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14.0 LANDSCAPE AND VISUAL AMENITY

14.1 Introduction

14.1.1 This chapter of the Environmental Statement (ES) addresses the potential effects of the construction, opening, operation (including maintenance) and decommissioning of the Proposed Development on landscape character (as a resource in its own right) and visual amenity.

14.1.2 The assessment considers:

- the present-day and future baseline conditions during construction and at opening;
- the effects of construction of the Proposed Development on landscape character and visual amenity;
- the effects of operation of the Proposed Development on landscape character and visual amenity; and
- the potential effects of the eventual decommissioning of the Proposed Development.

14.1.3 The chapter includes a future baseline scenario whereby the Proposed Development is constructed and operates within the envelope of existing Keadby 1 Power Station and Keadby 2 Power Station structures (under construction) present. However, an alternative scenario with Keadby 1 Power Station structures removed has also been assessed in order to consider whether this represents a worst-case.

14.1.4 The assessment of cumulative effects associated with the Proposed Development and other committed developments in the vicinity is assessed in **Chapter 19**: Cumulative and Combined Effects (ES Volume I - **Application Document Ref. 6.2**).

14.1.5 This chapter is supported by **Appendix 14A:** Landscape and Visual Impact Assessment Methodology, **Appendix 14B:** Potential Viewpoints and **Appendix 14C:** Landscape Character , provided in ES Volume II (**Application Document Ref. 6.3**). **Figures 14.1-14.24** also accompany the chapter and are provided in ES Volume III - **Application Document Ref. 6.4**. An indicative site layout for the Proposed Development (**Figure 4.1**) presented in ES Volume III - **Application Document Ref. 6.4** has also informed this chapter.

14.2 Legislation, Planning Policy and Guidance

Legislation

14.2.1 The landscape and visual impact assessment takes account of the legislation relevant to landscape and visual issues, including the aims of the European Landscape Convention (Council of Europe, 2020).

Planning Policy Context

National Planning Policy

14.2.2 The overarching National Policy Statement (NPS) for Energy EN-1 (BEIS, 2011a) includes a number of statements pertinent to the potential landscape, including Green Infrastructure (GI) and visual impacts of energy infrastructure in general.

14.2.3 Section 5.9 of EN-1 sets out the requirements for assessing and mitigating landscape and visual impacts of proposed nationally significant energy infrastructure projects. The scope of the assessment should include construction phase effects as well as the effects of the completed facility and its operation on landscape components, landscape character and views and visual amenity. The assessment also considers the potential effects associated with the decommissioning of the Proposed Development.

14.2.4 In terms of mitigation, EN-1 encourages the reduction in scale of the buildings taking into consideration function, appropriate siting, design including colours and materials, and landscaping schemes to mitigate adverse landscape and visual impacts.

14.2.5 Section 5.10 of EN-1 establishes the requirements for identifying and mitigating impacts of energy infrastructure projects on open space (including GI).

14.2.6 An energy infrastructure project will have direct effects on the existing use of the proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development. Given the likely locations of energy infrastructure projects there may be particular effects on open space including GI.

14.2.7 Where GI is affected, the Secretary of State should consider imposing requirements to ensure the connectivity of the green infrastructure network is maintained in the vicinity of the development and that any necessary works are undertaken, where possible, to mitigate any adverse impact.

14.2.8 The NPS for Fossil Fuel Electricity Generating Infrastructure, EN-2 (DECC, 2011b) provides further detail with respect to the required impacts for large-scale structures associated with fossil fuel generating stations.

14.2.9 Table 14.1 provides a summary of relevant NPS advice regarding landscape and visual amenity and presents an assessment of where matters are assessed within this chapter.

Table 14.1: Summary of relevant NPS advice regarding landscape and visual amenity

Summary of NPS	Consideration within the Chapter
NPS EN-1	
Paragraphs 5.9.15 to 5.9.16 state: *"The scale of such projects means that they will often be visible within many miles of the site of the proposed infrastructure. The IPC (Infrastructure Planning Commission) should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project.* *In reaching a judgment, the IPC should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the IPC considers reasonable."*	Effects resulting from the Proposed Development are identified in Section 14.6 Likely Impacts and Effects.
Paragraph 5.9.18 states: *"All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. The IPC will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project".*	Effects resulting from the Proposed Development are identified in Section 14.6 Likely Impacts and Effects.
Paragraph 5.9.22 states: *"Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on*	Measures to minimise and manage the visual effects of the Proposed Development have been outlined in Section 14.5 Development Design and Impact Avoidance.

Summary of NPS	Consideration within the Chapter
the size and type of the proposed project. Materials and designs of buildings should always be given careful consideration."	
Paragraph 5.10.5 states: *"The ES (see Section 4.2) should identify existing and proposed land uses near the project, any effects of replacing an existing development or use of the site with the proposed project or preventing a development or use on a neighbouring site from continuing. Applicants should also assess any effects of precluding a new development or use proposed in the development plan."*	Existing land uses near the Proposed Development are noted in Section 14.4 Baseline Conditions. Effects resulting from the Proposed Development are identified in Section 14.6 Likely Impacts and Effects.
NPS EN-2	
Paragraph 2.6.4 states: *"The applicant should also consider the design of the plant, including the materials to be used, and the visual impact of the stack, as set out in Section 5.9 of EN-1 in the context of the local landscape."* Paragraph 2.6.5 states: *"It is not possible to eliminate the visual impacts associated with a fossil fuel generating station. Mitigation is therefore to reduce the visual intrusion of the buildings in the landscape and minimise impact on visual amenity as far as reasonably practicable. Applicants should design fossil fuel generating stations with the aim of providing the best fit with the existing local landscape so as to reduce visual impacts. This may include design of buildings to minimise negative aspects of their appearance through decisions in areas such as size, external finish and colour of the plant as far as compliance with engineering and environmental requirements permit.*	The Planning Statement (**Application Document Ref 5.5**) describes the design principles to be applied in relation to the Proposed Development, including materials. It is proposed that the detailed design of the Proposed Development will be secured through a Requirement of the draft DCO (**Application Document Ref 2.1**) and this will specify the colour, materials and finishes to be applied; this will need to be approved by NLC prior to construction. Section 14.5 describes the development design and impact avoidance measures that have been or will be incorporated into the design of the Proposed Development to mitigate landscape and visual impacts. Consideration has been given to enclosing buildings at low level, as illustrated on the elevations plans for the Proposed PCC Site (**Application Document Ref. 4.7**). Retention of existing vegetation

Summary of NPS	Consideration within the Chapter
The precise architectural treatment will need to be site-specific." Paragraph 2.6.7 states: *"Reduction of visual impacts may often involve enclosing buildings at low level as seen from surrounding external viewpoints. This makes the scale of the plant less apparent, and helps conceal the lower level, smaller scale features of the plant. Earth bunds and mounds, tree planting, or both may be used for softening the visual intrusion and may also help to attenuate noise from site activities. Where the existing landscape is more industrial, design may involve other forms of visual impact mitigation."*	and tree planting to soften visual impact is described in Section 14.5 and in **Application Document Ref. 5.10**: Landscaping and Biodiversity Management and Enhancement Plan.

Marine Planning Policy

14.2.10 The Marine Policy Statement (MPS) (Defra, 2011) provides a framework for taking decisions affecting the marine environment, which includes the River Trent at Keadby. All public authorities taking authorisation or enforcement decisions that affect or might affect the UK marine area are to do so in accordance with the MPS unless relevant considerations indicate otherwise, and applications for NSIP are required to have regard to the MPS.

14.2.11 Policies SOC3 of the Eastern Inshore Marine Plan (Defra, 2014) which requires that proposals that affect the terrestrial or marine character of an area firstly avoid, or then mitigate, or then justify, these effects is relevant in relation to the works within and adjacent to the marine environment is relevant for those limited works that are proposed adjacent to the River Trent.

National Planning Policy Framework

14.2.12 The National Planning Policy Framework (Ministry of Housing, Communities and Local Government (MHCLG), 2019) (NPPF) does not set specific policies for NSIP and is not applicable to NSIP where the requirements of the NPS apply; however, its policies may be of relevance to decision making. The NPPF includes policies that ensure developments are '*sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change'*..

14.2.13 NPPF Chapter 15: Conserving and enhancing the natural environment recognises that the environment should be enhanced by:

- *"protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- *maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate"*.

14.2.14 The NPPF also includes a number of policies relating to conserving and enhancing the natural environment relevant to landscape. includes policies that ensure developments are '*sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change'*.

Local Development Plan Policy

14.2.15 The local development planning policy that are relevant to the Proposed Development Site include:

- North Lincolnshire Core Strategy (adopted June 2011);
- North Lincolnshire Local Plan Saved Policies (September 2007); and
- North Lincolnshire Local Plan Preferred Options (February 2020).

14.2.16 These documents contain a number of policies of relevance to the Proposed Development in landscape and visual terms as set out below.

North Lincolnshire Core Strategy

14.2.17 The Core Strategy sets out the long term vision for North Lincolnshire to 2026. The policies of relevance to the Proposed Development are CS5 and CS16.

14.2.18 Policy CS5 - Delivering Quality Design in North Lincolnshire notes that all new design in North Lincolnshire should be well designed and appropriate for its

context. It should incorporate the principles of sustainable development including mitigating against the impacts of climate change. It notes that developments should incorporate appropriate landscaping and planting that enhances biodiversity and contributes to GI.

14.2.19 Policy CS16 - North Lincolnshire's Landscape, Greenspace and Waterscape notes that a network of strategically and locally important landscape, greenspace and waterscape areas will be supported, protected and enhanced. Development on or adjacent to these areas will not be permitted if it would result in an unacceptable conflict with the characteristic or function(s) of that area. Where appropriate, development proposals would be required to improve the quality and quantity and address local deficiencies of accessible landscape, greenspace and waterscape. Where appropriate trees, hedgerows and historic landscape will be protected.

North Lincolnshire Local Plan Saved Policies

14.2.20 Several saved polices within the North Lincolnshire Local Plan considered relevant to the Proposed Development Site are set out below.

14.2.21 Policy LC7 - Landscape Protection notes that where development is permitted within rural settlements or within the open countryside, special attention will be given to the protection of the scenic quality and distinctive local character of the landscape. Development which does not respect the character of the local landscape will not be permitted.

14.2.22 Policy LC12 - Protection of Trees, Woodland and Hedgerows recognises that proposals for all new development will, wherever possible ensure the retention of trees, woodland and hedgerows. Landscaping and tree and hedgerow planting schemes will be required to accompany applications for new development where it is appropriate to the development and its setting.

14.2.23 Policy RD2 – Development in the Open Countryside notes that development in the open countryside will be strictly controlled. Planning will only be granted if it meets a set of criteria. This includes employment related development appropriate to the open countryside or provision of utility services. Planning permission will only be granted providing that open countryside is the only appropriate location and development cannot be reasonably located within defined development limits. Development must not be detrimental to the character or appearance of the open countryside. Development must not be detrimental to public amenity and development must be sited to make use of existing and new landscaping.

North Lincolnshire Local Plan Preferred Options

14.2.24 Policy DQE1p – Protection of Landscape, Townscape and Views requires that development proposals do not cause unacceptable harm and protect the distinctive character and quality of the landscape. Development proposals

should also take account of views in to and out of development areas and preserve local views and vistas.

Other Guidance

14.2.25 The Countryside Design Summary (CSC) for North Lincolnshire (Estell Warren, 1999) forms a suite of Supplementary Planning Guidance (SPG) documents to be used in conjunction with saved policies of the North Lincolnshire Local Plan. The purpose of this particular document is to show how necessary development can be accommodated in ways in which protect local character and to provide a basis for the production of SPG. The document provides design guidelines for each of the character types within North Lincolnshire.

14.2.26 The Proposed Development Site is located within the Trent Levels Character Type. Design guidelines relevant to the Proposed Development for Trent Levels include:

- *retain character of key approaches to villages by avoiding development outside current village limits;*
- *retain and enhance mature tree and hedgerow cover within villages, to reinforce sheltered 'island' effect in wider open landscape. Open field areas should remain open although reinforcement of open field zone boundary characteristics may be appropriate. Consider selective infill development to reinforce enclosed, sheltered character of settlements; and*
- *consider selective mitigation of views to adjacent industrial uses/visual detractors. Also consider retention or reinforcement of views to modern industrial or man-made features which are a strong, unique component of Trentside village character (e.g. bridge at Gunness, waterways at Keadby)'.*

14.2.27 The landscape and visual impact assessment presented in this chapter has been based on the following best practice guidance:

- Guidelines for Landscape and Visual Impact Assessment, Third Edition (Landscape Institute and Institute of Environmental Management and Assessment, 2013) (GLVIA3); and
- Technical Guidance Note (TGN) 06/2019: Visual Representation of Development Proposals (Landscape Institute, 2019).

14.3 Assessment Methodology

14.3.1 A detailed description of the assessment methodology is included in **Appendix 14A:** Landscape and Visual Amenity Methodology (ES Volume II - **Application Document Ref. 6.3**) and is summarised below.

Consultation

14.3.2 The consultation undertaken with statutory consultees to inform this chapter, including a summary of comments raised via the formal Scoping Opinion (**Appendix 1B** (ES Volume II - **Application Document Ref. 6.3**)) and in response to the formal consultation and other pre-application engagement is summarised in Table 14.2.

Table 14.2: Consultation Summary Table

Consultee or Organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
Secretary of State	June 2020 (Scoping Opinion)	The ES should be supported with suitable visual representations in line with the approach set out in the Landscape Institute Technical Guidance Note 06/19.	Summer photography has been undertaken at the representative viewpoints shown in **Figure 14.5** (ES Volume III - **Application Document Ref. 6.4**). **Figures 14.6 – 14.18** (ES Volume III – **Application Document Ref. 6.4**) present photoviewpoints from a range of viewpoints to illustrate the potential visibility of the indicative layout of the Proposed Development. Wirelines and Type 4 verified photomontages to illustrate the view in summer and winter from a number of representative viewpoints are presented as **Figures 14.19 – 14.24** (ES Volume III - **Application Document Ref. 6.4**).
		The Landscape and Visual Amenity assessment in the ES should explain how the North Lincolnshire Green Infrastructure Network (2019), the proposed northern extension to the Lincolnshire Wolds AONB, and other relevant local	The principles of preserving views and landscape characteristics, including Green Infrastructure in accordance with emerging policies within the North Lincolnshire Local Plan (Preferred Options) have been taken into account in this assessment. The Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) and it's proposed extension has been included within the study area and effects on this assessed. The extent of this is shown in

Consultee or Organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		policies have been taken into account.	relation to the study area on **Figure 14.3** (ES Volume III – **Application Document Ref. 6.4**).
		The Inspectorate considers that, given the scale of the Proposed Development, a night-time lighting impact assessment should also be prepared for the ES, for both the construction and operational phases.	The impacts of night-time lighting as required by NPS EN-1 has been reviewed as part of this chapter to determine its effects on landscape character and visual amenity. The likely impacts and effects as a result of the recommendations as set out in the Indicative Lighting Strategy (**Application Document Ref. No. 5.11**) submitted with the DCO are discussed in Section 14.6: Likely Impacts and Effects of this chapter.
		Consider possible effects on the Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) and its proposed extension, along with the Humber Estuary Ramsar site, the Thorne Moors Special Area of Conservation (SAC) and the Thorne and Hatfield Moors	The potential effects on the Lincolnshire Wolds AONB extension area is included as part of the landscape assessment. The Lincolnshire Wolds AONB lies outside of the 10km study area and due to the long distance has not been included as part of this assessment. The Humber Estuary Ramsar Site lies within the Flat Drained Farmland Landscape Character Type (LCT) and the effects of the Proposed Development are assessed as part of the landscape character

Consultee or Organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		Special Protection Area (SPA). This assessment needs to be cross-referenced with potential night-time impacts on ecological receptors.	assessment. The direct effects on the Humber Estuary Ramsar site have been assessed within **Chapter 11**: Biodiversity and Nature Conservation (ES Volume I - **Application Document Ref 6.2**). The Flat Open Remote Farmland LCT, Thorne and Hatfield Peat Moorland Landscape Character Area (LCA) and the Drained Open Farmland LCT which the Thorne Moors SAC and Thorne and Hatfield Moors SPA lie within, have been discounted from the landscape character assessment because it has been assessed that there is no potential for the LCT/ LCA to receive significant effects as a result of the long distance from the Proposed Development Site; they are therefore excluded from the assessment. The night-time lighting effects on the ecological designations have been assessed within **Chapter 11**: Biodiversity and Nature Conservation (ES Volume I - **Application Document Ref. 6.2**).
North Lincolnshire Council	Scoping Consultation response 26th June 2020 Email response	Include Core Strategy Spatial Objective 10, policies CS5 and CS16 and Saved Local Plan Policies LC7 and RD2 should also be considered.	The policy context for the chapter, including the policies noted, is set out in Section 14.2 Relevant landscape policies have been included within the report.

Consultee or Organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
Keadby with Althorpe Parish Council	Scoping Consultation response 25th June 2020 Email response	Visual aspect concerns. Concerns regarding the configuration, layout and height of the stack. What will be the effects on those living close to the plant and in the wider communities? What will the plume dispersion characteristics of these stacks be?	Section 14.6 Likely Impacts and Effects considers the visual effects of the Proposed Development. Section 14.5 and Section 14.7 considers the minimisation of visual effects in accordance with NPS EN2. Detail relating to form, siting, use of materials and colours is not yet available given the early stage of design, but wirelines and verified photomontages from a number of representative viewpoints are presented as **Figures 14.19 – 14.24** (ES Volume III - **Application Document Ref. 6.4**). Visible plumes could potentially occur from the carbon capture plant absorber stack due to the low temperature of release and the water content of the gas. The use of gas re-heat to increase the stack temperature has been considered as part of the plant design and in **Chapter 8**: Air Quality (ES Volume I - **Application Document Ref. 6.2**), including the effect this would have on visible plume formation. The impact on a range of residential receptors and users of the local road networks have been assessed utilising representative viewpoints.

Consultee or Organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
			Details of the plume dispersion characteristics are set out in **Chapter 8**: Air Quality (ES Volume I - **Application Document Ref. 6.2**).
National Grid	Stage 2 (Statutory) Consultation January 2021	If a landscaping scheme is proposed, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.	Noted and considered in the Landscaping and Biodiversity Management and Enhancement Plan (**Application Document Ref. 5.10**).
Natural England	Stage 2 (Statutory) Consultation January 2021	The proposal is not located within or in the vicinity of any nationally designated landscapes. We support the use of the Guidelines for Landscape and Visual Impact Assessment (3rd Edition) in carrying out the landscape and visual assessment as set out in Chapter 14 of the PEI report.	Noted.

Consultee or Organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		Natural England welcomes that there is a commitment to creating a gain for biodiversity and that a Landscape and Biodiversity Management and Enhancement Plan will be developed for the proposed development.	Noted.
North Lincolnshire Council	Stage 2 (Statutory) Consultation January 2021	NLC support the proposals and the assessment methodology proposed at PEI Report stage.	Noted.
Isle of Axholme and North Nottinghamshire Water Level Management Board	Stage 2 (Statutory) Consultation January 2021	Any planting undertaken at the site must be carried out in such a way to ensure that the planting does not encroach within nine metres of any Board maintained watercourse when fully matured.	Noted and considered, as far as reasonably practicable in the Landscaping and Biodiversity Management and Enhancement Plan (**Application Document Ref. 5.10**).
Public Health England	January 2021 (Stage II Consultation / PEI Report)	Greater clarity is needed on consideration of baseline and cumulative impacts from the whole site footprint.	Construction of Keadby 2 Power Station is now largely complete and therefore there will not be any cumulative effects with the Proposed Development given that the earliest date that construction could

Consultee or Organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		It is recommended this include Keady 2 construction and Keadby 1 removal (unless continued operation confirmed), details and justifications regarding which assessment year has been chosen and any monitoring proposals.	commence is quarter 4, 2022. Similarly, any decommissioning of Keadby 1 Power Station would not occur concurrently with construction of the Proposed Development, as explained in Section 2.6 (**Chapter 2**: Assessment Methodology (ES Volume I – **Application Document Ref. 6.2**)). However, in order to determine whether the removal of Keadby 1 Power Station structures would affect the worst-case assessment presented in this chapter, this additional scenario has been considered in the assessment of built heritage effects (**Chapter 15:** Cultural Heritage (ES Volume I - **Application Document Ref. 6.2**) and visual amenity effects within this chapter.

Summary of Key Changes to Chapter 14 since Publication of the Preliminary Environmental Information (PEI) Report and PEI Report Addendum

14.3.3 The PEI Report was published for statutory consultation in November 2020, allowing consultees the opportunity to provide informed comment on the Proposed Development, the assessment process and preliminary findings through a consultation process, prior to the finalisation of this ES. A PEI Report Addendum was subsequently published in March 2021 following minor changes that were made to the indicative Order Limits since the formal Stage 2 consultation.

14.3.4 The key changes relevant to this chapter since the PEI Report was published are summarised in Table 14.3 below.

Table 14.3: Summary of key changes to chapter since publication of the PEI Report and addendum

Summary of change since PEI Report and addendum	Reason for change	Summary of change to chapter text in the ES
A set of winter verified photography was undertaken on the 22nd January 2021 for a number of viewpoints to consider impacts on these viewpoints without leaf cover.	To assess the effect of no leaf cover (winter views) in addition to full leaf cover (summer views) undertaken previously.	Generally, it was found that there are no significant differences between seasonal views due to the presence of evergreen or trees with dense canopies. Winter viewpoint photographs are included in **Figures 14.9 – 14.24** (ES Volume III - **Application Document Ref. 6.4**).
The effects of night-time lighting have been included in the landscape and visual assessment.	An Indicative Lighting Strategy (**Application Document Ref. 5.11**) has been prepared, enabling assessment of night-time lighting effects to be made in this chapter.	The Indicative Lighting Strategy (**Application Document Ref. No. 5.11**) is discussed in Section 14.5.

Summary of change since PEI Report and addendum	Reason for change	Summary of change to chapter text in the ES
Inclusion of an operational impact assessment scenario where the structures of Keadby 1 Power Station are removed during operation of the Proposed Development.	To assess a potential future baseline scenario in the ES, to determine if this represented a worst-case, assuming in the future that removal of structures associated with Keadby 1 Power Station may occur and the Proposed Development would have the potential for different impacts on landscape and visual amenity.	The assessment is included within Section 14.6.

Assessment Methods

14.3.5 The landscape and visual impact assessment has been based on the following best practice guidance:

- Guidelines for Landscape and Visual Impact Assessment (GLVIA 3), Third Edition (Landscape Institute and Institute of Environmental Management and Assessment, 2013); and
- Technical Guidance Note (TGN) 06/2019: Visual Representation of Development Proposals (Landscape Institute, 2019).

14.3.6 Baseline data has been gathered from a desk based assessment including study of Ordnance Survey (OS) maps and aerial photographs, publicly available documents such as landscape character assessment documents from local authorities within the immediate area and national character mapping available from Natural England. A site visit has also been undertaken to provide valuable background knowledge on the existing character and impact of the Proposed Development on receptor groups such as residents and to record views from representative viewpoints.

Impact Assessment and Significance Criteria

14.3.7 A detailed description of the assessment methodology is included in **Appendix 14A**: Landscape and Visual Assessment Methodology (ES Volume II - **Application Document Ref. 6.3**) and is summarised below.

14.3.8 For the purposes of comparison and in order to establish a 'control' scenario against which the effects of the Proposed Development may be assessed,

the baseline conditions are projected forward to produce a future 'no development' (baseline) scenario. The potential impacts of the Proposed Development upon the future baseline landscape and views are then identified and the significance of any resulting effects assessed. Potential landscape and visual impacts and the resulting effects (both adverse and beneficial) are considered for the following scenarios:

- construction (Quarter 4, 2022);
- opening (start of operation) (late 2026);
- operation (15 years post opening) (2041) assumes Keadby 1 Power Station is still present;
- operation (15 years post opening) (2041) assumes Keadby 1 Power Station including stacks, will no longer be present; and
- decommissioning (at the earliest 2051).

14.3.9 Impacts may be temporary, permanent, short-term or long-term. Landscape and visual impacts may be further categorised as being either direct, i.e. originating from the development itself; or indirect and secondary, from consequential change resulting from the development.

14.3.10 In order to provide a level of consistency and transparency to the assessment and allow comparisons to be made between the various landscape and visual receptors subject to assessment, the assessment of effects is based on pre-defined criteria as outlined in Table 16 within **Appendix 14A**: Landscape and Visual Assessment Methodology (ES Volume II - **Application Document Ref. 6.3**). When assessing the degree of individual effects, these may fall across several different categories and professional judgement is therefore used to determine which level best fits the overall effect on a landscape or visual receptor. GLVIA 3 dictates that this is not a prescriptive process and is provided as a guide to how combination of sensitivity and magnitude are typically combined.

Landscape Impact Assessment Methodology

14.3.11 In assessing the predicted effects from any likely impacts to the landscape resulting from the Proposed Development, the following aspects are considered:

- landscape character;
- landscape sensitivity; and
- magnitude of likely impacts that may affect the landscape.

14.3.12 Landscape impacts are considered, including both the direct and indirect impacts of the Proposed Development upon landscape elements and features (or components), as well as the impact upon the general landscape character of the surrounding area.

14.3.13 The susceptibility of the landscape to change is the degree to which a particular LCA or feature can accommodate changes or new features without unacceptable detrimental effects to its essential characteristics. Susceptibility is combined with value to determine sensitivity.

14.3.14 The magnitude of a predicted landscape impact relates to the size, extent or degree of change and duration likely to be experienced as a result of the Proposed Development. The magnitude takes into account whether there is a direct impact resulting in the loss of landscape components, or a change beyond the land-take of the Proposed Development that might have an effect on the character of the area, and whether the impact is permanent or temporary.

14.3.15 The relationship between sensitivity and magnitude of impact allows an assessment of the significance of predicted landscape effects to be made. **Diagram 14.1** below describes the relationship between sensitivity and magnitude of impacts on the landscape to determine the level of effect.

14.3.16 An explanation of the criteria used to assess sensitivity, magnitude of impact and classification of landscape effects is included in **Appendix 14A**: Landscape and Visual Assessment Methodology (ES Volume II - **Application Document Ref. 6.3**).

Visual Impact Assessment Methodology

14.3.17 The assessment of effects likely to result from visual impacts is structured by the susceptibility of receptor groups to change. Receptors are primarily identified through the combination of definition of the zone of theoretical visibility (ZTV), within which views of the Proposed Development are likely to be possible; and professional judgment. The sensitivity of each receptor group is then evaluated as being high, medium, low or very low through combination of the value of view and susceptibility of the receptor.

14.3.18 Views from each identified representative viewpoint are recorded, considering the distance from the Proposed Development Site (as the crow flies), receptor type, and a short description of the view.

14.3.19 For the purposes of assessment, the sensitivity of a receptor and the magnitude of a likely impact are combined to assess the effects that the Proposed Development is predicted to have on existing baseline visual conditions for that given receptor. As previously described for the landscape impact assessment, specific terminology is used to describe the magnitude of impact (see **Appendix 14A**: Landscape and Visual Assessment Methodology (ES Volume II - **Application Document Ref. 6.3**) for details). Diagram 14.1 sets out the criteria used to assess the relative significance of visual effects.

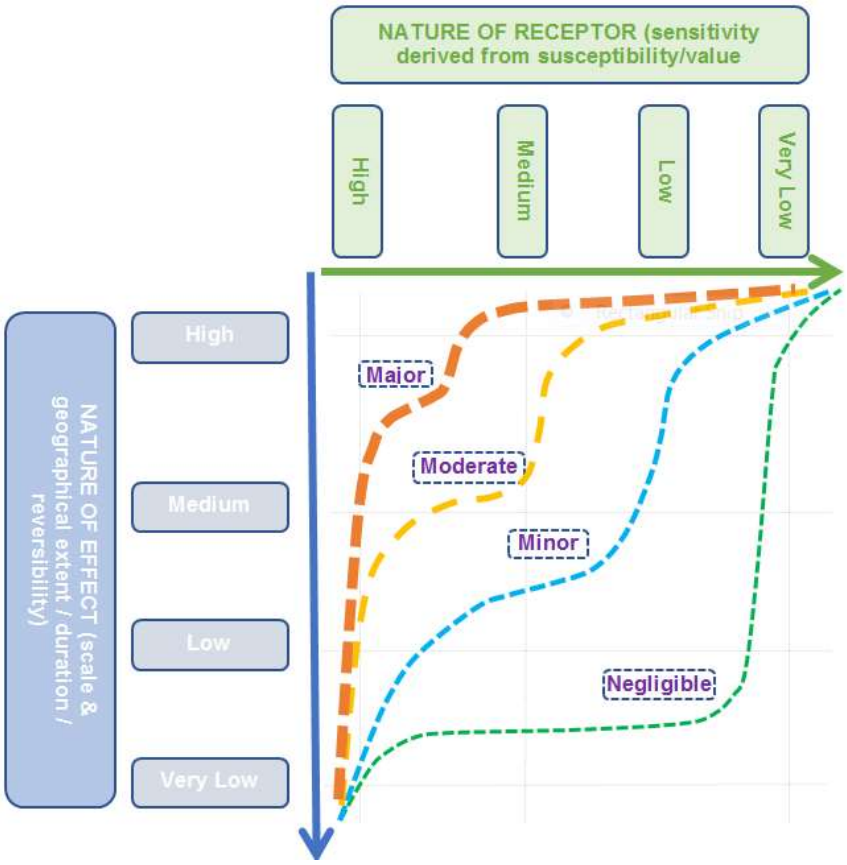
14.3.20 Although some visual receptors may consider the Proposed Development to be visually interesting, the assessment follows standard best practice

methods, and therefore assumes a 'worst-case' scenario whereby significant changes to views as a result of new tall/ large structures or buildings in an existing relatively open area are generally considered to be adverse.

14.3.21 Viewpoint photography accompanying this assessment has been undertaken in accordance with best practice in Landscape Institute Technical Guidance Note (TGN) 06/2019: Visual Representation of Development Proposals; Type 1 (annotated viewpoint photograph), Type 2 (wireline) and Type 4 (verified photomontage).

14.3.22 The relationship between the sensitivity of receptors and the magnitude of likely impacts allows the relative significance of predicted effects on landscape and visual receptors to be defined. **Diagram 14.1** below describes the relationship, and so allows a relative level of significance of any predicted visual effects to be categorised. For the purposes of this assessment, moderate and major effects are considered 'significant' in accordance with standard EIA practice; while minor and negligible effects are considered to be 'not significant'. Where significant environmental effects are identified, measures to mitigate these effects are proposed (where feasible) and the remaining residual effects are identified.

Diagram 14.1: Classification of Landscape and Visual Effects



14.3.23 Although the assessment considers all structures relating to the Proposed Development, the focus of the assessment within this chapter is the worst-case scenario which is based on the maximum dimensions outlined in **Chapter 4**: The Proposed Development (ES Volume I - **Application Document Ref. 6.2**).

14.3.24 To facilitate the reader's interpretation of the information, wireline imagery illustrating the Proposed Development (see **Figures 14.19 – 14.24**) using the indicative layout shown in **Figure 4.1** (ES Volume III - **Application Document Ref. 6.4**) has been prepared.

Study area

14.3.25 The extent of the study area is determined by the potential visibility of the Proposed Development in the surrounding landscape and is proportionate to the size and scale of the Proposed Development and nature of the surrounding landscape. GLVIA3 (Landscape Institute and Institute of Environmental Management and Assessment, 2013) states that the study area should include *'the full extent of the wider landscape around it which the Proposed Development may influence in a significant manner'*.

14.3.26 For the purposes of this Landscape and Visual Impact Assessment (LVIA) the study area has been defined by a combination of ZTV analysis (see below) and professional judgement. This 10km radius study area was determined through professional judgement and consultation to agree these viewpoints was undertaken with relevant authorities (as listed in Table 14.2). Based upon the tallest element of the Proposed Development being the absorber stack (105m AGL) it is considered that it is highly unlikely that significant effects will be experienced from further than 10km from the boundary of the Proposed PCC Site.

Study Area Data Sources

14.3.27 A site visit was undertaken by a Chartered Landscape Architect on 14th July 2020, to provide background knowledge on the existing landscape character of the study area and to record potential views that receptors would have of the Proposed Development from representative viewpoints to inform this assessment.

Use of Rochdale Envelope

14.3.28 The LVIA has been undertaken in accordance with the Planning Inspectorate Guidance Note Nine: Using the Rochdale Envelope (The Planning Inspectorate, 2018). The key measurements for the implementation of the Rochdale Envelope (i.e. the maximum parameters for the Proposed Development and in particular, its main buildings and structures) are detailed in Table 4.1 (**Chapter 4**: The Proposed Development (ES Volume I - **Application Document Ref. 6.2**).

14.3.29 The magnitude of visual impacts of the Proposed Development relates to (amongst other criteria) the size and scale of the structures and geographical extent of the area influenced by them. The assessment is based upon the maximum proposed dimensions for the Proposed Development, and the height for the tallest structure (absorber stack) of up to 105m AGL (107.6m above ordnance datum (AOD)); having considered that a single larger absorber tower and stack is more likely to result in significant effects and represent the worst-case scenario compared to smaller twin absorber towers with stack(s). The maximum dimensions are based upon the widest building footprint and tallest proposed height as detailed in Table 4.1 in **Chapter 4**: The Proposed Development (ES Volume I - **Application Document Ref. 6.2**).

14.3.30 In addition to the Rochdale Envelope parameters, there are also limits of deviation within which the Proposed Development could be constructed defined in the Works Plans (**Application Document Ref. 4.3**) that accompany the Application. Given the space constraints of the limits of deviation for each work within the Proposed Development, it is considered that the overall conclusions of the assessment presented in this chapter would not be materially affected by the positioning of the buildings and structures within these limits.

14.4 Baseline Conditions

Existing Landscape Baseline

National Character Areas

14.4.1 At a national scale Natural England provide 159 National Character Area (NCA) profiles. Each profile includes a description of the natural and cultural features that shape the landscape. The study area contains two NCA profiles:

- NCA Profile 39: Humberhead Levels (Natural England, 2014a); and
- NCA Profile 45: Northern Lincolnshire Edge with Coversands (Natural England, 2014b).

14.4.2 The Proposed Development Site and the majority of the study area falls within NCA 39: Humberhead Levels (Natural England, 2014a). The east of the study area falls within NCA 45 Northern Lincolnshire Edge with Coversands (Natural England, 2014b). The relevant characteristics of these NCAs are described below and in full in **Appendix 14C**: Landscape Character (ES Volume II - **Application Document Ref. 6.3**). NCA are also illustrated on **Figure 14.1**: Landscape Character Areas and Types (ES Volume III - **Application Document Ref. 6.4**).

14.4.3 The potential for significant adverse landscape effects on NCA 45 as a result of the Proposed Development is considered negligible and as such it is excluded from further assessment. This is due to the large scale of the NCA,

the long distance between the Proposed Development and NCA and lack of intervisibility of the Proposed Development.

14.4.4 NCA 39: Humberhead Levels is a flat, low-lying and large scale agricultural landscape. There is widespread evidence of drainage history, in particular from the 17th century, in the evidence of ditches, dykes and canalised rivers. The Isle of Axholme is an Area of Special Historic Interest for its extensive strip field system. There are also several sites of international importance for their biodiversity. The flat landscape enables extensive, unbroken views where vertical structures including power stations and wind turbines, are very prominent. The value of NCA: 39 Humberhead Levels is assessed to be **high** as a result of the high conservation interest and high level of tranquillity.

Regional

14.4.5 The Proposed Development Site and study area is not covered by any regional Landscape Character Assessment.

Local

14.4.6 The study area is covered by four local Landscape Character Assessments;

- North Lincolnshire Landscape Character Assessment and Guidelines (Estell Warren Landscape Architects, 1999);
- East Riding of Yorkshire Council Landscape Assessment (AECOM, 2018);
- Doncaster Landscape Character Assessment and Capacity Study (ECUS Ltd 2007); and
- West Lindsey Landscape Character Assessment (Environment Resource Management, 1999).

North Lincolnshire Landscape Character Assessment and Guidelines

14.4.7 The North Lincolnshire Landscape Character Assessment and Guidelines divides the landscape into broad landscape character areas. The Proposed Development Site lies within the Trent Levels LCA. To the east of the study area lies Lincolnshire Edge LCA. The relevant characteristics of the LCA's are described below and in full in **Appendix 14C**: Landscape Character (ES Volume II - **Application Document Ref. 6.3**) and illustrated in **Figure 14.1**: Landscape Character Areas and Types (ES Volume III - **Application Document Ref. 6.4**).

14.4.8 The Trent Levels LCA is located centrally within and covers a large portion of the study area. The Proposed Development Site lies within the LCA which is characterised as a flat, open floodplain landscape with long distance views and little diversity in character. The area is dominated by linear features, long narrow roads flanked by drainage ditches, rectilinear field patterns, shelterbelts, field drainage systems, overhead electricity pylon runs and some

major transport corridors. Despite settlements, motorways and main roads, there is still a sense of remoteness to be experienced on the Levels.

14.4.9 The Lincolnshire Edge LCA is located in the east of the study area. It is a complex landscape which includes arable farmland, scarp slopes, urbanisation and dereliction in the Scunthorpe area, and the coversands area of heath, blown sand habitats and conifer woods. The north-south scarp slopes are locally distinctive. There are few boundaries within the open rectangular arable fields creating a large-scale escarpment landscape.

14.4.10 Trent Levels and Lincolnshire Edge LCA are further subdivided into local landscape character types (LCT). Within the study area, seven LCT lie within the Trent Levels LCA and eight LCT within the Lincolnshire Edge LCA. These are:

- Trent Levels LCA:
  - Flat Drained Treed Farmland LCT
  - Flat Drained Farmland LCT
  - Open Island Farmland LCT
  - Industrial Landscapes LCT
  - Flat Wooded Farmland LCT
  - Wooded Springline Farmland LCT; and
  - Flat Open Remote Farmland LCT.
- Lincolnshire Edge LCA:
  - Elevated Wooded Farmland LCT
  - Elevated Open Farmland LCT
  - Steep Wooded Scarp Slope LCT
  - Despoiled Landscape LCT
  - Heathy Woodland LCT
  - Industrial Landscape LCT
  - Wooded Scarp Slope LCT
  - Wooded Undulating Farmland LCT
  - Farmed Urban Fringe LCT; and
  - Open Undulating Farmland LCT.

14.4.11 The likelihood of significant adverse landscape effects on the following landscape receptors is considered negligible, as a result of the scale of the LCA, lack of intervisibility and the distance from the Proposed Development:

- Wooded Springline Farmland LCT due to long distance from the Proposed Development Site and limited intervisibility;
- Flat Open Remote Farmland LCT due to long distance from the Proposed Development Site and lack of intervisibility;
- Elevated Wooded Farmland LCT due to long distance from the Proposed Development Site and limited intervisibility;

- Elevated Open Farmland LCT as a result of the long distance from the Proposed Development Site and small proportion of the LCT within the study area;
- Despoiled Landscape LCT due to long distance from the Proposed Development Site and limited intervisibility;
- Heathy Woodland LCT including the area of High Landscape Value as a result of the long distance from the Proposed Development Site and small proportion of the LCT within the study area;
- Wooded Scarpe Slope LCT including the area of High Landscape Value as a result of the long distance from the Proposed Development Site and small proportion of the LCT within the study area;
- Wooded Undulating Farmland LCT as a result of the long distance from the Proposed Development Site and small proportion of the LCT within the study area;
- Farmed Urban Fringe LCT due to long distance from the Proposed Development Site and lack of intervisibility; and
- Open Undulating Farmland LCT due from long distance to the Proposed Development Site and lack of intervisibility.

14.4.12 As such, these receptors are excluded from further assessment.

14.4.13 The relevant characteristics of the LCT scoped into the assessment are briefly described below (full descriptions are presented in **Appendix 14C**: Landscape Character (ES Volume II - **Application Document Ref. 6.3**).

14.4.14 Flat Drained Treed Farmland LCT is located in the south-west of the study area. The LCT takes in the farmland west of the Isle of Axholme Area of Historic Special Interest. It is characterised by large regular field pattern with minimal hedgerow planting but relatively frequent boundary and field trees and woodland copses. The LCT is a flat, open and expansive arable landscape. Views are generally open with localised enclosure around settlement and farmsteads. The gently rising land in the east gives a sense of distant enclosure. The value of the Flat Drained Treed Farmland LCT is **high** as a result of the high conservation value, moderate scenic quality and recreational value.

14.4.15 The Proposed Development including the Proposed PCC Site lies within the Flat Drained Farmland LCT, which is characterised by expansive open and level, low-lying farmland. Tree cover is sparse and largely limited to shelterbelts surrounding farmsteads and settlements. Few boundary hedgerows are present within the intensively farmed arable landscape. The area is bisected by the M180, offering enclosure with its raised embankments. Transmission lines are a prominent feature within the floodplains and areas of industrial and wharfside development influencing the landscape. The value

of the Flat Drained Farmland LCT is **medium** as a result of the moderate scenic quality and conservation interest.

14.4.16 Landscape guidelines for the LCT state that in places, hedgerow and occasional tree planting should be encouraged to reinforce existing landscape structure without damaging the open characteristics. Any new planting should reflect existing species, size and regularity to create consistency throughout the character area.

14.4.17 The Open Island Farmland LCT is located in the south-west of the study area and is characterised by gently undulating arable fields, rounded landform with localised hillocks and ridges, creating an island of elevated land within the flat landscape. The elevated areas associated with the Isle of Axholme are rich with historic influences. The area is the most diverse LCT within the Trent Levels, combining open elevated views across the arable landscape with more intimate enclosed pockets of historically important land surrounding the settlements. Church towers, wind turbines and water towers are repeating structures within this area, puncturing the mostly unbroken skyline. The value of the Open Island Farmland LCT is **high** as a result of the high conservation interest, moderate scenic quality and recreational value.

14.4.18 The east section of the Proposed Development Site lies within the Industrial Landscape LCT. It is characterised by an industrial character, providing an abrupt transition from the surrounding open agricultural landscape. The industrial character of the area is strengthened by the convergence of several transmission lines on Keadby Power Station. The use of building materials such as concrete, prefabricated steel and wire mesh fencing contribute to the industrial feel. This LCT is also present within the Lincolnshire Edge LCA. The value of the Industrial Landscape LCT is **low** as a result of the low landscape quality, scenic quality and low levels of tranquillity.

14.4.19 The landscape guidelines for the LCT state that efforts should seek to contain this area. New industrial development should be sited to minimise impact. Light materials should be used that dissipate with the backdrop over distant views. The use of mitigation planting close to development should look to screen components built from heavy and intrusive materials. Tree planting should be encouraged around settlement to improve the eventual assimilation with the surrounding landscape and inappropriate planting should be actively avoided.

14.4.20 The Flat Wooded Farmland LCT is located in two enclosed farmland areas in the south-west of the study area. It is characterised by medium sized arable fields with little hedgerow planting. Tree lined avenues are a distinctive feature of the area, flanking roads, major drainage channels and former railway corridors. The value of the Flat Wooded Farmland LCT is **medium** as a result of the moderate scenic quality and landscape quality.

14.4.21 The Steep Wooded Scarp Slope LCT is located in a narrow linear strip in the north-east of the study area and is characterised by the prominent, steep

scarp slope rising from vale lowlands. Long range views are afforded across the Trent lowlands from the top of the slope and where vegetation is more limited. The landscape is generally of intimate scale and well enclosed by vegetation. Settlement edges of Burton upon Stather and Alkborough provide visual interest where houses, interspersed with vegetation, cling to the top of the slope face. The value of the Steep Wooded Scarp Slope LCT is **medium** as a result of the moderate scenic quality, rarity of landform and moderate levels of tranquillity.

East Riding of Yorkshire Council Landscape Assessment

14.4.22 A total of 23 LCT have been identified in the East Riding. The north of the study area falls within LCT 9 Drained Open Farmland and LCT 23 Humber Banks. It is considered that significant adverse landscape effects are unlikely to arise as a result of the Proposed Development for either of these landscape receptors; for the Humber Banks LCT, this is as a result of the considerable distance to the Proposed Development Site and small proportion of the LCT within the study area; and for the Drained Open Farmland LCT, due to the considerable distance to the Proposed Development Site. On this basis, they are excluded from further assessment.

14.4.23 The relevant characteristics of the LCT are described in **Appendix 14C**: Landscape Character (ES Volume II - **Application Document Ref. 6.3**) and illustrated in **Figure 14.1**: Landscape Character Areas and Types (ES Volume III - **Application Document Ref. 6.4**).

Doncaster Landscape Character Assessment and Capacity Study

14.4.24 The study identifies eight LCT in Doncaster and further divides the LCT into LCA of similar character. The west of the study area lies within G-Peat Moorlands LCT and Thorne and Hatfield Peat Moorland LCA. It is considered that significant adverse effects are unlikely to arise as a result of the Proposed Development for the Thorne and Hatfield Peat Moorlands LCA as a result of the considerable distance to the Proposed Development Site. and is therefore excluded further from this assessment. The relevant characteristics of the LCA are described in full in **Appendix 14C**: Landscape Character (ES Volume II - **Application Document Ref. 6.3**) and illustrated in **Figure 14.1**: Landscape Character Areas and Types (ES Volume III - **Application Document Ref. 6.4**).

West Lindsey Landscape Character Assessment

14.4.25 The study area falls within the Laughton Woods LCA. It is considered that significant adverse effects are unlikely to arise as a result of the Proposed Development for this LCA as a result of the considerable distance to the Proposed Development Site and is therefore excluded further from this assessment. The relevant characteristics of the LCA are described in full in **Appendix 14C**: Landscape Character (ES Volume II - **Application**

Document Ref. 6.3) and illustrated in **Figure 14.1**: Landscape Character Areas and Types (ES Volume III - **Application Document Ref. 6.4**).

Vegetation Cover

14.4.26 Tree and shrub cover within the study area is generally sparse. There are a limited number of small blocks of woodland dispersed across the open agricultural landscape. Tree cover is largely restricted to along the main arterial routes including the M180, A18 and A161. Wooded landscape areas are present to the east of the River Trent in the north of the study area between Alkborough and Flixborough.

14.4.27 Hedgerows are rare and where they are present, they tend to be sparse and gappy adding to the sense of openness within the study area.

Topography and Drainage

14.4.28 The topography of the study area is low lying and predominately flat. Much of the land is at or below mean high water mark and maintained by an extensive network of drainage systems. Land rises in the east of the study area with Foxhills Industrial Estate lying at approximately 60m AOD. Refer to **Figure 14.2**: Topography (ES Volume III - **Application Document Ref. 6.4**).

14.4.29 The River Trent flows from the south, across the Levels and joins the River Ouse immediately north of the study area at the Humber Estuary. The River Torne joins the River Trent at Keadby Pumping Station. Much of the channel within the study area is engineered. There are navigable waterways crossing the study area including Stainforth and Keadby Canal which forms part of the Sheffield and South Yorkshire Navigation.

14.4.30 There is widespread evidence of historic drainage, in particular the extensive drainage of land from the 17th century, revealed through canalised rivers, dykes, old river courses and canals across the study area. The large geometric fields are generally bound by ditches. In addition to providing a key characteristic of the study area, the rivers, floodplain and the network of drainage ditches and dykes form important ecological corridors and wetland habitats. The lower sections of the River Trent drain across the Humber Estuary in the north of the study area, providing flood management issues.

Settlements

14.4.31 The east of the study area includes the large industrial town of Scunthorpe, approximately 4.1km east of the Proposed PCC Site. There are several smaller settlements dispersed across the study area, generally located on higher ground or adjacent to the River Trent. Three small villages are located in close proximity to the Proposed Development Site. Keadby lies directly to the east of the Water Discharge Corridor, approximately 1km east from the Proposed PCC Site at its closest point. Gunness lies 580m east of the River Water Abstraction Option, 1.7km to the east of the Proposed PCC Site,

beyond the River Trent. Althorpe lies approximately 1.7km to the south-east of the Proposed Development Site.

14.4.32 Other nearby small settlements located along the River Trent include Burringham, West and East Butterwick, Amcotts, Flixborough, Garthorpe, Adlingfleet and Burton upon Stather. Further west there are several villages located along the A161 including Eastoft, Ealand, Belton, Epworth and the larger parish area of Crowle.

Communications

14.4.33 Settlements are connected by a series of "A" roads. The A18 crosses east to west through the centre of the study area, linking the M180 to Scunthorpe. The A161 crosses north to south through the study area connecting a number of villages in the west and linking to the A18. There are also a number of smaller roads bisecting the study area. The M180 lies to the south of the study area and runs east to west, joining the M181 in the east which provides links to Scunthorpe.

14.4.34 The South Humberside main line railway, which runs from Doncaster to Cleethorpes, is located in close proximity to the south of the Proposed PCC Site. The line runs alongside the Stainforth and Keadby Canal and crosses the River Trent at Keadby Bridge.

14.4.35 A number of Public Rights of Way (PRoW) are located within the study area. There are several bridleways and footpaths in close proximity to the Proposed Development Site. KEAD9 and KEAD10 lie north of the Proposed Development Site, crossing through Keadby Wind Farm. CROW12 and CROW13 lie to the west of the Proposed Development Site and CROW11 runs along the North Soak Drain to the west of the Proposed Development Site.

14.4.36 The long distance path Peatlands Way is located in the west of the study area and passes through the Isle of Axholme, Belton and Crowle. Refer to **Figure 14.3**: Landscape Context (ES Volume III - **Application Document Ref. 6.4**).

The Site and Its Immediate Setting

14.4.37 The full extent of the Proposed Development Site is shown on **Figure 3.1**: The Order Limits (ES Volume III - **Application Document Ref. 6.4**). The Proposed Development areas are shown on **Figure 3.3**: Indicative Work Areas Referred to in the ES (ES Volume III - **Application Document Ref. 6.4**) and detailed in **Chapter 3**: The Site and Surroundings (ES Volume I - **Application Document Ref. 6.2**).

14.4.38 The Proposed Development Site and immediate surrounding area is heavily influenced by power related industrial structures. Wind turbines are prominent features in the landscape alongside large pylons and transmission lines converging near Keadby 1 Power Station and Keadby 2 Power Station (under

construction). The surrounding low-level arable landscape, interspersed with scattered villages, provides areas of tranquility; however, large-scale structures and transport networks are ever present within views due to the open nature of the landscape.

14.4.39 The Proposed Development Site is largely surrounded by arable fields. Keadby village lies directly east, adjacent to the River Trent; to the south beyond the A18 lies farmland; to the west lies the reclaimed former ash heap and to the north lies a drain, farmland and Keadby Wind Farm. The Proposed Development Site is bisected by the Stainforth and Keadby Canal and the Scunthorpe to Doncaster Passenger railway line.

14.4.40 The Proposed Development Site lies between approximately 0-6m AOD, although the majority of the Proposed PCC Site lies between 0 and 2m AOD. The Proposed Development Site to the north of the canal/ railway line currently comprises large scale plant and buildings associated with the operational Keadby 1 Power Station and Keadby 2 Power Station (under construction). Immediately west of the Proposed Development Site, north of the canal/ railway line comprises the former Keadby Ash Tip including areas of grassland bordered by pockets of scrub vegetation. South of the canal/ railway line, the Proposed Development Site comprises agricultural fields and an existing access road. There are no natural features of noteworthy landscape value within the Proposed Development Site.

Value of the Landscape Receptor

14.4.41 The Lincolnshire Wolds AONB lies to the south-east outside of the study area. There is currently a formal request to extend the northern boundary of the Lincolnshire Wolds AONB. The proposed boundary extension encompasses the north-east of the study area around Burton upon Stather and as shown on **Figure 14.3**: Landscape Context (ES Volume III - **Application Document Ref. 6.4**). The value of the proposed boundary extension of the Lincolnshire Wolds AONB is assessed to be **high** as a result of the high scenic value and high landscape quality.

14.4.42 At a local level, the study area encompasses eight conservation areas illustrated on **Figure 14-3**: Landscape Context (ES Volume III - **Application Document Ref. 6.4**). The nearest, Crowle Conservation Area, lies 3.7km to the west of the Proposed Development Site.

14.4.43 There are no Registered Parks and Gardens within the study area.

14.4.44 Table 14.4 describes the factors relating to the value of the landscape at the Proposed Development Site and study area.

Table 14.4: Non-designated Landscape Areas/ Features

Factor	Study area	The Proposed Development Site
Landscape quality (condition)	The landscape of the study area is predominantly open, low lying arable farmland, influenced by industrial structures, pylons, wind turbines and transport routes. There is a visible presence of industrial structures on the eastern skyline around Scunthorpe. Landscape quality is poor where industry and power stations are present. Higher quality land is present in the north-east of the study area and Thorne, Crowle and Goole Moors is identified as an Important Landscape Area.	The Proposed Development Site is industrial in nature although contains areas of arable farmland and areas of scattered scrub.
Scenic quality	The low-lying arable landscape provides some scenic quality. Keadby 1 Power Station, Keadby 2 Power Station (under construction) and Keadby Wind Farm have a strong visual influence on the generally flat, open landscape.	The Proposed Development Site has very low scenic quality due to its power station use.
Rarity	The landscape of the study area contains historically important land around the settlements. Examples include the open strip fields surrounding the Isle of Axholme including the ancient open fields around Belton, Epworth and Haxey.	The Proposed Development Site contains no rare features.
Representativeness	The low-lying arable landscape containing	The Proposed Development Site and

Factor	Study area	The Proposed Development Site
	sporadic industrial development is representative of the wider landscape of the study area.	its mix of industrial structures with an arable landscape is representative of the wider landscape context.
Conservation interests	The study area contains eight conservation areas and a number of listed buildings. Locally important landscapes within the study area include the historic landscape of Axholme, Sites of Special Scientific Interest (SSSI), Important Landscape Areas, Special Areas of Conservation (SAC) and Ramsar Sites.	The majority of the Proposed Development Site does not contain any areas that have high conservation or biodiversity value. Within the land required by the Proposed Development, the River Trent has been identified as a potential water abstraction and discharge location, and during construction the existing infrastructure associated with the Waterborne Transport Offloading Area on the River Trent is proposed to be used to facilitate offloading of AIL, as has been undertaken for Keadby 2 Power Station construction. At this location, the River Trent is classified as a Ramsar, SAC and SSSI.
Recreation value	Taken as whole the landscape of the study area has a high recreational value which includes a number of PRoW, long distance routes, parks and gardens and waterways.	The Proposed Development Site has no public access. The Stainforth and Keadby Canal has been identified as a potential water abstraction option. The canal is used for navigation and water sports, and the

Factor	Study area	The Proposed Development Site
		towpath is popular for recreation.
Perceptual aspects	The study area contains a relatively high number of areas which can be regarded as tranquil and remote.	No specific, relevant perceptual aspects which define landscape character have been identified within the Proposed Development Site.
Overall landscape value	**Medium** The study area includes a number of areas designated locally for their landscape character and/or perceptual qualities/tranquillity, whilst being heavily influenced by industrial developments, residential areas and transport corridors.	**Low** The Proposed Development Site is an area of industrial land and farmland.

Existing Visual Baseline

Zone of Theoretical Visibility Analysis

14.4.45 In order to identify locations with potential to have views of the Proposed Development, a ZTV has been produced. This identifies those areas which have potential for views of the Proposed Development and to what extent it is likely to be visible. The ZTV is illustrated in **Figure 14.4**: Zone of Theoretical Visibility and Potential Viewpoint Locations (ES Volume III - **Application Document Ref. 6.4**).

14.4.46 The ZTV has been prepared for the Proposed Development based upon the tallest structure, i.e. the single absorber tower and stack, at up to 105m AGL (107.6m AOD), as a worst-case, in order to identify the likely maximum extent of theoretical visibility of the Proposed Development.

14.4.47 The ZTV has been generated by analysis of a 3D digital terrain model (DTM) of the surrounding terrain and the Proposed Development. Buildings have been incorporated into the DTM from OS Open Map Local with an assumed height of 7.5m. Woodland from the National Forest Inventory has also been incorporated into the DTM with an assumed height of 15m. The ZTV is based upon a grid of points at 20m apart within the Main Site footprint at a height of 105m AGL, with an observer eye height of 1.6m.

14.4.48 As detailed in **Chapter 4**: The Proposed Development (ES Volume I - **Application Document Ref. 6.2**), the Application envelope considers the potential for more than one absorber tower for the CCP, which forms the tallest component of the Proposed Development (apart from the stack on top). Therefore, to ensure that all potential locations for the tallest element (absorber stack at up to 105m AGL, 107.6m AOD) were assessed, as a worst-case, the whole of the Main Site which comprises the northern part of the Proposed PCC Site on Keadby Common was modelled at a height of 105m AGL. The **Figure 14.4**: Zone of Theoretical Visibility and Potential Viewpoint Locations – 105m stack (ES Volume III - **Application Document Ref. 6.4**) identifies the locations within the 10km study area where there is the potential to receive views of any part of the Proposed Development within the Proposed PCC Site.

14.4.49 Potential viewpoints and receptors were identified throughout this area. The potential receptors and their existing views are described in Table 14.5 and shown on **Figure 14.5**: Representative Viewpoints (ES Volume III - **Application Document Ref. 6.4**).

14.4.50 Visibility within the study area is generally widespread. Due to the low-lying land along the majority of the study area and limited intervening vegetation, there are frequent, open views in the north-west and east. Visibility in the south and south-west is restricted due to the extent of built form and topography.

Dynamic Views

14.4.51 Users of the main transport routes and long-distance trails will gain dynamic views towards the Proposed Development Site to varying degrees, dependent on intervening structures, screening vegetation, elevation and direction of travel.

14.4.52 Users of the Scunthorpe to Doncaster passenger railway line will gain transient, dynamic views towards the Proposed Development Site. Views will include a landscape containing large areas of farmland, industrial structures, overhead power lines, highway infrastructure and wind turbines. In close proximity to the Proposed Development Site, Keadby 1 Power Station and Keadby 2 Power Station (currently under construction) will be prominent within views.

14.4.53 Users of the Stainforth and Keadby Canal will gain dynamic and ever changing views, often limited by intervening vegetation and landform. Where views do exist, it is anticipated that Keadby 1 Power Station, Keadby 2 Power Station and infrastructure would be prominent in views close to the Proposed Development Site with views elsewhere within the study area influenced by a number of industrial structures.

14.4.54 Within the study area, there are a number of local roads in close proximity of the Proposed Development Site which join the settlements. Generally, views

from these roads will be dynamic and ever changing. Views are often broken or restricted by screening vegetation and built form located along the road corridors. Where views are open, the structures associated with Keadby 1 Power Station and Keadby 2 Power Station (under construction) are clearly visible, appearing prominent in close proximity to the Proposed Development Site.

Visual Receptors and Viewpoints

14.4.55 Through consultation with the relevant stakeholders, listed in Table 14.2, a total of 13 viewpoints were chosen to represent the typical range of views of the Proposed Development from within the study area. The selected viewpoints are listed in Table 14.5 and illustrated on **Figure 14.5**: Representative Viewpoints (ES Volume III - **Application Document Ref. 6.4**).

14.4.56 The full list of all viewpoints originally considered can be found in **Appendix 14B**: Potential Viewpoints (ES Volume II - **Application Document Ref. 6.3**) and illustrated on **Figure 14.4**: Zone of Theoretical Visibility and Potential Viewpoint Locations – 105m stack (ES Volume III - **Application Document Ref. 6.4**).

Table 14.5: Representative Viewpoints

Viewpoint ID	Name and Location	Receptor Type	Elevation (AOD)	Co-ordinates	View
1	Chapel Lane West, Keadby	Residential	3	483216, 411888	Short range view along Chapel Lane south-west across farmland. Keadby 1 Power Station and Keadby 2 Power Station (under construction) are prominent in the view. Pylons, transmission lines, silos, a concrete water tower and wind turbines associated with Keadby Wind Farm are visible in the view. Representative of close-range views from the north. **Night-time:** Street lighting is present along the eastern section of the road. Existing aviation warning lighting is present on the wind turbines, the stacks associated with Keadby 1 Power Station and cranes associated with the construction of Keadby 2 Power Station. In general, there are low levels of night-time lighting. **Value of view**: Local, commonplace view containing a high level of detractors; therefore, the overall value is **Low.** Refer to **Figure 14.6** (ES Volume III – **Application Document Ref. 6.4**).
2	Gate Keepers Residence, (Vazon Bridge), Keadby	Residential, Recreational	4	482480, 411470	Short range view along the Stainforth and Keadby Canal towpath. The foreground comprises the canal and the Gate Keepers Residence. Pylons, transmission lines, wind turbines associated with Keadby Wind Farm, Keadby 1 Power Station and construction activity

Viewpoint ID	Name and Location	Receptor Type	Elevation (AOD)	Co-ordinates	View
					associated with Keadby 2 Power Station are all visible above intervening vegetation in the middle ground. Representative of close-range views from the south. **Night-time:** Existing aviation warning lights on the wind turbines, the stacks of Keadby 1 Power Station and the cranes associated with the construction of Keadby 2 Power Station are visible. In general, there are low levels of night-time lighting at this location. **Value of view**: View likely to be locally valued with medium visitor numbers and high level of detractors; therefore the overall value is **Medium.** Refer to **Figure 14.7** (ES Volume III – **Application Document Ref. 6.4**).
3	Keadby Lock	Recreational	4	483436, 411410	Short range view from the towpath close to Keadby Lock. The foreground comprises Stainforth and Keadby Canal. Signals along the B1392 Trent Road overbridge are visible to the right of the view. Vegetation bordering the canal is visible in the middle ground of the view with industrial structures, Keady 1 Power Station, Keadby 2 Power Station (under construction), pylons and a wind turbine are visible on the horizon, partially screened by the intervening vegetation. **Night-time:** There is street lighting and high-level flood lighting associated with the Lock at this location. In

Viewpoint ID	Name and Location	Receptor Type	Elevation (AOD)	Co-ordinates	View
					general, there are medium levels of night-time lighting visible within Viewpoint 3. Representative of close-range views from the east. **Value of view**: Local view with a number of detractors; therefore the overall value is **Low.** Refer to **Figure 14.8** (ES Volume III **– Application Document Ref. 6.4**).
4	PRoW (KEAD9, KEAD10), north of Keadby	Recreational	2	483218, 412391	Open view from the junction of PRoW KEAD9 AND PRoW KEAD10 looking in a south-westerly direction. The fore and middle ground contains flat arable land. Overhead lines, pylons, transmission lines Keadby Wind Farm, Keadby 1 Power Station and Keadby 2 Power Station (under construction) are clearly visible in the background of the view. **Night-time:** Street lighting along Chapel Lane and aviation warning lights on the wind turbines, Keadby 2 Power Station stacks and the cranes associated with the construction of Keadby 2 Power Station are visible. There are low levels of night-time lighting at this location. **Value of view**: Local, commonplace view and high level of detractors; therefore the overall value is **Low.** Refer to **Figure 14.9** (ES Volume III **– Application Document Ref. 6.4**).

Viewpoint ID	Name and Location	Receptor Type	Elevation (AOD)	Co-ordinates	View
5	PRoW (GUNN179), north-east of Gunness	Recreational	5	484108, 411829	Wide open view in a south-west direction across flat arable farmland from the edge of Gunness residential area. The residential area of Keadby is visible in the background of the view. Keadby 1 Power Station, Keadby 2 Power Station (under construction), Keadby Wind Farm, pylons and transmission lines are visible in the background view. Representative of mid-range views from the east. **Night-time:** Street lighting from Gunness is visible, creating sky glow to the south-east. The lighting located in the Lock and aviation warning lighting will be visible to the south-west. There are low levels of lighting visible in the night sky from this location. **Value of view**: Local, commonplace view with high level of detractors in the background.; therefore the overall value is **Low.** Refer to **Figure 14.10** (ES Volume III **– Application Document Ref. 6.4**).
6	Trunk Road, Keadby	Recreational, Residential, Transport	2	483145, 409787	Middle range view to the west across farmland. Pylons, transmission lines and the Keadby 1 Power Station and Keadby 2 Power Station (under construction) are visible on the horizon. Representative of mid-range views from the south. **Night-time:** Street lighting from Althorpe is visible as the closest source of lighting. Lighting from Keadby and

Viewpoint ID	Name and Location	Receptor Type	Elevation (AOD)	Co-ordinates	View
					Keadby Port creates a low-level of sky glow and aviation warning lighting is clearly visible from this location. There are overall low levels of lighting visible in the night sky from this location. **Value of view**: Local, commonplace view with high level of detractors in the background; therefore the overall value is **Low.** Refer to **Figure 14.11** (ES Volume III **– Application Document Ref. 6.4**).
7	PRoW (CROW11) east of Ealand Poultry Farm	Recreational, Residential,	1	480231, 412383	Close range view south-east across farmland. Wind turbines, pylons, transmission lines are visible in the fore and middle ground. The restored former ash tip is visible in the background of the view. The stacks of Keadby 1 Power Station are visible above the former ash tip against the sky. Representative of mid-range views from the west. **Night-time:** Aviation warning lights on the wind turbines, Keadby 1 Power Station stack and the cranes associated with the construction of Keadby 2 Power Station are visible from this location. Task lighting is present at the nearby industrial unit. There are low levels of night-time lighting at this location. **Value of view**: Local, commonplace view with high level of detractors throughout the view; therefore the value is **Low.**

Viewpoint ID	Name and Location	Receptor Type	Elevation (AOD)	Co-ordinates	View
					Refer to **Figure 14.12** (ES Volume III **– Application Document Ref. 6.4**).
8	PRoW (East8) Eastoft	Residential, Recreational	3	480570, 415872	Wide, open view across farmland from the edge of Eastoft. Overhead telecommunication lines are apparent in the foreground. Pylons, transmission lines and Keadby 1 Power Station is visible in the background. Representative of long-range views from the north. **Night-time:** Street lighting is present in Eastoft. Distant sky glow is visible from the northern area of Scunthorpe. Overall there are low levels of night-time lighting at this location. **Value of view**: Local, commonplace view with medium level of detractors; therefore the overall value is **Medium.** Refer to **Figure 14.13** (ES Volume III **– Application Document Ref. 6.4**).
9	Meredyke Road, Luddington	Residential	2	483337, 416543	Open view looking south from the edge of Luddington village. Telecommunication lines transect the flat arable landscape in the fore and middle ground. A woodland block and scattered trees are visible in the background as are residential dwellings within Keadby. Wind turbines associated with Keadby Wind Farm and Keadby 1 Power Station and Keadby 2 Power Station (under construction) are visible on the horizon. Representative of long-range views from the north.

Viewpoint ID	Name and Location	Receptor Type	Elevation (AOD)	Co-ordinates	View
					Night-time: Street lighting is present in Luddington. Distant sky glow is visible from the northern area of Scunthorpe. Overall there are low levels of night-time lighting at this location. **Value of view**: Locally valued view with medium level of detractors; therefore the overall value is **Medium.** Refer to **Figure 14.14** (ES Volume III **– Application Document Ref. 6.4**).
10	Middle Lane, Amcotts	Residential	4	485274, 414117	Open expansive view adjacent to residential properties along Middle Lane. An access track and grassland are visible in the foreground. Lighting columns along Middle Lane are visible in the wider view. The flat arable farmland transected by overhead telecommunication lines form the middle to background view. Wind turbines associated with Keadby Wind Farm, Keadby 1 Power Station and Keadby 2 Power Station (under construction) are visible in the background of the view. Representative of long-range views from the north. **Night-time:** Street lighting is present in Amcotts. Distant sky glow is visible from the northern area of Scunthorpe. Overall there are low levels of night-time lighting at this location. **Value of view**: Local, commonplace view with medium level of detractors; therefore the overall value is **Medium.**

Viewpoint ID	Name and Location	Receptor Type	Elevation (AOD)	Co-ordinates	View
					Refer to **Figure 14.15** (ES Volume III **– Application Document Ref. 6.4**).
11	PRoW (BURT171) accessed off Chafer Lane, Burton upon Stather	Recreational	25	486661, 417434	Slightly elevated, wide open view from PRoW across arable farmland. Overhead telecommunication lines are visible in the foreground. Turbines associated with Keadby Wind Farm are prominent in the middle ground. Pylons, overhead transmission lines, Keadby 1 Power Station and Keadby 2 Power Station (under construction) are visible in the background view. Representative of long-range views from the north-east. **Night-time:** No direct light sources are present. Sky glow from Burton upon Stather and the north of Scarborough would be visible from this location. Overall there are very low levels of night-time lighting at this location. **Value of view**: View likely to be locally valued with medium visitor numbers and high level of detractors; therefore the overall value is **Medium.** Refer to **Figure 14.16** (ES Volume III **– Application Document Ref. 6.4**).
12	Mill Road, Crowle	Residential	19	478007, 413172	Wide open view taken from the edge of Crowle. The foreground and middle ground comprise flat arable farmland. Intermittent vegetation is visible in the middle ground. Wind turbines associated with Keadby Wind Farm, pylons and transmission lines form detracting features in the background view. Keadby 1 Power Station

Viewpoint ID	Name and Location	Receptor Type	Elevation (AOD)	Co-ordinates	View
					and Keadby 2 Power Station (under construction) are visible in the background view. Land rises on the horizon in the east. Representative of mid-range views from the west. **Night-time:** Street lighting is present in Crowle. Very distant sky glow is visible from Scunthorpe. Overall there are low levels of night-time lighting at this location. **Value of view**: Well composed view with a high level of detractors in the distance; therefore the overall value is **Medium.** Refer to **Figure 14.17** (ES Volume III **– Application Document Ref. 6.4**).
13	PROW (BELT30/ BELT 34) Isle of Axholme	Recreational	14	477882, 406999	Wide open view taken along PRoW in a slightly elevated location. Arable farmland is visible in the fore and middle ground. Properties along Westgate Road are visible in front of a belt of mature trees. Overhead telecommunication lines transect the landscape. Keadby Wind Farm and the stacks associated with Keadby 1 Power Station are visible above vegetation in the background view. Representative of long-range views form the south-west. **Night-time:** Street lighting is visible from within Belton. Aviation warning lighting is visible from wind turbines on the horizon. Overall there are very low levels of night-time lighting at this location.

Viewpoint ID	Name and Location	Receptor Type	Elevation (AOD)	Co-ordinates	View
					Value of view: View from heritage asset with medium visitor numbers and low level of detractors; therefore the overall value is **High.** Refer to **Figure 14.18** (ES Volume III **– Application Document Ref. 6.4**).

Summary of Visual Baseline

14.4.57 The study area is characterised by low lying arable land, influenced in parts by industrial development. Large scale pylons and transmission lines transect the landscape. Due to the low topography within the study area, views of these structures including Keadby Wind Farm, Keadby 1 Power Station and Keadby 2 Power Station are readily available where vegetation and built form allow. The elevated land to the east of the River Trent allows for wide ranging views. In localised areas, small isolated woodlands and hedgerows restricts views of the industrial structures from further afield.

14.4.58 The extent of views available to receptors range from close proximity to long distance. A number of receptors are located at the edge of villages, along roads and along PRoW where the landform is low lying. The rising landform in the east and localised areas of slightly raised ground around the Isle of Axholme in the south-west allows for elevated long-distance views towards the Proposed Development Site.

Future Baseline

14.4.59 The future baseline is a prediction of baseline conditions in the future, assuming the Proposed Development has not been, or is not being, constructed.

14.4.60 Keadby 1 Power Station began commercial operation in 1996. The gas-fired power station has a contract to provide capacity to the grid until September 2022 and will have opportunities to secure further agreements in future auctions. Future plans for Keadby 1 Power Station will be confirmed by the Applicant in due course.

14.4.61 As described in **Chapter 2**: Assessment Methodology (ES Volume I – **Application Document Ref. 6.2**) it is recognised that the Keadby 1 Power Station would not be in operation concurrently with the Proposed Development. However, there is uncertainty regarding plans for, and timing of, future closure of Keadby 1 Power Station and whether it will still be present in the future baseline for the Proposed Development operational scenario (2041). Two scenarios have therefore been considered as part of the future baseline; scenario one - in which structures associated with Keadby 1 Power Station will continue to be present on-site, and scenario 2 - in which structures associated with Keadby 1 Power Station will be removed.

14.4.62 In the scenario 2 future baseline, the absence of structures associated with Keadby 1 Power Station would reduce the mass and concentration of structures present within the landscape. However, due to the continued presence of Keadby 2 Power Station and other power related developments, the overall impression of the landscape and of views would be largely unchanged. The sensitivity of each of the landscape receptors would be unchanged in the scenario 2 future baseline, with Keadby 1 Power Station structures no longer present.

14.4.63 Construction of Keadby 2 Power Station by the Applicant's Engineering, Procurement and Construction (EPC) contractor Siemens Energy commenced in April 2019 and is ongoing; expected completion is by quarter 1 (Q1), 2022. As part of the future baseline, Keadby 2 Power Station structures will continue to be present as the Proposed Development becomes operational.

14.4.64 The wider study area will continue to be influenced by a number of large-scale power related structures including wind turbines, power stations and infrastructure corridors in the future baseline scenario.

14.4.65 In the absence of the Proposed Development (i.e. if it was not to exist in the future baseline), it is considered that the Proposed Development Site may be used for other large-scale power developments, but the nature of these is undetermined.

14.5 Development Design and Impact Avoidance

14.5.1 The following impact avoidance measures will either be incorporated into the design or are standard construction or operational measures. These measures have therefore been taken into account as part of the impact assessment process described in this chapter:

- suitable materials will be used, where possible, in the construction of structures to reduce reflections and to assist with breaking up the massing of the buildings and structures; and
- the selection of finishes for the buildings and other infrastructure will be informed by the finishes of the adjacent developments (including Keadby 2 Power Station), in order to reduce the visual impact of the Proposed Development.

14.5.2 Lighting required during the construction and operation stages of the Proposed Development will be designed to reduce unnecessary light spill outside of the Proposed Development Site boundary. The effects of lighting have been reviewed as part of the landscape and visual assessment, to determine its effects on the landscape character of the Proposed Development Site and the surrounding area. The visual impact of lighting as described in the Indicative Lighting Strategy (**Application Document Ref. 5.11**) has also been considered on the relevant viewpoints around the Proposed Development that may be affected. For this purposes of this The following assumptions have been made with regards to the extent of lighting within the Proposed Development:

- construction temporary lighting will be designed so that excessive glare is minimised outside of the construction site as far as reasonably practicable. Measures to minimise light disturbance during construction are detailed in the Indicative Lighting Strategy (**Application Document Ref. 5.11**); and

- permanent external lighting during the operational phase would seek to reduce light pollution and the visual impact on the local environment by following the principles set out in Section 4 of the Indicative Lighting Strategy (**Application Document Ref. 5.11**).

14.6 Likely Impacts and Effects

14.6.1 This section identifies the potential impacts resulting from the Proposed Development. The magnitude of each impact is defined with reference to the relevant baseline conditions (existing or future, as appropriate), and effects are determined in accordance with the identified methodology presented within **Appendix 14A:** Landscape and Visual Amenity Methodology (ES Volume II - **Application Document Ref. 6.3**).

Landscape

14.6.2 The potential landscape impacts of the Proposed Development primarily relate to the visibility of proposed structures (temporary and permanent), including how this affects the perceptual qualities and tranquillity of a character area. In the case of the construction phase of the Proposed Development, this will relate to the following:

- movement of plant and heavy goods vehicles, both within the Proposed Development and in the surrounding area;
- temporary stockpiling of storage of materials on site;
- establishment of site compounds resulting in temporary structures to serve the workforce;
- crane activity to assist high level construction works on the Proposed PCC Site;
- building construction including new stacks on the Proposed PCC Site; and
- external lighting to illuminate site operations after dark on the Proposed PCC Site.

14.6.3 During the operational phase of the Proposed Development, this will relate to the following:

- introduction of permanent large-scale structures including buildings within the Proposed PCC Site;
- introduction of additional site lighting, where required for operational safety;
- movement of additional vehicles within and around the operational areas; and
- potential visibility of plumes from the Proposed Development including cooling towers at certain times of the year.

Specific Aesthetic or Perceptual Aspects

14.6.4 Large-scale power related development including Keadby 1 Power Station, Keadby 2 Power Station, Keadby Wind Farm, pylons and overhead lines is a well-established land-use within the Study Area and within the landscape immediately adjacent to the Proposed Development Site. The existing power related development is high visible across a large extent of the Study Area as a result of limited intervening vegetation and built form. Therefore, it is anticipated that the presence of the Proposed Development will not affect the aesthetic and perceptual qualities of the local landscape.

14.6.5 During construction, there would be changes in the aesthetic and perceptual qualities through the movement of plant within close proximity of the Proposed Development Site and the introduction of new large-scale structures at various stages of development within the Proposed PCC Site. At operation, the aesthetic and perceptual qualities would remain similar to the present, with large-scale static structures visible within the wider landscape.

Assessment of Landscape Effects

14.6.6 The Proposed Development is located in close proximity to Keadby 1 Power Station and Keadby 2 Power Station (under construction). The Proposed Development Site includes power related structures including pylons and overhead lines. There are further large-scale power related structures in the immediate vicinity of the Proposed Development Site including Keadby Wind Farm. The main feature of change during construction of the Proposed Development would be the introduction of tall cranes and piling rigs. By the time of opening, there would be new large-scale structures within the Proposed PCC Site.

14.6.7 During construction, there would be infrequent, short-duration and temporary disturbance to the landscape around Keadby village as a result AIL deliveries to the Proposed Development Site arriving at the Waterborne Transport Off-loading Area. Works may also be required at the River Water Abstraction Option involving installation and removal of a temporary cofferdam and works to upgrade the existing Keadby 1 Power Station intake structures.

14.6.8 If the River Water Abstraction Option was utilised minor pipework upgrades are required, trenchless excavation methods (‘sliplining’) would be applied to the existing pipeline. There will be no open cut pipeline replacement along the existing pipeline easement. The extent of temporary disturbance is there considered to be limited.

14.6.9 The main potential for effects on landscape character relates to the intervisibility between the Proposed Development and the LCA/LCT. Given the existing presence of large-scale power related development in close proximity to the Proposed Development Site, it is considered that it is likely to be congruous with its context and therefore there is a low potential for the landscape character of the surrounding areas to be affected.

14.6.10 Due to the setting of the Proposed Development Site, which is influenced by large-scale power related development, it is anticipated that there is a low likelihood that the effects will result in an inherent change to the existing landscape character at a local scale and negligible at a regional or national scale. Overall, the influence of the Proposed Development will be limited to the localised landscape immediately adjacent to the Proposed PCC Site.

14.6.11 Table 14.6 provides an assessment of the sensitivity of each landscape receptor. A detailed description of the criteria used to assess the landscape receptors can be found in **Appendix 14A**: Landscape and Visual Impact Methodology (ES Volume II - **Application Document Ref. 6.3**).

Table 14.6: Landscape Sensitivity Assessment

Landscape receptor		**Sensitivity Assessment**		
		Value	**Susceptibility**	**Sensitivity**
Natural England National Character Area Profiles (Natural England 2014)				
NCA Profile 39: Humberhead Levels		High	The low-lying open landscape contains some nationally significant conservation features, although is influenced by the presence of existing large-scale infrastructure. Susceptibility to change arising from the Proposed Development is therefore considered to be medium.	Medium
North Lincolnshire Landscape Character Assessment and Guidelines – (Estell Warren Landscape Architects, 1999)				
The Trent Levels LCA	Flat Drained Treed Farmland	High	The flat, open, expansive arable landscape contains nationally significant conservation interest, although interspersed with infrastructure in places. Susceptibility to change from the Proposed Development is considered to be high.	High
	Flat Drained Farmland	Medium	The low-lying, flat open arable landscape contains a number of detracting features including power stations, transmission lines, transport routes and wind turbines. Susceptibility to change from the Proposed	Medium

Landscape receptor		Sensitivity Assessment		
		Value	Susceptibility	Sensitivity
			Development is considered to be low.	
Lincolnshire Edge LCA	Open Island Farmland	High	The diverse landscape combines elevated views and enclosed pockets of historically important land. Susceptibility to change arising from the Proposed Development is considered to be Medium.	High
	Industrial Landscapes	Low	The landscape is degraded in places containing a high number of detracting features including industrial development along the riverside. Tranquillity is considered low. Susceptibility to change arising from the Proposed Development is considered to be low.	Low
	Flat Wooded Farmland	Medium	The landscape is largely intact and in reasonable condition, although contains a number of detractors. Susceptibility to change arising from the Proposed Development is considered to be low.	Medium
	Steep Wooded Scarp Slope	Medium	The steep scarp slope provides a strong sense of character with a good level of landscape condition. Susceptibility to change arising from the Proposed Development is therefore considered to be medium.	Medium
Lincolnshire Wolds AONB proposed extension area		High	The landscape within the AONB has a strong pattern and is a distinctive varied landscape with high value features. Susceptibility to change arising from the Proposed Development is therefore considered to be high.	High

Landscape receptor	Sensitivity Assessment		
	Value	Susceptibility	Sensitivity
Site Landscape Features	Medium	The pattern of the landscape ranges from degraded to intact. Overall susceptibility to change arising from the Proposed Development is therefore considered to be low.	Low

14.6.12 The following section provides an assessment of the anticipated magnitude of landscape impacts and the classification of effects on each landscape receptor at construction (Table 14.7), in the opening year (Year 1) (Table 14.8), during operation (Year 15) with Keadby 1 Power Station structures present (scenario 1) and absent (scenario 2) (Tables 14.9 – 14.10).

Table 14.7: Assessment of Landscape Effects – Construction

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
NCA Profile 39: Humberhead Levels	Medium	Construction activities associated with the Proposed Development will directly impact the NCA as a result of construction activities and removal of landscape features. Construction activities will be viewed in context with other large-scale power related structures. Due to presence of large-scale structures which lie within this NCA and the nature of construction activities, it is assessed that the Proposed Development will have very limited potential to affect the landscape character and perception of the NCA . Impacts will be very low over a small geographical extent, short term and reversible.	Very low	Negligible adverse (**not significant**)
Flat Drained Treed Farmland	High	The Proposed Development lies outside of this LCT but will introduce views of construction activity into it. Due to expansive views containing large-scale structures including Keadby 1 Power Station, Keadby 2 Power Station, wind turbines, pylons and road infrastructure, it is considered that the construction of the Proposed Development will result in limited perceptible change to the landscape character and tranquillity . The impact is assessed as very low over a medium geographical extent, short term and reversible.	Very low	Minor adverse (**not significant**)
Flat Drained Farmland	Medium	Construction activities associated with the Proposed Development will directly impact the LCT. Construction activities will be viewed in context with the existing large-scale power related structures.	Low	Minor adverse (**not significant**)

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
		The Proposed Development will result in the introduction of characteristic construction activity within the immediate area of the Proposed Development Site. Construction activity will result in a direct, intensive change over a limited area without altering the perception and tranquillity of the LCT overall . Impacts are assessed to be low, over a small geographical extent, short term and reversible.		
Open Island Farmland	High	The Proposed Development lies outside of this LCT and will introduce limited views of construction activity into it. Due to the existing influence of large-scale structures and road infrastructure within the surrounding LCT, it is considered that the Proposed Development will have limited potential to affect the character and tranquillity of the LCT . Impacts are assessed to be very low over a limited area, short term and reversible.	Very low	Minor adverse (**not significant**)
Industrial Landscapes	Low	Construction activities associated with the Proposed Development will directly impact the LCT. Construction activities will be viewed in context with existing large-scale power related structures. The Proposed Development will result in the introduction of characteristic construction activity within the immediate area of the Proposed Development Site. Construction activity will result in a direct, intensive change as a result of removal of landscape features over a limited area without altering the perception and tranquillity of the LCT overall . Impacts are assessed to be low over a small geographical extent short term and reversible.	Low	Negligible adverse (**not significant**)

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
Flat Wooded Farmland	Medium	The Proposed Development lies outside of this LCT and will introduce limited views of construction activity into it. Due to the existing influence of large-scale industrial structures in the surrounding LCT and road infrastructure within the LCT, it is considered that the Proposed Development will have little perceptible change on the character and tranquillity of the LCT . Impacts are assessed to be very low over a limited geographical area in the short term that will be reversible.	Very low	Negligible adverse (**not significant**)
Steep Wooded Scarp Slope	Medium	The Proposed Development lies outside of this LCT but will introduce construction activity within limited views from it. Due to expansive views containing large-scale industrial structures it is considered that the construction of the Proposed Development will result in very limited perceptible change to the landscape character and tranquillity of the LCT . Impacts are assessed to be very low over a limited geographical area in the short term that will be reversible.	Very low	Negligible adverse (**not significant**)
Lincolnshire Wolds AONB proposed extension area	High	The Proposed Development lies outside of this area but will introduce long distance views of construction activity within limited views from it. Due to existing views containing large-scale industrial structures it is considered that the construction of the Proposed Development will result in very limited perceptible change to the landscape character and tranquillity of the proposed AONB extension area . Impacts are assessed to be	Very low	Minor adverse (**not significant**)

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
		very low, over a limited geographical area in the short term that will be reversible.		
Site Landscape Features	Low	The Proposed Development will result in the removal of arable farmland, minor losses of scattered scrub where it coincides with localised areas required for temporary works (e.g. the laying of electrical connections) and recently reseeded grassland. Impacts are assessed to be low, over a limited geographical area and long term that are reversible.	Low	Negligible adverse (**not significant**)

Table 14.8: Assessment of Landscape Effects – Opening (Year 1)

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
NCA Profile 39: Humberhead Levels	Medium	The Proposed Development will introduce views of the CCGT within the NCA. Due to the existing influence of other large-scale industrial structures and road and rail infrastructure within the NCA, the Proposed Development will result in a small change to the character without altering the overall characteristics of the landscape. Impacts will be very low, over a small geographical area, long term and theoretically reversible.	Very low	Negligible adverse (**not significant**)
Flat Drained Treed Farmland	High	The Proposed Development lies outside of this LCT but will introduce views of structures associated with it. Due to expansive views containing large-scale industrial structures and associated infrastructure and road infrastructure, it is considered that the Proposed Development will result in limited perceptible change to the landscape character and tranquillity of the LCT. Impacts will be very low, over a medium geographical area, long term and theoretically reversible.	Very low	Minor adverse (**not significant**)
Flat Drained Farmland	Medium	The Proposed Development will introduce views of structures into it. The Proposed Development will be viewed in context with existing large-scale industrial structures and road and rail infrastructure. The Proposed Development will result in a small change to the character without altering the overall	Low	Minor adverse (**not significant**)

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
		characteristics of the landscape. Impacts will be low, over a small geographical area, long term and theoretically reversible.		
Open Island Farmland	High	The Proposed Development lies outside of this LCT but will introduce limited views of structures associated with the Proposed PCC Site into it. Due to existing visibility of large-scale industrial structures in the adjacent LCT, it is considered that the Proposed Development will have little perceptible change on the landscape character and tranquillity. Impacts will be very low, over a small geographical area, long term and theoretically reversible.	Very low	Minor adverse (**not significant**)
Industrial Landscapes	Low	The Proposed Development will directly impact the LCT and will introduce views of structures associated with The Proposed PCC Site. The existing influence of other large-scale industrial structures within the LCT will result in a small change to the character without altering the overall characteristics of the landscape. The impacts will be low, over a small geographical area, long term and theoretically reversible.	Low	Negligible adverse (**not significant**)
Flat Wooded Farmland	Medium	The Proposed Development lies outside of this LCT and will introduce limited views of structures associated with the Proposed PCC Site within it. Due to the existing influence of large-scale industrial structures in the surrounding LCT and road infrastructure within the LCT, it is considered that the	Very low	Negligible adverse (**not significant**)

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
		Proposed Development will have little perceptible change on the character and tranquillity of the LCT. The impacts will be very low, over a small geographical area, long term and theoretically reversible.		
Steep Wooded Scarp Slope	Medium	The Proposed Development lies outside of this LCT but will introduce views of structures associated with the Proposed PCC Site from it. Due to expansive views containing large-scale industrial structures it is considered that the construction of the Proposed Development will result in limited perceptible change to the landscape character and tranquillity of the LCT. The impacts will be very low, over a small geographical area, long term and theoretically reversible.	Very Low	Negligible adverse (**not significant**)
Lincolnshire Wolds AONB proposed extension area	High	The Proposed Development lies outside of this area but will introduce long distance views of additional power related structures within limited views from it. Due to existing views containing large-scale industrial structures it is considered that the construction of the Proposed Development will result in very limited perceptible change to the landscape character and tranquillity of the AONB. Impacts are assessed to be very low, over a limited geographical area in the short term that will be theoretically reversible.	Very low	Minor adverse (**not significant**)
Site Landscape Features	Low	The landscape features located on the Proposed PCC Site lost as part of the construction stage will not be replaced. Areas of scrub within the construction laydown areas will	Low	Negligible adverse (**not significant)**

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
		recolonize over time. Impacts are assessed to be low, over a limited geographical area and long tern that are theoretically reversible.		

Table 14.9: Assessment of Landscape Effects – Operation (Year 15) – Scenario 1 (Keadby 1 Power Station structures present)

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
NCA Profile 39: Humberhead Levels	Medium	The impacts during operation are anticipated to be similar to the opening assessment scenario. The operation of the Proposed Development will result in a small change to the character without altering the overall characteristics of the landscape. The impacts would be low, over a small geographical area, long term and theoretically reversible.	Low	Negligible adverse (**not significant**)
Flat Drained Treed Farmland	High	The impacts during operation are anticipated to be similar to the opening assessment scenario. The operation of the Proposed Development will result in limited perceptible change to the landscape character and tranquillity of the LCT. The impacts would be very low, over a medium geographical area, long term and theoretically reversible.	Very low	Minor adverse (**not significant**)
Flat Drained Farmland	Medium	The impacts during operation are anticipated to be similar to the opening assessment scenario. The operation of the Proposed Development will result in a small change to the character without altering the overall characteristics of the landscape. The impacts would be low, over a small geographical area, long term and theoretically reversible.	Low	Minor adverse (**not significant**)
Open Island Farmland	High	The impacts during operation are anticipated to be similar to the opening assessment scenario. The operation of the Proposed Development will have little perceptible change on	Very low	Minor adverse (**not significant**)

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
		the landscape character and tranquillity of the LCT. The impacts would be very low, over a small geographical area, long term and theoretically reversible.		
Industrial Landscapes	Low	The impacts during operation are anticipated to be similar to the opening assessment scenario. The operation of the Proposed Development will result in a small change to the character without altering the overall characteristics of the landscape. The impacts will be low, over a small geographical area, long term and theoretically reversible.	Low	Negligible adverse (**not significant**)
Flat Wooded Farmland	Medium	The impacts during operation are anticipated to be similar to the opening assessment scenario. The operation of the Proposed Development will have little perceptible change on the character and tranquillity of the LCT. The impacts will be very low, over a small geographical area, long term and theoretically reversible.	Very low	Negligible adverse (**not significant**)
Steep Wooded Scarp Slope	Medium	The impacts during operation are anticipated to be similar to the opening assessment scenario. The operation of the Proposed Development will result in limited perceptible change to the landscape character and tranquillity of the LCT. The impacts will be very low, over a small geographical area, long term and theoretically reversible.	Very Low	Negligible adverse (**not significant**)

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of effect
Lincolnshire Wolds AONB proposed extension area	High	The impacts during operation are anticipated to be similar to the opening assessment scenario. The operation of the Proposed Development will result in limited perceptible change to the landscape character and tranquillity of the AONB. The impacts will be very low, over a small geographical area, long term and theoretically reversible.	Very low	Minor adverse (**not significant**)
Site Landscape Features	Low	The landscape features, specifically areas of scrub lost as part of the construction laydown areas will continue to mature. Impacts are assessed to continue to be low, over a limited geographical area and long tern that are theoretically reversible.	Low	Negligible adverse (**not significant**)

Table 14.10: Assessment of Landscape Effects – Operation (Year 15) – Scenario 2 (Keadby 1 Power Station structures not present)

Landscape Type	Sensitivity of Receptor	Description of Impact	Predicted Magnitude of Impact	Classification of Effect
NCA Profile 39: Humberhead Levels	Medium	The absence of the structures associated with Keadby 1 Power Station will have a negligible change on the assessed impacts associated with the opening and operation (with Keadby 1 Power Station present) of the Proposed Development. The impacts would be low, over a small geographical area, long term and theoretically reversible.	Low	Negligible adverse (**not significant**)
Flat Drained Treed Farmland	High	The absence of the structures associated with Keadby 1 Power Station will have a negligible change on the assessed impacts associated with the opening and operation (with Keadby 1 Power Station present) of the Proposed Development. The impacts would be very low, over a medium geographical area, long term and theoretically reversible.	Very low	Minor adverse (**not significant**)
Flat Drained Farmland	Medium	The absence of the structures associated with Keadby 1 Power Station will have a negligible change on the assessed impacts associated with the opening and operation (with Keadby 1 Power Station present) of the Proposed Development. The impacts would be low, over a small geographical area, long term and theoretically reversible.	Low	Minor adverse (**not significant**)
Open Island Farmland	High	The absence of the structures associated with Keadby 1 Power Station will have a negligible change on the assessed impacts associated with the opening and operation (with Keadby 1 Power Station present) of the Proposed	Very low	Minor adverse (**not significant**)

Landscape Type	Sensitivity of Receptor	Description of Impact	Predicted Magnitude of Impact	Classification of Effect
		Development. The impacts would be very low, over a small geographical area, long term and theoretically reversible.		
Industrial Landscapes	Low	The absence of the structures associated with Keadby 1 Power Station will have a small change on the assessed impacts associated with the opening and operation (with Keadby 1 Power Station present) of the Proposed Development. The absence of Keadby 1 Power Station would reduce the amount of industrial and power station structures present, although the industrial characteristics of the LCT will remain. The operation of the Proposed Development will result in a small change to the character without altering the overall characteristics of the landscape. The impacts will be low, over a small geographical area, long term and theoretically reversible.	Low	Negligible adverse (**not significant**)
Flat Wooded Farmland	Medium	The absence of the structures associated with Keadby 1 Power Station will have a negligible change on the assessed impacts associated with the opening and operation (with Keadby 1 Power Station present) of the Proposed Development. The impacts will be very low, over a small geographical area, long term and theoretically reversible.	Very low	Negligible adverse (**not significant**)
Steep Wooded Scarp Slope	Medium	The absence of the structures associated with Keadby 1 Power Station will have a negligible change on the assessed impacts associated with the opening and operation (with Keadby 1 Power Station present) of the Proposed	Very Low	Negligible adverse (**not significant**)

Landscape Type	Sensitivity of Receptor	Description of Impact	Predicted Magnitude of Impact	Classification of Effect
		Development. The impacts will be very low, over a small geographical area, long term and theoretically reversible.		
Lincolnshire Wolds AONB proposed extension area	High	The absence of the structures associated with Keadby 1 Power Station will have a negligible change on the assessed impacts associated with the opening and operation (with Keadby 1 Power Station present) of the Proposed Development. The impacts will be very low, over a small geographical area, long term and theoretically reversible.	Very low	Minor adverse (**not significant**)
Site Landscape Features	Low	The absence of the structures associated with Keadby 1 Power Station will have no change on the assessed impacts associated with the opening and operation (with Keadby 1 Power Station present) of the Proposed Development. Impacts are assessed to continue to be low, over a limited geographical area and long tern that are theoretically reversible.	Low	Negligible adverse (**not significant**)

Visual Amenity

14.6.13 Potential visual effects of the Proposed Development in comparison with the future baseline visual context are considered in Table 14.11 by reference to representative viewpoints. The assessments contained within Table 14.11 should be read in conjunction with **Figures 14.6 - 14.18** (ES Volume III - **Application Document Ref. 6.4**) which illustrate the existing baseline situation at each viewpoint.

14.6.14 A series of photowires and photomontages have been prepared (**Figures 14.19 to 14.24** in ES Volume III - **Application Document Ref. 6.4**) which illustrate the likely visibility of the Proposed Development at four of the assessed viewpoints for both operation scenarios (scenario 1 - with Keadby 1 Power Station present and scenario 2 – with Keadby 1 Power Station structures removed). The photowires represent the maximum proposed heights of key elements in the Proposed Development as set out in the parameters presented in Table 4.1 of **Chapter 4**: Proposed Development (ES Volume I - **Application Document Ref. 6.2**). The photomontages presented in **Figures 14.19 - 14.24** represent the indicative layout and illustrated on **Figure 4.1** (ES Volume III - **Application Document Ref. 6.4**).

Table 14.11: Viewpoint Assessment

Viewpoint 1 Chapel Lane West, Keadby				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
483216, 411888	Residential	3	1.0	South-west
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms primary focus for residential receptors at this location. Therefore, susceptibility is assessed to be high.		Low		Medium
Size/ scale, duration and reversibility of impact at construction				
Close range views of construction activity associated with the Proposed Development, visible in the middle ground of the view beyond the electrical substation and property on Chapel Lane West. Construction activity associated with the proposed Water Connection Corridor would be clearly visible in the foreground of the view. Low level construction activity would				

be partially screened by intervening structures. The middle and upper sections of construction activity would be clearly visible including the movement of cranes. The construction activity associated with the Proposed Development would intensify the visible large-scale structures and activity in the wider view, forming a new prominent feature that is readily apparent to the receptor. **Night-time:** The task lighting and aviation warning lighting on the crane during the construction period will marginally increase lighting levels visible in the view. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact during construction is assessed to be medium, short term and reversible.		
Magnitude of impact at construction		Medium
Significance of effect at construction	Residential	Moderate adverse (**significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)		
During opening, the majority of the structures associated with the Proposed Development will be clearly visible. The larger structures, including absorber stack(s) will be visible against the sky, viewed to the right of the large-scale structures associated with Keadby 1 Power Station and Keadby 2 Power Station. The operational structures associated with the Proposed Development will be viewed as separate development, increasing the amount of built form visible across the view. The Proposed Development will increase the prominence and visibility of the power related structures, altering the balance of the overall view. **Night-time:** Operational lighting, including aviation warning lights on the stacks will marginally increase lighting levels on the Proposed PCC Site. The Proposed Development will be clearly visible from this location, resulting in low levels of sky glow. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact at opening is assessed to be medium, long term and theoretically reversible.		
Magnitude of impact at opening		Medium
Significance of effect at opening	Residential	Moderate adverse (**significant**)

Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
There will be no change to the impacts assessed at opening including at night-time. The Proposed Development will be prominent, altering the overall balance of the view and increasing the massing of built form as a result of the existing large-scale structures within the wider view. The impact is assessed to be medium, long term and theoretically reversible.		
Magnitude of impact at operation		Medium
Significance of effect at operation	Residential	Moderate adverse (**significant)**
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keady 1 Power Station structures not present)		
There would be a reduction in the visible power related structures in the view as a result of the absence of Keadby 1 Power Station. The operational structures associated with the Proposed Development will be clearly visible, viewed as a separate development and increase the amount of built form visible across the view. The Proposed Development will increase the prominence and visibility of the power related structures, altering the balance of the overall view. **Night-time:** Operational lighting, including aviation warning lights on the stack(s) will marginally increase lighting levels within the view. The Proposed Development will be clearly visible from this location, resulting in low levels of sky glow. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 2 Power Station, the existing 400kv National Grid Substation and Keadby Wind Farm. The impact at operation is assessed to be medium, long term and theoretically reversible.		
Magnitude of impact at operation		Medium
Significance of effect at operation		Moderate adverse (**significant**)

Viewpoint 2 Gate Keepers Residence, Vazon Bridge, Keadby				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
482480, 411470	Residential Recreational	4	0.3	North
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms primary focus for residential receptors at this location. Therefore, susceptibility is assessed to be high.		Medium		High
Size/ scale, duration and reversibility of impact at construction				
Close range views of construction activity associated with the Proposed Development, visible in the middle ground of the view beyond the cooling towers associated with Keadby 2 Power Station. Vegetation in the middle ground will screen low level construction activity. The middle and upper sections of construction activity would be clearly visible including the movement of cranes. The construction activity associated with the Proposed Development will be visible as a separate development from Keadby 1 Power Station and Keadby 2 Power Station that will be prominent and readily apparent to the receptor, although viewed in the context of existing power related infrastructure that is visible across the majority of the view. **Night-time:** The task lighting and aviation warning lighting on the crane during the construction period will marginally increase lighting levels visible in the view. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact during construction is assessed to be medium, short term and reversible.				
Magnitude of impact at construction				Medium
Significance of effect at construction		Residential, Recreational		Moderate adverse (**significant**)

Size/ scale, duration and reversibility of impact at opening (Year 1)		
At opening, the structures associated with the Proposed Development will be clearly visible, viewed beyond the intervening vegetation in the middle ground. The majority of the large-scale structures including stack and plume will be visible against the sky. The structures will appear as a new, standalone development, although set within a view that contains existing power stations, pylons and wind turbines. The Proposed Development will be prominent, altering the overall balance of the view and increasing the massing of built form as a result of the existing large-scale structures within the wider view. **Night-time:** Operational lighting, including aviation warning lights on the stacks will marginally increase lighting levels within the view. The upper sections of the Proposed Development will be clearly visible from this location, resulting in a marginal increase in low levels of sky glow. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact at opening is assessed to be medium, long term and theoretically reversible.		
Magnitude of impact at opening		Medium
Significance of effect at opening	Residential, Recreational	Moderate adverse (**significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
Intervening vegetation will have gained further height, providing additional screening of the Proposed Development. There will be minor reduction to the impacts assessed at opening. The Proposed Development will continue to be prominent, altering the overall balance of the view. The impact is assessed to be medium, long term and theoretically reversible.		
Magnitude of impact at operation		Medium
Significance of effect at operation	Residential, Recreational	Moderate adverse (**significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keady 1 Power Station not present)		
There would be a reduction in the visible power related structures in the view as a result of the absence of Keadby 1 Power Station. The operational structures associated with the Proposed Development will be clearly visible, viewed as separate development to Keadby 2 Power Station. The		

Proposed Development will largely increase the amount of built form visible across the view. The Proposed Development will increase the prominence and visibility of the power related structures, altering the balance of the overall view. **Night-time:** Operational lighting, including aviation warning lights on the stacks will marginally increase lighting levels within the view. The Proposed Development will be clearly visible from this location, resulting in low levels of sky glow. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 2 Power Station, the existing 400kV National Grid Substation and Keadby Wind Farm. The impact at operation is assessed to be medium, long term and theoretically reversible.		
Magnitude of impact at operation		Medium
Significance of effect at operation	Residential, Recreational	Moderate adverse (**significant**)

Viewpoint 3 Keadby Lock				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
483436, 411410	Recreational, Residential	4	1.3	North-west
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms primary focus for recreational receptors at this location. Therefore, susceptibility is assessed to be high.		Low		Medium
Size/ scale, duration and reversibility of impact at construction				
Glimpsed views of high-level construction operations associated with Proposed Development will be visible from this location. The majority of construction activity will be screened behind structures associated with Keadby 1 Power Station, Keadby 2 Power Station and mature evergreen trees/ scrub lining the canal. The construction of the high-level structures, including stacks and the movement of cranes will be visible above the tree line, behind existing structures and viewed against the sky. The presence				

of construction activity will be discernible but not alter the overall balance of the view. **Night-time:** The task lighting and aviation warning lighting on the crane during the construction period will marginally increase lighting levels visible in the view. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact during construction is assessed to be very low, short term and reversible.		
Magnitude of impact at construction		Very low
Significance of effect at construction	Recreational, Residential	Negligible adverse (**not significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)		
At opening, the upper section of the stack(s) will be visible in the background of the view, behind the existing structures associated with Keadby 1 Power Station and Keadby 2 Power Station. The majority of the rest of the Proposed Development will be screened behind vegetation, limiting the visibility of the structures. As a result of the existing power related structures present in the view, including Keadby 1 Power Station, Keadby 2 Power Station and pylons, the Proposed Development will be barely discernible. **Night-time:** Operational lighting, including aviation warning lights on the stacks will marginally increase lighting levels within the view. The upper sections of the Proposed Development will be visible from this location, resulting in a marginal increase in low levels of sky glow. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact at opening is assessed to be very low, short term and theoretically reversible.		
Magnitude of impact at opening		Very low
Significance of effect at opening	Recreational, Residential	Negligible adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
Trees in the foreground may have increased in height providing additional screening of the Proposed Development. Therefore, there will be a minor reduction in the visibility of the structures in comparison to that assessed at opening. The Proposed Development will continue to be barely discernible		

in the view. The impact is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Recreational, Residential	Negligible (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keady 1 Power Station structures not present)		
There would be a reduction in the visible power related structures in the view as a result of the absence of Keadby 1 Power Station. Trees in the foreground may have increased in height providing additional screening of the Proposed Development. Therefore, there would be a minor reduction in the visibility of the structures in comparison to that assessed at opening. The Proposed Development will be barely discernible in the view. **Night-time:** Operational lighting, including aviation warning lights on the stacks will negligibly increase the medium lighting levels within the view. The impact at operation is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Recreational, Residential	Negligible (**not significant**)

Viewpoint 4 - PRoW (KEAD9, KEAD10), north of Keadby				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
483218, 412391	Recreational	2	1.0	South-west
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms primary focus for recreational receptors at this		Low.		Medium

location. Therefore, susceptibility is assessed to be high.		
Size/ scale, duration and reversibility of impact at construction		
Construction operations will be visible in the middle ground, beyond and to the right of the existing 400kV National Grid electrical substation. Ground level operations will be partially screened by intervening vegetation and structures although the majority of operations, including the movement of cranes, will be clearly visible against the sky. Construction activity will be readily apparent, changing the overall balance of the view which increases the amount of solid built form that will be visible across the view. The impact of the Proposed Development is reduced as a result of the characteristics of the existing view which is dominated by power related structures including pylons and overhead lines. **Night-time:** The task lighting and aviation warning lighting on the crane during the construction period will marginally increase lighting levels visible in the view. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact during construction is assessed to be medium, short term and reversible.		
Magnitude of impact at construction		Medium
Significance of effect at construction	Recreational	Moderate adverse (**significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)		
At opening, the majority of the Proposed Development will be clearly visible in the middle ground. The stack(s) will be the tallest, most prominent features of the Proposed Development, clearly visible against the sky. The Proposed Development would appear as a separate development to Keadby 1 Power Station and Keadby 2 Power Station, although extending the visible power station structures across a large proportion of the view. The structures associated with the Proposed Development will form additional prominent elements from this viewpoint, although the pylons and overhead lines would remain as the largest structures within the view. The Proposed Development would be prominent but not alter the overall balance of the view. **Night-time:** The upper sections of the Proposed Development will be visible from this location, resulting in a marginal increase in low levels of sky glow. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm.		

The impact at opening is assessed to be medium, long term and theoretically reversible.		
Magnitude of impact at opening		Medium
Significance of effect at opening	Recreational	Moderate adverse (**significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
There will be no change to the impacts assessed at opening. The Proposed Development will be prominent, although not altering the overall balance of the view. The impact is assessed to be medium, long term and theoretically reversible.		
Magnitude of impact at operation		Medium
Significance of effect at operation	Recreational	Moderate adverse (**significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keadby 1 Power Station structures not present)		
There would be a reduction in the visible power related structures in the view as a result of the absence of Keadby 1 Power Station. The Proposed Development will largely increase the amount of built form visible across the view. The Proposed Development will increase the prominence and visibility of the power related structures, slightly altering the balance of the overall view. **Night-time:** Operational lighting, including aviation warning lights on the stack(s) will negligibly increase the medium lighting levels within the view. The impact at operation is assessed to be medium, long term and theoretically reversible.		
Magnitude of impact at operation		Medium
Significance of effect at operation	Recreational	Moderate adverse (**significant**)

Viewpoint 5 PRoW (GUNN179), north-east Gunness				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
484108, 411829	Recreational	5	1.9	West
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms primary focus for recreational receptors at this location. Therefore, susceptibility is assessed to be high.		Low		Medium
Size/ scale, duration and reversibility of impact at construction				
Construction operations associated with the Proposed Development will be visible in the middle distance. Ground level operations will be screened by intervening vegetation. Mid-level and upper level construction activities, including the movement of cranes, will be visible against the sky and existing pylons and wind turbines. The construction activity associated with the Proposed Development would be visible to the right of the view, as a separate development to Keadby 1 Power Station and Keadby 2 Power Station. The Proposed Development will be readily apparent although not alter the overall balance of the view. **Night-time:** The task lighting and aviation warning lighting on the crane during the construction period will marginally increase lighting levels visible in the view. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact during construction is assessed to be low, short term and reversible.				
Magnitude of impact at construction				Low
Significance of effect at construction		Recreational		Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)				
At opening, the structures associated with the Proposed Development will be readily noticeable, visible against the skyline. Ground level built form will be screened behind intervening vegetation. Mid-level and high-level				

structures, including the stacks, will be visible against the sky, increasing their prominence. The structures will form a separate development to Keadby 1 Power Station and Keadby 2 Power Station, although set amongst other power related structures that extend across the view. The Proposed Development will be noticeable and not alter the overall balance of the view. **Night-time:** Operational lighting, including aviation warning lights on the stack(s) will marginally increase lighting levels within the view. The upper sections of the Proposed Development will be visible from this location, resulting in a marginal increase in low levels of sky glow. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact at opening is assessed to be low, long term and theoretically reversible.		
Magnitude of impact at opening		Low
Significance of effect at opening	Recreational	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
There will be no change to the impacts assessed at opening. The Proposed Development will be noticeable, although not altering the overall balance of the view. The impact is assessed to be low, long term and theoretically reversible.		
Magnitude of impact at operation		Low
Significance of effect at operation	Recreational	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keady 1 Power Station not present)		
There would be a reduction in the visible power related structures in the view as a result of the absence of Keadby 1 Power Station. The Proposed Development will marginally increase the amount of built form visible across the view. The Proposed Development will increase the prominence and visibility of the power related structures, although not altering the balance of the overall view. The impact is assessed to be low, long term and reversible. **Night-time:** Operational lighting, including aviation warning lights on the stack(s) will negligibly increase the low levels of lighting within the view.		

The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 2 Power Station and other sources of lighting within the view. The impact at operation is assessed to be low, long term and theoretically reversible.		
Magnitude of impact at operation		Low
Significance of effect at operation	Recreational	Minor adverse (**not significant**)

Viewpoint 6 Trunk Road, Keadby				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
483145, 409787	Residential	2	2.1	North-west
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms primary focus for residential receptors at this location. Therefore, susceptibility is assessed to be high.		Low		Medium
Size/ scale, duration and reversibility of impact at construction				
Middle range views towards construction activity associated with the Proposed Development and longer distance view towards the construction laydown areas. Ground level operations will be screened by intervening vegetation. Mid and upper level activities, including the movement of cranes will be clearly visible, viewed in front of wind turbines and amongst the large-scale pylons and overhead lines. Construction activity will be located to the left of Keadby 2 Power Station, viewed as a separate development to Keadby 2 Power Station and Keadby 1 Power Station. The construction laydown area will be partially screened by intervening vegetation, viewed in the far left of the view. The Proposed Development will be noticeable, but not alter the overall balance of the view that contains a high number of existing power related structures. **Night-time:** The task lighting and aviation warning lighting on the crane during construction will marginally increase lighting levels visible in the				

view. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact during construction is assessed to be low, short term and reversible.		
Magnitude of impact at construction		Low
Significance of effect at construction	Residential	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)		
At opening, the Proposed Development will be clearly visible on the horizon. Ground level structures will be screened behind intervening vegetation. The stacks will be viewed against the sky. The structures would be noticeable, forming a separate development to Keadby 1 Power Station and Keadby 2 Power Station that will not alter the overall balance of the view. The Proposed Development will be set amongst other power related structures that extend across the full extent of the view. **Night-time:** Operational lighting, including aviation warning lights on the stack(s) will marginally increase lighting levels within the view. The upper sections of the Proposed Development will be visible from this location, resulting in a marginal increase in low levels of sky glow. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact is assessed to be low, long term and theoretically reversible.		
Magnitude of impact at opening		Low
Significance of effect at opening	Residential	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
There will be no change to the impacts assessed at opening. The Proposed Development will be noticeable, although not altering the overall balance of the view. The impact is assessed to be low, long term and theoretically reversible.		
Magnitude of impact at operation		Low
Significance of effect at operation	Residential	Minor adverse

		(**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keady 1 Power Station not present)		
There would be a reduction in the visible power related structures in the view as a result of the absence of Keadby 1 Power Station. The Proposed Development will increase the amount of built form visible across the view. The Proposed Development will increase the prominence and visibility of power related structures, altering the balance of the overall view. **Night-time:** Operational lighting, including aviation warning lights on the stacks will marginally increase the low lighting levels of lighting within the view. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 2 Power Station and other sources of lighting within the view. The impact at operation is assessed to be medium, long term and theoretically reversible.		
Magnitude of impact at operation		Medium
Significance of effect at operation	Residential	Moderate adverse (**significant**)

Viewpoint 7 PRoW (CROW11) east of Ealand Poultry Farm				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
480231, 412383	Residential, Recreational	1	1.6	South-east
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms secondary focus for residential receptors and a primary focus for recreational receptors at this location. Therefore, susceptibility is assessed to be high.		Low		Medium

Size/ scale, duration and reversibility of impact at construction		
The majority of construction operations at this location will be screened behind the former Keadby Ash Tip. The construction of the upper sections of the stack including the movement of the taller cranes will be visible above the landform. Only a very small part of the construction of the Proposed Development would be visible, occupying a negligible proportion of the view. **Night-time:** The lighting required during the construction period will result in a low level of sky glow that will be a negligible increase to existing levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact during construction is assessed to be very low, short term and reversible.		
Magnitude of impact at construction		Very low
Significance of effect at construction	Residential, recreational	Negligible adverse (**not significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)		
At opening the upper most section of the stack(s) will be visible behind the former Keadby Ash Tip. No other structures associated with the Proposed Development will be visible. Only a very small part of the construction of the Proposed Development will be visible, occupying a negligible proportion of the view. **Night-time:** The aviation warning lighting on the stack(s) will be visible and lighting required during opening will result in a low level of sky glow that will be a negligible increase to existing levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at opening		Very low
Significance of effect at opening	Residential, recreational	Negligible adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
There will be no change to the impacts assessed at opening. The Proposed Development will be barely visible, occupying a negligible proportion of the view. The impact is assessed to be very low, long term and theoretically reversible.		

Magnitude of impact at operation		Very low
Significance of effect at operation	Residential, recreational	Negligible adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keadby 1 Power Station structures not present)		
Keadby 1 Power Station is not visible in the view, therefore there will be no change to the assessed impacts during opening as a result of the removal of Keadby 1 Power Station. The Proposed Development will be barely visible, occupying a negligible proportion of the view. **Night-time:** Aviation warning lights on the stack(s) will be visible and operational lighting will marginally increase the low lighting levels of sky glow within the view. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 2 Power Station and other sources of lighting within the view. The impact is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Residential, recreational	Negligible adverse (**not significant**)

Viewpoint 8 PRoW (East8) Eastoft				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
480570, 415872	Residential, Recreational	3	3.9	South
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms secondary focus for residential receptors and a primary focus for recreational receptors at this location. Therefore,		Medium		High

susceptibility is assessed to be high.		
Size/ scale, duration and reversibility of impact at construction		
Long distance view towards construction activity associated with Proposed Development. Ground level operations will be partially screened by intervening vegetation. The rest of the construction activity, including the movement of cranes, will be visible, although at a distance of over 3km from the Proposed Development Site. Construction operations will be visible to the right of Keadby 2 Power Station, set amongst the wind turbines associated with the Keadby Wind Farm. The Proposed Development will be barely noticeable, and not alter the overall balance of the view. **Night-time:** The task lighting and aviation warning lighting on the crane during the construction period, visible at a long distance, will marginally increase lighting levels visible in the view. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact during construction is assessed as very low, short term and reversible.		
Magnitude of impact at construction		Very low
Significance of effect at construction	Residential, Recreational	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)		
At opening, the Proposed Development will be visible as a mass of built structures on the horizon, viewed in the context of existing power structures including wind turbines. The stacks will be seen against the sky which will increase their visibility, although from a distance of over 3km. The Proposed Development will be barely noticeable, forming a negligible proportion of the view. **Night-time:** Operational lighting, including aviation warning lights on the stack(s) will marginally increase the existing low levels of sky glow that are visible in the distance. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm which are visible in the distance. The impact at opening is assessed as very low, long term and theoretically reversible.		
Magnitude of impact at opening		Very low
Significance of effect at opening	Residential, Recreational	Minor adverse (**not significant**)

Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
There will be no change to the impacts assessed at opening as result of limited intervening vegetation. The Proposed Development will be barely visible, occupying a negligible proportion of the view. The impact is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Residential, Recreational	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keadby 1 Power Station structures not present)		
There would be a reduction in the visible power related structures in the view as a result of the absence of Keadby 1 Power Station. Due to intermittent intervening vegetation, the Proposed Development will marginally increase the amount of built form visible within the view. Due to distance the Proposed Development will be barely visible in the view. **Night-time:** The increase in lighting levels as a result of the operational lighting, including aviation warning lights on the stack(s) will be negligible due to distance and the existing lighting associated with Keadby 2 Power Station and other sources of lighting within the view. The impact at operation is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Residential, Recreational	Minor adverse (**not significant**)

Viewpoint 9 Meredyke Road, Luddington				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
483337, 416543	Residential	2	4.6	South

Visual susceptibility to change	**Value of view**	**Sensitivity of receptor**
View forms primary focus for residential receptors at this location. Therefore, susceptibility is assessed to be high.	Medium	High
Size/ scale, duration and reversibility of impact at construction		
Long distance view towards construction operations associated with the Proposed Development. Ground level operations will be largely screened by intervening vegetation and landform. Middle and high-level construction activity, including the movement of cranes, will be located on the horizon and set within a wide panorama that contains a number of power related structures including Keadby 1 Power Station, Keadby 2 Power Station and wind turbines. Construction activity will be barely noticeable occupying a negligible proportion of the view. **Night-time:** The task lighting and aviation warning lighting on cranes during the construction period will marginally increase lighting levels visible in the distant view. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact is assessed to be very low, short term and reversible.		
Magnitude of impact at construction		Very low
Significance of effect at construction	Residential	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)		
At opening, the completed Proposed Development would be visible on the horizon, to the right of Keadby 1 Power Station and Keadby 2 Power Station, viewed as a separate development. Due to distance and the presence of existing power related structures, the Proposed Development will be barely noticeable occupying a negligible proportion of the view. **Night-time:** Operational lighting, including aviation warning lights on the stack(s) will marginally increase the existing low levels of sky glow. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm which are visible in the distance. The impact at opening is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at opening		Very low

Significance of effect at opening	Residential	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
There will be no change to the impacts assessed at opening as result of limited intervening vegetation. The Proposed Development will be barely visible, occupying a negligible proportion of the view. The impact is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Residential	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keadby 1 Power Station structures not present)		
There would be a reduction in the visible power related structures in the view as a result of the absence of Keadby 1 Power Station. The Proposed Development will marginally increase the visibility of power related structures. Due to distance and the presence of wind turbines within the view there would be no change to the balance of the overall view. **Night-time:** Operational lighting, including aviation warning lights on the stack(s) will marginally increase the existing low levels of sky glow that are visible in the distance. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact at operation is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Residential	Minor adverse (**not significant**)

Viewpoint 10 Middle Lane, Amcotts				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
485274, 414117	Residential	4	3.6	South-west
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms primary focus for residential receptors at this location. Therefore, susceptibility is assessed to be high.		Medium		High
Size/ scale, duration and reversibility of impact at construction				
Construction operations associated with the Proposed Development will be visible on the horizon, to the right of Keadby 1 Power Station and Keadby 2 Power Station. Ground level construction activity will be largely screened behind intervening vegetation and landform. Middle and upper level construction operations will be barely noticeable within a negligible proportion of the wide panoramic view. **Night-time:** Task lighting and aviation warning lighting on cranes during the construction period will marginally increase lighting levels visible in the distance. The increase in lighting levels will be negligible due to distance and the presence of existing lighting associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact during construction is assessed to be very low, short term and reversible.				
Magnitude of impact at construction				Very low
Significance of effect at construction		Residential		Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)				
At opening, the completed Proposed Development would be visible on the horizon, to the right of Keadby 1 Power Station and Keadby 2 Power Station, viewed as a separate development and partially screened by intervening vegetation and landform. Due to distance and the presence of				

existing power related structures, the Proposed Development will be barely noticeable occupying a negligible proportion of the view. **Night-time:** Operational lighting, including aviation warning lights on the stack(s) will marginally increase the existing low levels of sky glow. The increase in lighting levels will be negligible in relation to the existing lighting levels associated with Keadby 1 Power Station, Keadby 2 Power Station and Keadby Wind Farm. The impact at opening is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at opening		Very low
Significance of effect at opening	Residential	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
There will be no change to the impacts assessed at opening as result of limited intervening vegetation. The Proposed Development will be barely visible, occupying a negligible proportion of the view. The impact is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Residential	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keadby 1 Power Station structures not present)		
There would be a reduction in the visible power related structures in the view as a result of the absence of Keadby 1 Power Station. The Proposed Development will marginally increase the visibility of power related structures within the view. Due to distance and the presence of other power related structures within the view there would be no change to the balance of the overall view. **Night-time:** Operational lighting, including aviation warning lights on the stacks will negligibly increase the low levels of lighting within the view due to distance, the existing lighting associated with Keadby 2 Power Station and other sources of lighting within the view. The impact at operation is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low

Significance of effect at operation	Residential	Minor adverse (**not significant**)

Viewpoint 11 PRoW (BURT171) accessed off Chafer Lane, Burton upon Stather				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
486661, 417434	Recreational	25	7.0	South-west
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms primary focus for recreational receptors at this location. Therefore, susceptibility is assessed to be high.		Medium		High
Size/ scale, duration and reversibility of impact at construction				
Construction associated with the Proposed Development will be barely noticeable within the wide, panoramic view. Construction activity will be located on the horizon, partially screened by mature intervening vegetation and at a distance of nearly 7km. The wider view contains partially screened views of Keadby 1 Power Station and Keadby 2 Power Station, which are just visible on the horizon and wind turbines in the middle distance of the view. The Proposed Development will occupy a negligible proportion of the view. **Night-time:** Due to distance, the task lighting and aviation warning lighting on cranes during the construction period will be barely detectable within the view. The impact during construction is assessed to be very low, short term and negligible.				
Magnitude of impact at construction				Very low
Significance of effect at construction		Recreational		Minor adverse (**not significant**)

Size/ scale, duration and reversibility of impact at opening (Year 1)		
At opening, the Proposed Development will be barely visible, located on the horizon and partially screened by intervening vegetation. The stacks will be visible, although at a long distance and set within a wide panoramic view that contains a high number of power related structures. **Night-time:** Due to distance, operational lighting, including aviation warning lights on the stack(s) will be barely detectible within the view. The impact at opening is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at opening		Very low
Significance of effect at opening	Recreational	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
There will be no change to the impacts assessed at opening as result of limited intervening vegetation. The Proposed Development will be barely visible, occupying a negligible proportion of the view. The impact is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Recreational	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keadby 1 Power Station structures not present)		
The absence of Keadby 1 Power Station does not materially change the impact of the addition of the Proposed Development at this viewpoint. The Proposed Development will be barely visible, occupying a negligible proportion of the view. **Night-time:** Due to distance, operational lighting, including aviation warning lights on the stack(s) will be barely detectable within the view. The impact at operation is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Recreational	Minor adverse (**not significant**)

Viewpoint 12 Mill Road, Crowle				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
478007, 413172	Residential	19	3.9	South-east
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms primary focus for residential receptors at this location. Therefore, susceptibility is assessed to be high.		Medium		High
Size/ scale, duration and reversibility of impact at construction				
Construction activity associated with the Proposed Development will be visible in the distance, located in front of Keadby 1 Power Station. Ground level operations will be screened by intervening vegetation. Middle and upper level operations, including the movement of cranes will be barely visible and occupy a negligible proportion of the view. **Night-time:** Due to distance, the task lighting and aviation warning lighting on cranes during the construction period will be barely detectable within the view. The impact during construction is assessed as very low, short term and reversible.				
Magnitude of impact at construction				Very low
Significance of effect at construction		Residential		Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)				
At opening the Proposed Development will be visible within the view, at a distance of approximately 4.5km and in front of Keadby 1 Power Station. The Proposed Development structures including stacks will be barely visible as a result of distance and viewed in a wide panorama containing other power related structures. **Night-time:** Due to distance, operational lighting, including aviation warning lights on the stack(s) will be barely detectable within the view.				

The impact at opening is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at opening		Very low
Significance of effect at opening	Residential	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
There will be no change to the impacts assessed at opening as result of limited intervening vegetation. The Proposed Development will be barely visible, occupying a negligible proportion of the view. The impact is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Residential	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keadby 1 Power Station structures not present)		
The removal of Keadby 1 Power Station does not materially change the content of view from this location. The Proposed Development will be barely visible, occupying a negligible proportion of the view. **Night-time:** Due to distance, operational lighting, including aviation warning lights on the stack(s) will be barely detectable within the view. The impact at operation is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Residential	Minor adverse (**not significant**)

Viewpoint 13: PROW (BELT30/ BELT 34) Isle of Axholme				
Grid reference	**Receptor type**	**Elevation (m AOD)**	**Approx. distance from Proposed PCC Site (km)**	**Direction of view**
477882, 406999	Recreational	19	6.2	North-east
Visual susceptibility to change		**Value of view**		**Sensitivity of receptor**
View forms primary focus for recreational receptors at this location. Therefore, susceptibility is assessed to be high.		A high quality view which relates to the non-designated heritage asset of the Isle of Axholme area of Special Historic Landscape Interest.		High
Size/ scale, duration and reversibility of impact at construction				
Long distance view over arable farmland towards the Proposed Development Site from a distance of over 6km. The majority of construction activity will be screened by landform and intervening built form and vegetation in the middle ground. The construction of upper sections of the absorber stack(s) including the movement of cranes will be visible against the sky, set amongst a wide panorama that contains the movement of wind turbines on the horizon. Construction activity will be barely perceptible and occupy a negligible portion of the view. **Night-time:** The aviation warning light on cranes will be visible from this location although viewed in the context of existing aviation lighting on the wind turbines in the distance. The impact during construction is assessed to be very low, short term and reversible.				
Magnitude of impact at construction				Very low
Significance of effect at construction		Recreational		Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at opening (Year 1)				
At opening the majority of the Proposed Development will be screened by landform and intervening built form and vegetation in the middle ground.				

The upper section of the stacks would be barely perceptible, at a distance of over 6km and occupy a negligible portion of the view. **Night-time:** The aviation warning lights on the stack(s) will be visible from this location although viewed in the context of existing aviation lighting on the wind turbines in the distance. The impact at opening is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at opening		Very low
Significance of effect at opening	Recreational	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 1 - with Keadby 1 Power Station present)		
Trees in the middle ground may have increased in height providing additional screening of the Proposed Development. Therefore, there will be a minor reduction in the visibility of the structures in comparison to that assessed at opening. The Proposed Development will continue to be barely discernible in the view. The impact is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Recreational	Minor adverse (**not significant**)
Size/ scale, duration and reversibility of impact at operation (Year 15) (scenario 2 - with Keadby 1 Power Station structures not present)		
The absence of Keadby 1 Power Station structures would not materially change the impact of the addition of the Proposed Development at this viewpoint. The upper section of the stack(s) would be barely perceptible, at a distance of over 6km and occupy a negligible portion of the view. **Night-time:** The aviation warning lights on the stack(s) will be visible at a distance from this location although viewed in the context of existing aviation lighting on the wind turbines. The impact at operation is assessed to be very low, long term and theoretically reversible.		
Magnitude of impact at operation		Very low
Significance of effect at operation	Recreational	Minor adverse (**not significant**)

Dynamic Views

14.6.15 Users of the main transport routes and long-distance trails will gain dynamic views towards the Proposed Development Site to varying degrees, dependent on intervening structures, screening vegetation, elevation and direction of travel. Due to the height of the tallest structure within the Proposed Development (the absorber and stack, with a maximum proposed height of 105m AGL/ 107.6m AOD) these receptors will gain a wide variety of views, dependent upon the proximity to the Proposed Development, and direction of travel.

14.6.16 The Scunthorpe to Doncaster Passenger railway line, which is the closest rail line to the Proposed Development Site, is orientated in a west to south-east direction through agricultural land. There is limited screening vegetation along the route in proximity to the Proposed PCC Site. The value of the view from it is considered to be medium. Views of the Proposed Development will fall within forward views from the west to side views in proximity to the Proposed Development Site. Susceptibility is considered to be medium with overall sensitivity to change considered to be medium.

14.6.17 Views from the trains will be intermittent as a result of intervening vegetation and occasional structures. Views of wind turbines, Keady 1 Power Station, Keadby 2 Power Station and pylons will be visible in proximity to the Proposed Development Site, where low level vegetation is occasionally present. Views closest to the Proposed Development Site will be open and direct as a result of the limited intervening vegetation. As a result of the close distance, numerous existing detractors and the dynamic nature of views, the magnitude of impact is therefore predicted to be low at all assessment scenarios, resulting in a minor adverse effect (**not significant**) that ranges from short to long term and that is reversible.

14.6.18 Views from the Stainforth and Keadby Canal are generally located within agricultural land with flood embankments, intervening vegetation and landform occasionally limiting views. The value of the view is considered medium. The direction of views ranges along the route and susceptibility is considered to be high. Overall sensitivity is considered to be high. Views in proximity to the Proposed Development will be either partially restricted by the flood embankment or partially screened by intervening vegetation from the vegetation located between the canal and the Scunthorpe to Doncaster Passenger railway line. Views for these receptors will be similar to that reported in the assessment for viewpoint 2. Where views are available, the upper sections of the Proposed Development will be clearly visible, seen in the context of existing power related structures.

14.6.19 Magnitude of impact for views in proximity to the Proposed Development Site are therefore predicted to be medium during all assessment scenarios, resulting in a moderate adverse effect (**significant**) that ranges from short to long term and that is reversible. For views further afield, it is predicted that

the magnitude of impact for all assessment scenarios would be low, resulting in a minor adverse effect (**not significant**) that ranges from short to long term and that is reversible.

14.6.20 The local roads within the study area that will gain views of the Proposed Development are located within and around the settlements including land between settlements. The value of the view is considered to range from low to medium. The direction of the view ranges and susceptibility is considered to be low as result of existing views containing power related structures such as wind turbines, Keadby 1 Power Station, Keadby 2 Power Station and pylons. Overall sensitivity is considered to be low. Views of the Proposed Development will range from clear and open to restricted by intervening vegetation or built form. Where views in proximity to the Proposed Development are available, they would be clear. Magnitude of impact is therefore predicted to be low at all assessment scenarios, resulting in a minor adverse effect (**not significant**) that is short term and reversible.

Decommissioning

14.6.21 The impacts on landscape character and visual amenity arising as a result of decommissioning of the Proposed Development are considered (using professional judgement) to be similar to those identified at the construction stage. For landscape this is as a result of the scale and nature of the development in relation to the existing industrial structures and complexes present in the wider landscape and the large-scale of the LCA. For visual amenity, this is as a result of the visibility of decommissioning and demolition activities not being prominent for the majority of viewpoints as a result of long-distance views and, intervening vegetation.

Visible Plumes

14.6.22 As discussed in **Appendix 8A:** Air Quality Operational Phase (ES Volume II – **Application Document Ref. 6.3**), the assumed release temperature of the absorber stack is 60°C. An average plume length of less than 4m for a 60°C release is predicted to be visible for up to 3% of the time reducing to approximately 1% of the time for a plume over 632m in length.

14.6.23 In addition to the potential for visible plumes to occur from the absorber stack, there is also potential for visible plumes to occur from the hybrid cooling towers (22 cooling cells), recognising that these are plume abated to reduce the potential for visible plumes to form. Plumes will be present for up to 26% of the time with a visible plume of on average under 1m. Two of the five years of meteorological data used in the assessment resulted in plumes greater than 1m.

14.6.24 At the opening assessment scenario, this impact is set in the context of Keadby 1 Power Station and Keadby 2 Power Station which will omit plumes similar to or greater in visibility than the Proposed Development, recognising that Keadby 1 Power Station will not operate concurrently with the Proposed

Development. For the future operation Scenario 2, this impact is set in the context of Keadby 2 Power Station only that will omit plumes similar or greater in visibility than the Proposed Development.

Table 14.12: Summary of effects on visual amenity

Receptor reference	Receptor location	Receptor type	Significance of effect			
			Construction	**Opening**	**Operation (scenario 1 - with Keadby 1 Power Station)**	**Operation (scenario 2 - with Keadby 1 Power Station structures not present)**
1	Chapel Lane West, Keadby	Residential	Moderate adverse (**significant**)	Moderate adverse (**significant**)	Moderate adverse (**significant**)	Moderate adverse (**significant**)
2	Gate Keepers Residence, Keadby	Residential Recreational	Moderate adverse (**significant**)	Moderate adverse (**significant**)	Moderate adverse (**significant**)	Moderate adverse (**significant**)
3	Keadby Lock	Recreational	Negligible adverse (**not significant**)	Negligible adverse (**not significant**)	Negligible adverse (**not significant**)	Negligible adverse (**not significant**)
4	PRoW (KEAD9, KEAD10), north of Keadby	Recreational	Moderate adverse (**significant**)	Moderate adverse (**significant**)	Moderate adverse (**significant**)	Moderate adverse (**significant**)
5	PRoW (GUNN179), north-east Gunness	Recreational	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)

Receptor reference	Receptor location	Receptor type	Significance of effect			
			Construction	**Opening**	**Operation (scenario 1 - with Keadby 1 Power Station)**	**Operation (scenario 2 - with Keadby 1 Power Station structures not present)**
6	Trunk Road, Keadby	Residential	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Moderate adverse (**significant**)
7	PRoW (CROW11) east of Ealand Poultry Farm	Residential Recreational	Negligible adverse (**not significant**)	Negligible adverse (**not significant**)	Negligible adverse (**not significant**)	Negligible adverse (**not significant**)
8	PRoW (East 8) Eastoft	Residential, Recreational	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)
9	Meredyke Road, Luddington	Residential	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)
10	Middle Lane, Amcotts	Residential	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)
11	PRoW (BURT171) accessed off Chafer Lane, Burton upon Stather	Recreational	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)

Receptor reference	Receptor location	Receptor type	Significance of effect			
			Construction	**Opening**	**Operation (scenario 1 - with Keadby 1 Power Station)**	**Operation (scenario 2 - with Keadby 1 Power Station structures not present)**
12	Mill Road, Crowle	Residential	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)
13	PROW (BELT30/ BELT 34) Isle of Axholme	Recreational	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)	Minor adverse (**not significant**)

14.7 Mitigation, Monitoring and Enhancement Measures

14.7.1 Moderate adverse (**significant**) visual amenity effects have been assessed for a number of representative viewpoints, as follows:

- Viewpoint 1 (Chapel Lane West, Keadby) during construction, opening, operation and decommissioning assessment scenarios;
- Viewpoint 2 (Gate Keepers Residence, Vazon Bridge, Keadby) during construction, opening, operation and decommissioning assessment scenarios;
- Viewpoint 4 (PRoW (KEAD9, KEAD10) north of Keadby) during construction, opening, operation and decommissioning assessment scenarios; and
- viewpoint 6 (Trunk Road, Keadby) during operation without Keadby 1 Power Station structures present (scenario 2).

14.7.2 The opportunity for mitigation of the visual effects of the Proposed Development is limited due to the size and scale of the Proposed Development. It is considered that the addition of landscape features such as trees and woodland would not be effective in reducing these effects on visual amenity.

14.7.3 An integrated design approach that considers massing and the disposition of taller structures within the Proposed PCC Site to minimise potential wall effects is considered to have potential to reduce visual impacts of the Proposed Development.

14.7.4 Section 2.6.5 of NPS EN-2 (DECC, 2011b) states that '*It is not possible to eliminate the visual impacts associated with a fossil fuel generating station. Mitigation is therefore to reduce the visual intrusion of the buildings in the landscape and minimise impact on visual amenity as far as reasonably practicable'*.

14.7.5 The final finishes of the buildings and exact sizes of component parts would not be finalised until the final detailed design is complete. Implementation of detailed design parameters is proposed to be secured by a requirement of the draft DCO (**Application Document Ref. 2.1**) including siting, layout, scale and external appearance, including colour, materials and surface finishes of permanent buildings and structures.

14.8 Limitations or Difficulties

14.8.1 Assessment of visual impact through the use of representative viewpoints has been restricted by the limits of public access. Land outside of the control of the Applicant was accessed from points of public access (roads and public rights of way) only. This is considered good practice and therefore has not

affected the appropriateness of the viewpoints selected nor the robustness of the assessment.

14.8.2 The viewpoints that have been included within the assessment were based on representative views from where the receptor was considered the most sensitive (based on professional judgement).

14.8.3 Views of the Proposed Development other than those assessed are acknowledged to exist. The viewpoints are not intended to provide an exhaustive or fully comprehensive catalogue of views of the Proposed Development Site; rather they provide a representative sample for the purpose of the landscape and visual amenity assessment, using viewpoints agreed with key consultees.

14.9 Summary of Likely Significant Residual Effects

14.9.1 The assessment has determined that the Proposed Development is likely to result in a significant adverse effect on visual amenity during all assessment scenarios from Viewpoints 1 (Chapel Lane West, Keadby), 2 (Gate Keepers Residence, Vazon Bridge, Keadby) and 4 (PRoW (KEAD9, KEAD10) north of Keadby). In addition, in the future baseline operation assessment (scenario 2) with Keadby 1 Power Station structures removed significant effects at Viewpoint 6 (Trunk Road, Keadby) would occur as a result of the close distance to the Proposed Development Site and lack of intervening vegetation.

14.9.2 Since it is considered that mitigation measures would not be effective in reducing this visibility, none are proposed. As such, these significant adverse residual effects will remain.

14.9.3 Likely significant residual effects are summarised in Table 14.13.

Table 14.13: Likely Significant Residual Environmental Effects

Development stage	Environmental impact (following development design and impact avoidance measures)	Classification of effect prior to mitigation	Mitigation/ enhancement (if identified)	Classification of residual effect after mitigation	Nature of effect(s) (Lt/ Mt/ St and P/ T and D/ In)
Construction	Impact on visual amenity to residents at Viewpoint 1, and Viewpoint 2 during construction activities	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	St/T/D
Construction	Impact on visual amenity to users of the canal and towpath at Viewpoint 2 and PRoW users at Viewpoint 4 during construction activities	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	St/T/D
Opening	Impact on visual amenity to residents at Viewpoint 1 and Viewpoint 2 during opening	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	Lt/T/D
Opening	Impact on visual amenity to users of the canal and towpath at Viewpoint 2 and	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	Lt/T/D

Development stage	Environmental impact (following development design and impact avoidance measures)	Classification of effect prior to mitigation	Mitigation/ enhancement (if identified)	Classification of residual effect after mitigation	Nature of effect(s) (Lt/ Mt/ St and P/ T and D/ In)
	PRoW users at Viewpoint 4 during opening				
Operation (scenario 1 - with Keadby 1 Power Station)	Impact on visual amenity to residents at Viewpoint 1 and Viewpoint 2 during operation	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	Lt/P/D
Operation (scenario 1 - with Keadby 1 Power Station)	Impact on visual amenity to users of the canal and towpath at Viewpoint 2 and PRoW users at Viewpoint 4 during operation	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	Lt/P/D
Operation (scenario 2 - with Keadby 1 Power Station structures not present)	Impact on visual amenity to residents at Viewpoint 1 and Viewpoint 2 during operation	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	Lt/P/D
Operation (scenario 2 - with Keadby 1 Power	Impact on visual amenity to users of the canal and towpath at	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	Lt/P/D

Development stage	**Environmental impact (following development design and impact avoidance measures)**	**Classification of effect prior to mitigation**	**Mitigation/ enhancement (if identified)**	**Classification of residual effect after mitigation**	**Nature of effect(s) (Lt/ Mt/ St and P/ T and D/ In)**
Station structures not present)	Viewpoint 2 and PRoW users at Viewpoint 4 during operation				
Operation (scenario 2 - with Keadby 1 Power Station structures not present)	Impact on visual amenity to residents at Viewpoint 6 during operation	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	Lt/P/D
Decommissioning	Impact on visual amenity to residents at Viewpoint 1 and Viewpoint 2 during decommissioning	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	Lt/P/D
Decommissioning	Impact on visual amenity to users of the canal and towpath at Viewpoint 2 and PRoW users at Viewpoint 4 during decommissioning	Moderate adverse (**significant**)	None	Moderate adverse (**significant**)	Lt/P/D

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