity with the relevant policies of the plan, including those that seek to protect environment and amenity of the area..

#### **4. PRE-APPLICATION CONSULTATION**

- 4.1 North Lincolnshire Council has previously expressed the opinion that it has no objection to the degree of community consultation undertaken and that this consultation has been undertaken as required by Sections 42, 47 & 48 of the Planning Act 2008 (as amended).

## **5. LANDSCAPE AND VISUAL IMPACT**

- 5.1 The Council has assessed the submitted information concerning the assessment of the landscape and visual impacts and the potential cumulative impact of this proposed development. This is included in 6.2.14 – ES Chapter 10 (APP-057). The representative viewpoints set out in table 14.5 have been discussed with and agreed by North Lincolnshire Council, as has the study area (10km). The LPA are also pleased to note that the assessment includes consideration of the proposed northern boundary extension of the Lincolnshire Wolds AONB as shown on Figure 14.3. Having considered this North Lincolnshire Council is satisfied that the submitted assessment can be relied upon as a reasoned explanation of the potential impacts of the proposed development.
- 5.2 The site is located within an area that is characterised by significant industrial, energy related development, including the adjacent Keadby 1 and Keadby 2 Power Stations, Keadby Windfarm, a National Grid 400kV substation and electricity pylons and transmission lines.. It is therefore agreed that the proposed development would not be out of keeping with the existing character of the area.
- 5.3 Section 14.6 provides a summary of landscape and visual effects respectively. Potential impacts on local and more distant views and landscape character types have been assessed. Overall, the potential for harm is relatively low, as the new structures will be set within an area already affected by power stations, pylons and windfarms. Moderate adverse effects on visual amenity are predicted at three viewpoints, but again, this has to be considered in the context as a minor additional effect on areas already affected by intrusive structures.

5.4 Impact avoidance measures are set out in sections 14.5 and 14.7 of the ES and in the submitted Landscape and Biodiversity Management and Enhancement Plan. These measures are proposed to be secured by Requirements (namely Requirements 5, 6 & 7 of the draft DCO(APP-005)). North Lincolnshire Council support these measures, recognising in particular that:

- it is not possible to screen such large-scale structures, but screening of low level “clutter” can be valuable;
- on the northern boundary, screening planting could adversely affect water vole habitat and would itself be inappropriate in an otherwise open landscape;
- details of finishes etc. are important in minimising visual impacts against the skyline.

5.5 Given the scale and mass of the proposed development it is not feasible to eliminate the visual impacts of the development and as such there will be residual effects in this regard. Despite this fact it must be noted that this location already supports substantial industrial developments which contribute significantly to the character of the area.

## **6. TRAFFIC AND TRANSPORT**

6.1 The Council has assessed the submitted information concerning the assessment of potential traffic and transport effects of the proposed development. This is set out in 6.2.10 – ES Chapter 10 (APP-053) and includes the Transport Assessment and framework Construction Phase Traffic Management Plan and Framework Construction Workers Travel Plan.

6.2 The applicant has undertaken pre-application discussions with the Local Highway Authority and the relevant advice issued has been incorporated into the submitted information. The council are satisfied that the Transport

Assessment demonstrates that the proposed development will not have an adverse impact on the highway network.

- 6.3 The proposals in terms of construction access are similar to those agreed for Keadby 2 (under construction). All construction access will access the site directly from the A18, either via Mabey Bridge or the skewed bridge (abnormal loads). However, it is proposed that the access on the A18 will become the main access for all construction and operational traffic and the applicant is proposing to upgrade the existing junction to facilitate this, via the provision of a right turn holding lane to improve road safety. It is noted that the improvements to the A18 junction constitute a departure from DMRB standards and that this is still subject to agreement with the Local Highway Authority.
- 6.4 The applicant has identified that Mabey Bridge will require replacing and this is proposed to be undertaken prior to the main construction works starting on site. The improvements to the junction with the A18 will be undertaken at the same time. During these works, vehicles will access the site via the skewed bridge.
- 6.5 A temporary Traffic Regulation Order for a 40mph speed limit on the A18 is proposed in the vicinity of the site access. Whilst the Local Highway Authority would agree to this temporary TRO for the duration of construction works, a permanent reduction to the speed limit would not be supported.
- 6.6 A new gatehouse is proposed to be provided at the site access and the submitted plans show that this is set sufficiently far back to prevent vehicles queuing back onto the A18.
- 6.7 The majority of abnormal loads are proposed to access the site via the skewed bridge; however the option is retained to direct a small number of loads (up to 10) via Bonnyhale Road if required. Whilst the Local Highway Authority has no objection to this in principle it would be preferable if as many

abnormal loads as possible could access the site via the skewed bridge and that any trips via Bonnyhale Road be kept to a minimum.

- 6.8 It is estimated that the peak months for construction workers on site will be months 17-38, with over 1000 workers on site, with a modal split of 80% travelling by car, with an assumption of 2 workers per car, and 20% travelling by work minibus, with an average of 7 people per vehicle. The Local Highway Authority is satisfied with the methodology for calculating construction movements and that this will not have an adverse impact on the highway network.
- 6.9 No recent traffic counts have been undertaken due to COVID-19 and the impact this has had on traffic levels. Therefore, historic traffic data has been used and the appropriate growth factors used to calculate current flows. This approach was agreed with the Local Highway Authority at the scoping stage.
- 6.10 Further to the above, both the Framework Construction Phase Traffic Management Plan and Framework Construction Workers Travel Plan have been reviewed and are considered to be acceptable.
- 6.11 Overall the proposed development is considered to have a neutral impact on the local highway network.

## **7. BIODIVERSITY AND ECOLOGY**

- 7.1. The Council has assessed the submitted information concerning the assessment of potential ecological effects of the proposed development. This is set out in 6.2.11 – ES Chapter 11 (APP-054).
- 7.2 The application site lies adjacent to the Humber Estuary SAC and Ramsar site. Atmospheric dispersion modelling has been necessary to evaluate the potential for air pollution effects on more distant sites, such as Humber Estuary SPA, Thorne Moor SAC and Thorne and Hatfield Moors SPA.

- 7.3 The applicant has provided the Planning Inspectorate, as Competent Authority, with all of the information reasonably required for a Habitats Regulations Assessment (HRA) in the form of a shadow HRA. Potential impacts, such as noise and visual impacts on birds, entrainment of lampreys and air pollution impacts appear to have been assessed appropriately, taking into account Natural England's advice.
- 7.4 Of all the potential effects considered, only atmospheric emissions was considered to present a likely significant effect on the Humber Estuary SAC, SPA and Ramsar site, Thorne Moor SAC, Hatfield Moor SAC and Thorne and Hatfield Moors SPA. Following Appropriate Assessment, and consideration of mitigation options which form part of the committed design of the Proposed Development, the HRA concluded that emissions to air would not have an adverse effect on the integrity of any European Sites. NLC's ecologist has confirmed that they have no reason to disagree with the conclusions of the HRA.
- 7.5 With regards to protected and priority species NLC has reviewed the application in accordance with Natural England's standing advice for protected species. Having reviewed the submitted preliminary ecological appraisal NLC agree that the survey effort deployed is appropriate for the site in question.
- 7.6 Sections 11.5, 11.6 and 11.7 of Chapter 11 of the ES (and associated appendices) deal appropriately with the following species/groups in terms of Development Design and Impact Avoidance, Likely Impacts and Effects and Mitigation and Enhancement Measures:
- Plants (terrestrial and aquatic);
  - Invertebrates (terrestrial and aquatic);
  - Badgers;
  - Bats;
  - Breeding birds;

- Reptiles;
- Riparian mammals (water vole and otter).

7.7 Natural England has identified parts of the proposal site as being within an "amber risk zone" for great crested newts- a European Protected Species. The potential for harm to great crested newts (and thus an offence) would normally need to be taken into account on this site. However, the submitted Preliminary Ecological Appraisal Report provides adequate evidence, in terms of site-based habitat suitability assessment and past survey results, to justify this species being scoped out of further assessment.

7.8 Sections 11.5, 11.6 and 11.7 of Chapter 11 (and associated appendices) deal appropriately with the following habitats/features in terms of Development Design and Impact Avoidance, Likely Impacts and Effects and Mitigation and Enhancement Measures:

- Hedgerows/trees;
- Drains;
- Ephemeral/short perennial vegetation;
- Scrub;
- Acid Grassland;
- Open mosaic habitats on previously developed land (OMH);
- Local Wildlife Sites;
- Statutorily designated sites (SSSI, SAC, SPA, Ramsar).

In particular NLC welcome the following measures:

1. Following the scoping stage, the red-line boundary has been tightened to exclude some large areas of sensitive habitat;
2. Care has been taken to minimise impacts on undesignated acid grassland, open mosaic habitats and terrestrial invertebrate communities of national importance.

- 7.9 In accordance with policy CS17 of the North Lincolnshire Core Strategy and para's 174 and 180 of the National Planning Policy Framework biodiversity enhancement should be secured by implementing the measures set out in Section 11.7 of Chapter 11 of the ES and in the submitted Landscaping and Biodiversity Management and Enhancement Plan.
- 7.10 At the time of writing, the requirement for Nationally Significant Infrastructure Projects to deliver 10% biodiversity net gain, as set out in the Environment Act 2021, has not yet come onto force. Nevertheless, Sections 11.7.6 to 11.7.9 of the Biodiversity and Nature Conservation chapter of the Environmental Statement state that:

*"A standalone Landscape and Biodiversity Management and Enhancement Plan (LBMEP) is provided as Application Document Ref. 5.10 of the DCO Application. This sets out biodiversity enhancement proposals and the habitat management and monitoring proposed to deliver these. It also confirms that the proposed enhancement measures are suitable to achieve no net loss and a net gain in biodiversity within the Proposed Development Site. It is proposed that submission and approval of the final LBMEP will be secured by a Requirement of the draft DCO (Application Document Ref. 2.1).*

*The biodiversity enhancement measures proposed comprise:*

- creation of flower-rich native grassland;*
- new species-rich native hedgerow plantings;*
- enhancement of field drains for water voles and other aquatic biodiversity; and*
- installation of nest boxes for barn owl and other birds, habitat creation for willow tit, and installation of roosting boxes for bats.*

*The proposed new grassland creation includes areas directly connected to habitat corridors designated as Stainforth and Keadby*

*Canal Corridor LWS and Hatfield Waste Drain LWS. The proposed new grassland therefore complements and enhances these LWS.”*

Applying Defra Metric 2.0 (which was current at the time that the document was written):

- a gain in habitat units of at least 11.27% is achievable;
- a gain in hedgerow units of 35.92% is achievable; and
- the broad requirements of planning policy to achieve no net loss and a net gain are met.

NLC support this approach and it is considered to align with policy CS17 of the North Lincolnshire Core Strategy and the requirements of the NPPF.

- 7.11 In conclusion North Lincolnshire Council are of the view that subject to the acceptable discharge of requirement 7 of the Draft DCO the development will ultimately achieve a minor positive impact on ecological receptors.

## **8. CULTURAL HERITAGE**

- 8.1 The Council has assessed the submitted information concerning the assessment of potential effects of the proposed development on heritage assets. This is set out in 6.2.15 – ES Chapter 15 (APP-058).

### **8.2 ARCHAEOLOGICAL ASSESSMENT**

- 8.2.1 The available Historic Environment data indicates that the construction of the proposed development has high potential to impact directly on the known and potential archaeological and palaeoenvironmental resource of the application site. This resource ranges from pre-peat land surfaces and associated activities that may date from the Mesolithic and Early Neolithic periods preserved beneath peat deposits that formed between the Mesolithic and Iron Age periods; artefacts and ecofacts preserved within the peat deposits and

overlying sediments; Roman occupation; post-medieval drainage features and remains associated with the process of warping to improve agricultural fertility of the land in the late 18<sup>th</sup> and 19<sup>th</sup> centuries. The significance of the potential unrecorded archaeology is currently unknown but maybe of high significance.

8.2.2 NLC's Historic Environment Record (HER) advised on the EIA Scoping Report in June 2020 and made recommendations in line with the relevant national and local planning policies (Core Strategy CS6 and Local Plan HE8 and HE9). This advice recommended that undertaking a staged programme of archaeological field evaluation would be necessary to prepare a robust assessment of the heritage significance of the site and inform any appropriate mitigation for inclusion in the Environmental Statement. Archaeological mitigation measures may include avoiding or minimising impacts that necessitate design and layout changes, and/or excavation and recording where remains would be lost in whole or part, to be carried out either in advance of, or during construction. As such, it is important that this information is available in the Environmental Statement to inform the DCO application and the subsequent timely discharge of any Requirements should consent be granted. The following archaeological field evaluation stages were advised:

- A programme of hand and/or machine drilled coring to produce a detailed deposit model of the sub-surface topography of the application area, to identify and model the deposit sequence and former land surfaces, and provide an understanding of the development of the landscape; and to obtain appropriate samples for assessment of preservation potential and the potential for palaeo-environmental evidence to inform the archaeological record; this assessment should include all relevant palaeo-environmental indicators and provision for a programme of scientific dating of the deposit sequence;
- Dependent on ground conditions, field surveys comprising fieldwalking and geophysical survey;

- Excavation of sample trial trenches to determine the nature, extent, state of preservation and importance of any archaeological remains, such as those associated with the warping channels mapped in this area, the peat deposits and the pre-peat landscape.

8.2.3 The need to complete all the above stages of the evaluation during EIA was reiterated in our consultation response to the PEIR in January 2021. When it became clear in March/April that the applicant had not allowed sufficient time to undertake and report on all stages of the archaeological evaluation to include in the EIA for submission of the DCO application in June 2021, it was agreed the fieldwork would continue and if not completed in time, that the results not reported on in the ES would be made available as supplementary information. The ES would refer to this ongoing process and include the detailed Written Schemes of Investigation (WSI) for the outstanding stages of evaluation with a clear timescale for the submission of the reports to the Examining body.

8.2.4 For whatever reason this was not done, only the preliminary stages of the evaluation were completed pre-submission, and the ES does not refer to the process of completing the remaining stages of pre-determination evaluation or provide detailed WSIs for the individual evaluation stages. No further archaeological field evaluation was undertaken after April 2021.

8.2.5 Of the three evaluation stages recommended in June 2020 (as above), the initial steps of the geoarchaeological programme (first bullet point) and the geophysical survey (second bullet point) have been undertaken and the results included with the Environmental Statement (Appendices 15B and 15C, document refs 6.3.30 and 6.3.31 respectively).

8.2.6 A deposit model was produced from the results of the geoarchaeological hand auger survey which was constrained by the shallow depth of the cores (approx. 1.30m below ground level). The model indicates that the underlying sands have an undulating surface and that there are pockets of deeper organic peats within the hollows across the site. These deposits have the

potential for palaeoenvironmental and organic archaeological remains, and may also mask former land surfaces which may preserve archaeological features and artefacts such as prehistoric worked flint scatters. In places the overlying warp/alluvium directly overlies the sand and may mask archaeological deposits. Slightly higher areas of outcropping sand have the potential to be locations for buried 'dryland' archaeological remains in the surrounding former marshland.

8.2.7 The sand is considered likely to represent a pre-Iron Age land-surface with the general area subsumed by the encroaching floodplain by the Iron Age, and the estimated age of the peat deposits, in the absence of any scientific dates, is Iron Age/Romano-British/and later within the area of the proposed power station and Iron Age/Romano-British in the laydown area to the south.

8.2.8 The organic deposits were overlain by warp deposits deliberately accumulated in the late 18<sup>th</sup> and 19<sup>th</sup> centuries to create fertile soils for cultivation over the unproductive waterlogged peaty ground. The warp deposits may contain preserved remains of the engineering works of their original creation and the ongoing drainage necessary to maintain the farmland, as well as sealing earlier pre-warp land surfaces.

8.2.9 The geoarchaeological report concludes that a relatively thin layer of organic and warp deposits may mask a buried land surface of potentially pre-Iron Age date, noting that this requires confirmation by a scientific dating programme. The underlying sands also have the potential to preserve earlier landsurfaces or reworked archaeological remains and again require further evaluation during trial trenching to better understand this potential.

8.2.10 Given the constraints of the hand auger survey to core to any depth into the sands, the presence of more deeply buried organic and peat deposits as evidenced in boreholes close to the site and in the surrounding area remains unassessed. The construction works may require complete removal of such deposits and all deposits are therefore vulnerable.

- 8.2.11 The geophysical survey identified a number of anomalies potentially representing isolated enclosures in the power station and laydown areas and these may be of Romano-British origin given the recorded finds in the surrounding area. Other anomalies corresponding to known cropmarks appear to form part of the Post-medieval warping drainage systems, while undetermined anomalies may represent unrecorded archaeological features. The exact nature of these potential archaeological features detected by the geophysical survey is unclear and as a result their significance is uncertain. Archaeological trial trenching is required to investigate and confirm the findings of the geophysical survey.
- 8.2.12 The results of these initial evaluation stages confirm the archaeological potential of the proposed areas of development. The geoarchaeological report makes specific recommendations for the further evaluation to confirm the deposit model including test pitting during archaeological trial trenching and a programme of scientific dating to provide the chronology of the stratigraphic sequence and assess the archaeological potential. This should also include coring to sample the deposits for palaeo-environmental indicators that can enhance the archaeological record.
- 8.2.13 The exact nature of the potential archaeological features detected by the geophysical survey is unclear and as a result their significance is uncertain. Archaeological trial trenching is required to confirm the survey results and investigate these features to determine their extent, depth, character, date and level of preservation in order to assess their significance.
- 8.2.14 It is the view of NLC that the applicant should commission the second stages of the evaluation recommended in the HER's pre-application advice as soon as possible to confirm the results of the preceding assessment stages and determine the nature, extent, state of preservation and importance of any archaeological remains within the application area. The results will inform the assessment of significance and the impact of the proposals, as well as what mitigation measures may be appropriate, to be set out in a Written Scheme of

Investigation (WSI). The remaining stages of evaluation should comprise the following:

- Stage 2 geoarchaeological assessment as recommended in ES, Appendix 15B, and a programme of coring and sampling to assess the potential of the deposits for palaeo-environmental evidence to inform the archaeological record, to include all relevant palaeo-environmental indicators together with a programme of scientific dating to establish a site chronology and to inform recommendations for further fieldwork and analysis. A specification for this work should be agreed with the HER prior to commencement of fieldwork.
- Excavation of sample trial trenches to determine the nature, extent, state of preservation and importance of any archaeological remains, such as those associated with the identified geophysical survey anomalies, cropmarks and warping channels mapped in this area, the underlying peat deposits and the pre-peat landsurfaces. The trial trenching programme should encompass the recommended geoarchaeological test pitting. A specification for this work should be agreed with NLC's HER prior to commencement of fieldwork.

8.2.15 The completion of the field evaluation prior to the determination of the DCO is considered necessary to ensure the identification of any previously unknown remains, and to date and characterise all the heritage assets, the results to update the assessment of heritage significance in the EIA and inform the preparation of an appropriate archaeological mitigation strategy.

### 8.3 *ARCHAEOLOGICAL MITIGATION STRATEGY*

8.3.1 The Council's HER further advises that there is insufficient information available in the applicant's Environmental Assessment to assess the appropriateness of mitigation measures. Until further results from the completed archaeological evaluation are available to allow the archaeological significance to be properly understood and impacts of the proposed

development on the known rather than potential archaeological resource can be more accurately assessed, the planning authority cannot agree any mitigation measures that may be required.

- 8.3.2 The applicant has submitted an Outline Written Scheme of Investigation (Document ref: 7.4) that conflates the undertaking of archaeological evaluation and mitigation works, when the latter cannot be known until the former is completed and properly reported on.
- 8.3.3 Furthermore, it is clear from the outline WSI that the evaluation is not programmed to take place in time to inform the detailed design process, but would be deferred to a later stage once the main Site Contractor is appointed ready for the preliminary construction work to be underway. The outline WSI compresses the timescale for evaluation and subsequent mitigation rather than these being distinct separate and iterative stages.
- 8.3.4 Insufficient time is provided for to produce full written reports of the evaluation results, and it is suggested that appropriate mitigation strategies could be developed based on interim results, and further fieldwork commenced before the completion of full specialist evaluation reports are available to inform updated detailed WSIs for pre-commencement works such as archaeological area excavation.
- 8.3.5 This risks a delay to the commencement of the construction where there is insufficient time to implement pre-commencement mitigation fieldwork; or that the scope of the archaeological recording is put under pressure to fit the construction programme to the detriment of irreplaceable archaeology.
- 8.3.6 Individual WSIs for the outstanding evaluation stages should be prepared for the works to be commissioned as soon as possible. A separate WSI for appropriate mitigation should only be produced once the evaluation is completed, and prior to the determination of the DCO. A detailed WSI for mitigation only will ensure that all parties are aware of the archaeological implications of the development, both to inform the detailed design of the

development and for the archaeological mitigation work to be timetabled to avoid any unnecessary delay to the construction programme.

#### **8.4 DRAFT DEVELOPMENT CONSENT ORDER**

8.4.1 The draft DCO includes Requirement 16 for Archaeology that refers to the Outline WSI, which the HER considers cannot be agreed as appropriate and adequate as a WSI for archaeological mitigation. The HER advises that amendments to the wording should be considered once the archaeological field evaluation is complete and reported on, and a detailed mitigation strategy is prepared and agreed with the local planning authority and decision making body.

8.4.2 Part 4, Article 16 (Removal of Human Remains), it is important that any human remains are archaeologically recorded, assessed and analysed as appropriate according to the professional standards and guidelines for the excavation of human bones.

### **9. NOISE AND VIBRATION**

9.1 The Council has assessed the submitted information concerning the assessment of potential effects of the proposed development in respect of noise and vibration. This is set out in 6.2.9 – ES Chapter 9 (APP-052).

9.2 This Chapter assesses impacts on Noise Sensitive Receptors (NSRs) during the construction, operation (including maintenance) and decommissioning of the Proposed Development. In particular, the assessment considers:

- Existing and future baseline conditions;
- The effects of construction of the Proposed Development on NSR during the site clearance and construction works including predicted changes in road traffic noise levels on the local road network;

- The effects of noise and vibration resulting from operation of the Proposed Development;
- The effects of noise and vibration resulting from decommissioning of the Proposed Development.

9.3 NLC is satisfied with the information contained in the Environmental Statement with regard to noise and vibration. Comments made in January 2021 on the preliminary ES submitted in 2020 have been addressed and the report updated accordingly.

9.4 Notwithstanding the above it is noted that at Section 9.5 it is stated that core construction working hours and HGV deliveries would be Monday to Friday (except bank holidays) 07:00 to 19:00 and Saturday 08:00 to 13:00. It is also assumed that some works may need to take place outside of these core working hours and would be undertaken providing they comply with any restrictions agreed with the local planning authority, in particular regarding control of noise and traffic. NLC's Environmental Health Department typically recommend that construction operations are undertaken Monday to Friday (except bank holidays) between the hours 08:00-18:00 and Saturday 08:00 to 13:00 in line with other Local Authorities and to protect the amenity of those living in the vicinity. These slightly reduced construction hours can have a significant positive impact on local receptors and would be preferable.

## **10. AIR QUALITY**

10.1 The Council has assessed the submitted information concerning the assessment of potential effects of the proposed development in respect of air quality. This is set out in 6.2.8 – ES Chapter 8 (APP-051).

10.2 The Air Quality Assessment has considered the following potential impacts in relation to air quality:

- dust generation during construction;

- emissions from road traffic and Non-Road Mobile Machinery (NRMM) during construction;
- process emissions from the operational phase of the Proposed Development; and
- the potential effects of the eventual decommissioning of the Proposed Development.

10.3 The purpose of the construction dust assessment is to determine the potential risk of dust impacts occurring at sensitive receptors due to construction related activities. In addition, the assessment is undertaken to identify the level of mitigation required in order to avoid potential impacts. The assessment concludes that there is a low to medium risk of unmitigated dust impacts on human health (PM10) and dust soiling from unmitigated clearance works (“demolition”), earthworks, construction and track out activities. This assessment concludes that there is a low to medium risk of unmitigated dust impacts on human health (PM10) and dust soiling from unmitigated clearance works (“demolition”), earthworks, construction and track out activities. It is considered that with the implementation of appropriate mitigation and control measures set out in the Framework CEMP (**Application Document Ref. 7.1**), the potential effect from fugitive emissions of construction dust would not be significant.

10.4 For the construction traffic assessment, dispersion modelling has been used to predict road pollutant concentrations at sensitive receptors as a result of the IAQM screening criteria being fulfilled. The assessment concludes that the impact at all human receptors can be considered negligible as both: the change between the Do Minimum and Do Something scenarios for all receptors is less than 1% of the Air Quality Assessment Level; and all receptors are below 75% of the Air Quality Assessment Level. It is concluded that the effect of changes in traffic flows due to construction traffic on human health is negligible and not significant.

10.5 No detailed assessment of operational traffic emissions has been made. The assessment states that the rationale for this is *‘as the numbers of additional vehicles associated with the operational phase of the Proposed Development are below the Highways England (HE) Design Manual for Roads and Bridges (DMRB) (HE, 2019) and Institute for Air Quality Management (IAQM) (IAQM, 2017) screening criteria for requiring such assessment. In addition, the predicted impacts for the construction phase traffic emissions show that the effect of additional construction traffic will be not significant at all identified receptors (Appendix 8A: Air Quality – Construction Phase, ES Volume II – Application Document Ref. 6.3). The number of additional vehicles for the operational phase, including outages required for maintenance, is well below the numbers assessed for the construction phase and therefore it is considered that the effect of operational traffic is also not significant.’*

10.6 The assessment has considered the impact of the operational process emissions on local air quality under normal operating conditions, with the CCGT operational and the flue gas being abated by the carbon capture plant, operating for 8,760 hours per year. The assessment has used the dispersion model ADMS to predict the increases in pollutant species released from the operational Proposed Development to the local study area. The dispersion modelling has considered the effects of the following pollutants;

- Oxides of nitrogen (NO<sub>x</sub>)
- Carbon monoxide (CO)
- Ammonia (NH<sub>3</sub>) slip (from the Selective Catalytic Reduction NO<sub>x</sub> abatement system)
- Amines and their potential degradation products from the carbon capture plant

10.7 Further to the comments made at the scoping stage the Council is pleased to see that the human receptor, Vazon Bridge House, located closest to the proposed development has now been included in the air quality assessment. In addition, commentary has been made on the cumulative impact of the development as it is recognised that there is a potential impact on local air

quality from emission sources which have either received or may soon receive planning permission or consent but have yet to come into operation.

- 10.8 An evaluation of the release height for the main stack has shown that a release height of 105m is capable of mitigating the short-term and long-term impacts of emissions to an acceptable level, with regard to existing air quality and ambient air quality standards at human health receptors.
- 10.9 A separate assessment of the impact of the degradation of amines to form other species including nitrosamines and nitramines (N-amines) has also been undertaken, the source of these emissions being from the absorber stack. The Council's Environmental Health Officers have reviewed this Assessment of Amine Degradation and have raised the following questions/comments:

1. Section 4.2.1 states that "Direct N-amine emissions have been assumed to occur at the maximum concentration provided by licensors, and no atmospheric chemistry has been assumed to occur. These have therefore been modelled as a direct release within the ADMS model at a concentration of 0.002mg/m<sup>3</sup> (assumed to be NDMA, as a worst case)."

It is unclear where the concentration of 0.002mg/m<sup>3</sup> originates from.

2. Section 4.4.15 states *"This has been based on the average wind speed in the area and the distance to the identified receptors. The specified receptors included in the model are between 800 m and 2 km from the emission sources, and therefore considering that the average wind speed in the study area is approximately 4.5 m/s, the pollutants released from the stack(s) would take approximately 3 – 7.5 minutes to reach these receptors."*

It is unclear how the average wind speed for the area has been calculated as being 4.5m/s.

3. NOx and NO2 baseline concentrations have been derived from Low Santon monitoring station operating within North Lincolnshire. The Environmental Health officer agrees that the concentrations experienced at Low Santon are likely to exceed those at the development site due its industrial location.

It is unclear, however, which hourly data has been used (i.e. which year) and how this was selected.

4. The assessment discusses the high level of uncertainty with the modelling of these emissions throughout and it is advised that the amines module itself has not been validated.

It would be prudent to provide a numerical level of the uncertainty experienced that can be used when reviewing the model output tables (Table 5, 6, 7 etc). In the absence of this information it is not possible to understand the level of uncertainty involved.

10.10 The applicant has submitted a framework for a Construction Environmental Management Plan (CEMP). The final CEMP will be produced by the contractor appointed by the Applicant to undertake the construction of the Proposed Development. The submission, approval and implementation of this will be secured through a requirement of the DCO. The framework CEMP submitted provides generic control techniques and further details will be supplied as part of the final CEMP, this will be reviewed and appropriate comments made once this has been submitted. However, it is prudent to identify the following in relation to this framework submission:

- The document states that core construction working hours and HGV deliveries would be Monday to Friday (except bank holidays) 07:00 to 19:00 and Saturday 08:00 to 13:00. North Lincolnshire Council's Environmental Health department typically ask that construction operations are undertaken between Monday to Friday (except bank

holidays) 08:00-18:00 and Saturday 08:00 to 13:00 in line with other Local Authorities and to protect the amenity of those living in the vicinity.

- The document makes reference to “prohibit open fires on site”, this department prefer to see a no burning of waste policy implemented on site.

## **11. LAND CONTAMINATION**

11.1 The Council has assessed the submitted information concerning the assessment of potential effects of the proposed development in respect of contaminated land. This is set out in 6.2.13 – ES Chapter 13 (APP-056).

11.2 The Phase 1 Desk Based Assessment Report (Appendix 13A, APP-087) confirms that the application site covers an area of approximately 72.7ha and is currently occupied by the following:

- Keadby Power Station, including numerous above ground tanks in the central/ eastern area;
- A large 400kV electricity substation operated by National Grid in the northern area;
- Predominantly open land in the west (Keadby Common) including areas of former agricultural land (used by the Keadby 2 Power Station construction project as lay-down and temporary spoil storage) with further open land on the eastern spurs (proposed Water Connection Corridor); and
- A pumping station and residential housing located on the eastern-most extent of the eastern spur and a pumping station is also located on the north-eastern spur.

11.3 The proposed site is situated on former agricultural land associated with Keadby Common and lies north and north-west of the Keadby 2 Laydown Area. A site walkover was undertaken by AECOM during July 2020. The

phase 1 also includes a review of previous site reports that have been undertaken relating to the proposed development site and surrounding area. The report has been written to reflect the current best practice as outlined in the Land Contamination: Risk Management (LCRM) EA, October 2020.

- 11.4 Based on the current review of all the data, the conceptual site model confirms that there is a potential risk for contaminants to be present in the ground and that a low to moderate risk to human health of current and future on-site occupants, in the absence of mitigation, and a low to moderate/low risk to the human health of off-site users. A moderate/low risk for contamination to impact the groundwater within the superficial deposits and bedrock, and a moderate/ low to moderate potential risk to surface water receptors has been concluded.
- 11.5 A qualitative assessment of the risks posed by land contamination within the study area has been undertaken and a baseline risk score has been produced for each potential risk identified. The areas with a baseline risk score of three and above have been considered for further risk and impact assessment and those with a baseline risk score of two or below are not considered to pose an unacceptable risk for the proposed development construction or operation and have therefore been scoped out.
- 11.6 The recommendation is for a ground investigation to be undertaken, Chapter 13.5.3 suggests that the ground investigation will be undertaken before construction to inform the development of the preliminary and detailed design. The ground investigation will be designed to target the potentially contaminative sources identified, including the historical landfilling activities identified on the proposed development Site. Based on the findings of the investigation, where the risks are deemed to be unacceptable, a further detailed quantitative risk assessment and if required, a detailed remediation strategies will be provided.

- 11.7 The Council's Environmental Health Officer considers the Phase 1 investigation and its conclusions acceptable subject to the findings of the intrusive site investigation.

## **12. LIGHT**

- 12.1 The Council has assessed the submitted Indicative Lighting Strategy (Doc ref: 5.11, APP-040). The Strategy sets out the outline lighting requirements at the proposed development site during both construction and operational phases. It also addresses obtrusive lighting by means of specifying off-site obtrusive lighting constraints. The report also identifies potential measures and guidance that may be taken to control obtrusive light through the detailed design of the Proposed Development lighting scheme and management of lighting used during the construction phase.
- 12.2 The Strategy makes reference to the Guidance Notes for the Reduction of Obtrusive Light' (GN01/20) produced by the Institute of Lighting Professionals (ILP, 2020). Furthermore the site is categorised as being within Environmental Zone E2 (rural, low district brightness) which NLC would agree with.
- 12.3 The indicative strategy states that *"ILP provide obtrusive light limits for exterior lighting installations are specified for light intrusion (to windows), sky glow (upward light ratio) and glare for each Environmental Zone (ILP, 2020). The design of the Proposed Development Site lighting will follow the limits provided."* Requirement 7 of the Draft DCO (dDCO) requires a detailed lighting scheme to be submitted and agreed for both the construction and operational phases of the development. The Council would expect to see evidence of how these limits will be complied with including an assessment of modelled lx levels and lighting design with in any future submission in respect of this Requirement.
- 12.4 Subject to an appropriate lighting scheme being produced to satisfy dDCO Requirement 7 it is considered that potential light impacts from the development will be adequately mitigated.

### **13. HYDROLOGY AND FLOOD RISK**

- 13.1 The Council has assessed the submitted information concerning the assessment of potential effects of the proposed development in respect of flood risk and drainage. This is set out in 6.2.12 – ES Chapter 12 (APP-055).
- 13.2 The submitted Flood Risk Assessment and Drainage Strategy is considered to be acceptable in that it identifies pluvial flood risk and provides for various mitigation measures to be addressed in the detailed surface water drainage strategy.
- 13.3 Draft DCO Requirement 12 necessitates the submission and agreement of the detailed surface water drainage strategy. North Lincolnshire Council is satisfied that subject to the acceptable discharge of this requirement the impact of the proposals on flood risk and drainage will be adequately mitigated.

### **14. SOCIO-ECONOMIC IMPACT**

- 14.1 The Council has assessed the submitted information concerning the assessment of potential effects of the proposed development in respect of socio-economics. This is set out in 6.2.16 – ES Chapter 16 (APP-059).
- 14.2 North Lincolnshire Council are satisfied that the approach to the assessment of socio-economic impacts presented in Chapter 16 is robust. The methodology used to determine the impact of the project is clear and helpful, indicating levels that can be easily measured. The data and statistics are relevant and appropriate.
- 14.3 From previous delivery of large-scale projects in the area North Lincolnshire Council agree that it is realistic that there will be a major short-term positive impact on employment created during the employment phase of the development. It is understood that these will be temporary jobs and the

Council concur that a proportion of these jobs will be drawn from outside of the local area. The operational jobs created, although much lower in numbers, will have a minor positive long-term impact on the area.

- 14.4 Both temporary and permanent jobs generated by the development will result in additional spend to the area through accommodation, leisure use and local shops/services as well as the potential for additional work given to local supply chain companies. Although a minor impact, local companies may also secure long-term contracts once the facility is operational.
- 14.5 The proposed development has the potential to support further growth of the construction and energy sectors in North Lincolnshire. In addition to the value added GVA, it would provide an opportunity to address highlighted skills shortages in this key sector (highlighted in local and regional Industrial Strategies), therefore positively influencing the ability to attract and retain skilled workers over the lifetime of the proposed development. The skills and experience gained and developed for businesses and workers, has the potential to lead to opportunities with any future local developments. This will be further supported by draft DCO Requirement 37, which secures the submission and implementation of an Employment, skills and training plan. It is agreed that this provides an appropriate mechanism to promote employment, skills and training opportunities during construction and employment opportunities during operation for local residents.
- 14.6 The energy sector has been identified as a key growth sector across the Humber and the Greater Lincolnshire regions. This sector is identified in the North Lincolnshire Economic Growth Plan as a growth sector within the area. The proposal also aligns with the wider Humber Plus (Hull and East Yorkshire LEP & Greater Lincolnshire LEP) policies for an emerging sector around Carbon Capture and Utilisation and Storage (CCUS).
- 14.7 The proposed development is in an area of current industrial activity and is not considered to have an adverse impact on the visitor economy of North Lincolnshire.

## **15. OTHER MATTERS**

- 15.1 The local community has fed back to the Council that, as there are a number of existing large-scale energy developments in the area surrounding the site and the proposed development will add to these existing developments and their impacts, the further development of the Keadby Power Station site will have a detrimental impact upon their quality of life. In this situation, they have indicated that they consider that it would be appropriate for Keadby Generation Limited to contribute towards measures which the local community feel would help to mitigate against this impact. North Lincolnshire Council are understanding of the concerns of the local community and would be supportive of any proposal offered by Keadby Generation Limited which will help to mitigate the impact of the scheme on the residents of the surrounding area.
- 15.2 It is noted that a Community Fund was put in place by SSE to provide community benefits to local residents in the North Axholme Area in an attempt to mitigate the impacts of the Keadby Wind Farm development. It is suggested that a similar scheme may be an appropriate way of mitigating the impacts upon local residents in this instance.

## **16. CONCLUSION**

- 16.1 National guidance on Local Impact Reports recommends that a view is given by the local planning authority of the relative importance of different social, environmental or economic issues and impacts of the scheme on them.
- 16.2 Short term and negative social and environmental impacts are anticipated. Such impacts include increased traffic generation, construction disturbance and increased emissions. Longer term adverse impacts include the visual intrusion caused by the buildings and structures. North Lincolnshire Council are of the view that via the implementation of impact avoidance, design and mitigation measures that will be secured through Requirements (subject to

comments raised above) contained within the draft DCO and through other regulatory regimes that these negative impacts will not be significant.

- 16.3 Residual long-term negative effects relate to the potential impact on non-designated heritage assets. Whilst it is considered that this impact could potentially be mitigated through DCO Requirements for the reasons outlined in the Cultural Heritage section of the LIR above, it is the view of the Council that the current archaeological assessment is inadequate to inform the EIA and DCO application and as such the proposed Requirement 16 is not appropriate or acceptable.
- 16.4 The development will have short-term and long-term beneficial economic impacts in terms of job creation and inward investment into North Lincolnshire. Through the proposed Requirements the development will also provide an opportunity to address highlighted skill shortages in a key sector strategically promoted for growth by the Council in this area. These beneficial impacts are considered to be of moderate importance.
- 16.5 The Council also considers that the proposed development would provide a positive impact in terms of low carbon electricity generation, which will help to deliver carbon reduction policies set out in the NPPF, UK Clean Growth Strategy, Environment Bill, Humber Clean Growth Local White Paper and the North Lincolnshire Core Strategy. The development could contribute to a reduction in the carbon emissions of the energy supply in the UK and provide a secure and stable energy source. The Council believes that this is a significant positive impact but that it has to be balanced against the potential environmental impacts of the proposed scheme.

