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# 10. Landscape and Visual Amenity

#### 10.1 Introduction

- 10.1.1 This chapter of the Environmental Statement (ES) addresses the potential effects of the construction, operation (including maintenance) and decommissioning of proposed WBC gas fired generating station on the site of the West Burton Power Station (the Proposed Development) on landscape character (as a resource in its own right) and visual amenity. 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.
- 10.1.2 The cumulative landscape and visual effects of the Proposed Development and other committed developments in the vicinity are described in Chapter 16: Cumulative and Combined Effects.
- 10.1.3 This chapter is supported by Appendices 10A: Landscape and Visual Amenity Methodology (ES Volume II) and Figures 10.1-10.40 (ES Volume III). The layout and Indicative elevations for the Proposed Development presented in ES Volume III (Figures 4.1a and 4.1b and Figures 4.2a and 4.2b) have also informed this chapter.

# 10.2 Legislation, Planning Policy and Guidance

# Legislative Background

10.2.1 The Landscape and Visual Impact Assessment (LVIA) takes account of the legislation relevant to landscape and visual issues, including the European Landscape Convention and Reference Documents (Ref 10-1).

# Planning Policy Context

- 10.2.2 The Overarching National Policy Statement (NPS) for Energy EN-1 (Ref 10-2), includes a number of statements relevant to the potential landscape (including Green Infrastructure (GI)) and visual impacts of energy infrastructure in general.
- 10.2.3 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 and eventual decommissioning on landscape components, landscape character and views and visual amenity.

- 10.2.4 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 of electricity generation facilities.
- 10.2.5 The NPS for Fossil Fuel Electricity Generating Infrastructure (EN-2) (Ref 10-3) includes the following relevant to potential landscape and visual impacts:

"The applicant should include a landscape and visual impact assessment as part of the ES, as set out in Section 4.2 of EN-1."

(paragraph 2.6.3)

"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 2.6.4)

10.2.6 The NPS also includes the following paragraphs (pages 15 and 16) which relate to the decision making process:

"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."

(paragraph 2.6.5)

"For the reason given in paragraph 2.6.5 above if, having regard to the considerations in respect of other impacts set out in EN-1 and this NPS, the [the decision maker] is satisfied that the location is appropriate for the project, and that it has been designed sensitively (given the various siting, operational and other relevant constraints) to minimise harm to landscape and visual amenity, the visibility of a fossil fuel generating station should be given limited weight."

(paragraph 2.6.10)

10.2.7 Table 10-1 summarises the NPS advice relating to this chapter and signposts to where policies are considered.

Table 10-1: Summary of relevant NPS advice regarding Land Use including green infrastructure

Summary of NPS	Consideration within the Chapter
NPS EN-1	
Paragraph 5.10.5 states: "The ES (see Section 4.2) should identify existing and proposed land uses near the	Development are noted in Section



#### **Summary of NPS**

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."

#### **Consideration within the Chapter**

Effects resulting from the Proposed Development are identified in **Section 10.6** 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 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 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

The Planning Statement (Application Document Ref 7.1) 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 BDC prior to construction.

**Section 10.5** 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 (Figure 4.2a and Figure 4.2b (ES Volume III)). Retention of existing vegetation and tree planting to soften visual impact is described in Section 10.5 and in Application Document Ref. 7.5: Landscape and Biodiversity Management and Enhancement Plan.



Summary of NPS	Consideration within the Chapter
also help to attenuate noise from site activities. Where the existing landscape is more industrial, design may involve other forms of visual impact mitigation.	

## National Planning Policy

- 10.2.8 The revised National Planning Policy Framework (NPPF) (Ref 10-4) was published in February 2019, replacing earlier versions published in July 2018 and March 2012. The framework explains that the purpose of the planning system is to contribute to the achievement of sustainable development (paragraph 7).
  - "Planning policies and decisions should contribute to and enhance the natural and local environment by preventing new and existing development from contributing to, being put at an unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability..." (paragraph 170).
- 10.2.9 The NPPF emphasises the importance of delivering good design by confirming that good design is a 'key aspect of sustainable development' (paragraph 124). The NPPF goes on to set out the need to plan positively for the achievement of high quality and inclusive design for all development. It states that developments should establish a strong sense of place, respond to local character and history, create safe and accessible environments, and be visually attractive as a result of good architecture and landscaping.
- 10.2.10 A number of overriding core planning principles are relevant to the landscape including:
  - always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings;
  - take account of the different roles and character of different areas; and
  - contribute to conserving and enhancing the natural environment and reducing pollution.
- 10.2.11 The NPPF promotes a presumption in favour of sustainable development, with NPPF paragraph 127 stressing the need for development to respond to local character and be visually attractive, as well as emphasising the integration of the development into the environment.
- 10.2.12 The NPPF also includes a number of policies relating to conserving and enhancing the natural environment relevant to landscape. Paragraph 170 stresses that the planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes. Paragraph 180 encourages good design and stresses that planning policies and decisions should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.



10.2.13 The requirements of the NPPF have been accounted for in the assessment, with particular emphasis placed on: establishing the value and importance of landscapes and their character-forming components; avoiding, or minimising the extent and duration of, potential landscape and visual effects; and the development of a Landscape and Biodiversity Management and Enhancement Plan (Application Document Ref. 7.5) that positively responds to local environmental conditions.

## Local Development Plan Policy

- 10.2.14 The Bassetlaw Core Strategy and Development Management Policies Development Plan Document for Bassetlaw (Ref 10-5), defines several policies relevant to the assessment.
- 10.2.15 Policy DM3: General Development in the Countryside states that 'the Council is mindful of the need to ensure that applications for a range of other proposals in the countryside can be addressed. These tend to include... the re-use of brownfield sites in the countryside.'
- 10.2.16 Policy DM4: Design & Character states within Part A the principles which they require all major development proposals to demonstrate:
  - *'i. make clear functional and physical links with the existing settlement and surrounding area and not to be designed as 'standalone' additions;*
  - ii. complement and enhance the character of the built, historic and natural environment:
  - iii. are of a scale appropriate to the existing settlement and surrounding area;
  - iv. provide a qualitative improvement to the existing range of houses, services, facilities, open space and economic development opportunities.'
- 10.2.17 Part B sets out general design principles, stating that 'individual development proposals... will only be accepted where they are of a high quality design' that address local character and distinctiveness, architectural quality, public realm, accessibility, amenity and carbon reduction.
- 10.2.18 Policy DM9: Green Infrastructure; Biodiversity & Geodiversity; Landscape; Open Space and Sports Facilities states that 'new development will need to integrate with the character of the surrounding area and take full account of landscape character at all stages in the planning and delivery process, recognising opportunities for habitat creation'. Additionally, it states that new development is also 'expected to enhance the distinctive qualities of the landscape character policy zone in which they would be situated, as identified in the Bassetlaw Landscape Character Assessment'.
- 10.2.19 Policy DM10: Renewable and Low Carbon Energy. Part A focuses on carbon reduction and states 'the Council will be supportive of proposals that seek to utilise renewable and low carbon energy to minimise CO<sub>2</sub> emissions'. The policy sets out



- a list of criteria against which proposals for renewable and low carbon energy infrastructure will also need to demonstrate compliance as follows:
- 'i. are compatible with policies to safeguard the built and natural environment, including heritage assets and their setting, landscape character and features of recognised importance for biodiversity;...
- iii. are compatible with tourism and recreational facilities; will not result in unacceptable impacts in terms of visual appearance ...;
- v. will not result in an unacceptable cumulative impact in relation to the factors above.'
- 10.2.20 BDC is currently in the early stages of preparing a new Local Plan for the District and began consulting on a Draft Bassetlaw Local Plan (Ref 10-6) in January 2019. The draft Local Plan contains a strategic objective to 'promote rural Bassetlaw as a living and working landscape, where new development responds to local needs and opportunities and protects the intrinsic character of the countryside.'
- 10.2.21 Policy 17: Landscape requires that 'Where necessary, development proposals must:
  - i. Show how landscape character has been taken into account in the design; and ii. Include mitigation measures appropriate to the character type'. (paragraph 1)
- 10.2.22 It goes onto add that 'The provision of alternative, replacement or additional landscape features either within the development site, or in an appropriate alternative location, may be appropriate in circumstances where the impact is demonstrated to be necessary to facilitate an otherwise acceptable scheme. Proposals to offset any loss or damage will be subject to the agreement of an appropriate management scheme by the Council where necessary.' (paragraph 3).
- 10.2.23 Within the Sturton Ward Neighbourhood Plan (Ref 10-7) Policy 3 and Policy 4 are relevant to landscape and visual effects. Policy 3: Design Principles states that:

'New development will be supported where it demonstrates:

- layouts that maximise opportunities to integrate development with the existing settlements through creating new connections and improving existing ones to and from new development;
- consideration of local character in terms of street types, building detailing, colours, shapes and materials, landscaping and relationships between public and private spaces and how these might be used; and
- designs that draw up and reflect local character including building design, mass, and the use of traditional and vernacular materials'.
- 10.2.24 Policy 4: Protecting the Historic Environment states that: 'Planning applications will be supported where they preserve or enhance conservation areas, listed buildings and other heritage assets.'



- 10.2.25 Part B sets out general design principles, stating that 'individual development proposals... will only be accepted where they are of a high quality design' that address local character and distinctiveness, architectural quality, public realm, accessibility, amenity and carbon reduction.
- 10.2.26 The above policies have been taken into account in this chapter.

#### Other Guidance

- 10.2.27 The landscape and visual amenity assessment has been undertaken in accordance with principles within the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) (Ref 10-8) and in line with guidance within An Approach to Landscape Character Assessment, Guidance for England and Scotland (Ref 10-9).
- 10.2.28 Representative viewpoint photographs and photomontages have been prepared in accordance with the Landscape Institute's Advice Note 01/11 Photography and photomontage in landscape and visual impact assessment (Ref 10-10).
- 10.3 Assessment Methodology and Significance Criteria
- 10.3.1 Details of the assessment methodology are provided in Appendix 10A: Landscape and Visual Amenity Methodology (ES Volume II), and a summary is provided below.

#### Consultation

10.3.2 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)) and in response to the formal (statutory) consultation is summarised in **Table 10-2**Table 10-2: Consultation summary table



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
Secretary of State	June 2017 (Scoping Opinion)	The Secretary of State considers that the Applicant should assess the landscape and visual effects of the Proposed Development in accordance with the Guidelines for Landscape and Visual Impact Assessment (Third Edition) (GLVIA3). Any departure from the methodology should be fully justified within the ES.	See Section 10.2 Legislation, Planning Policy and Guidance. The landscape and visual amenity assessment has been undertaken in accordance with principles within the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) (Ref 10-8). Details of the landscape and visual impact assessment methodology are provided in Appendix 10A: Landscape and Visual Amenity Methodology (ES Volume II).
		The assessment baseline should consider relevant policy zones within the Bassetlaw Landscape Character Assessment Trent Washlands and Mid Nottinghamshire Farmlands. The Applicant's attention is drawn to NCC comments in this respect.	considers policy zones within the study
		The proposals will be for large structures. The Secretary of State recommends that careful consideration should be given to the form, siting, and use of materials and colours in terms of minimising the adverse visual impact of these structures in accordance with NPS-EN2. The cumulative landscape and visual effect of	Section 10.6 Likely Impacts and Effects considers the effects of the Proposed Development in conjunction with WBA Power Station and WBB Power Station as part of the landscape and visual baseline.  Section 10.7 considers the minimisation of



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		massing due to WBA, WBB and WBC should be considered. The potential for visible plumes to occur should be addressed and justification that the technology adopted is Best Available Technique (BAT).	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 some details are included in the Planning Statement (Application Document Ref. 7.1) and elevations drawings (Figures 4.2a and 4.2b (ES Volume III)). Detailed design of the Proposed Development is proposed to be secured by a Requirement of the draft DCO (Application Document Ref 2.1).  Visible plumes are very unlikely to occur from the Proposed Development as there is no steam cycle associated with the electricity generation process, and the emissions from the gas turbine(s) will be at a temperature that is significantly higher than the dew point of water.
		Scoping Report paragraph 5.6.12 refers to the preparation of a Zone of Theoretical Visibility (ZTV). The Secretary of State advises that the ES should describe the model used, provide information on the area covered and the timing of	Section 10.3 Assessment Methodology and Significance Criteria describes the model used, area covered, timing of survey work and methodology used. Details of the landscape and visual amenity assessment methodology are provided in Appendix



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		any survey work and the methodology used.	<b>10A:</b> Landscape and Visual Amenity Assessment Methodology (ES Volume II).
		The visual impact of the stack or stacks to be erected as part of the Proposed Development will need to be considered. Given the relatively flat landscape, the ZTV should seek to ensure that all potentially sensitive receptors are considered and viewpoints are agreed with the relevant local authorities. This includes receptors on both the east and west banks of the River Trent.	Section 10.3 Assessment Methodology and Significance Criteria records the status of discussions with relevant local authorities regarding representative viewpoints. A ZTV has been prepared to support the assessment as presented in Figure 10.4 (ES Volume III).
		The Applicant should liaise with BDC, WLDC and NCC to agree the number and location of accurate Visual Representations to be undertaken. Views from the Public Rights of Way (ProW) on the eastern side of the Scoping Opinion for West Burton C Power Station.	Section 10.3 Assessment Methodology and Significance Criteria records the status of discussions with relevant local authorities regarding representative viewpoints.
		River Trent should be included as well as night-time views.  The assessment of night-time lighting effects from the Proposed Development should consider the cumulative effect of lighting from WBA, WBB	Section 10.3 Assessment Methodology and Significance Criteria records the status of discussions with relevant local authorities regarding representative viewpoints located adjacent to the River Trent.



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		and WBC.	Night-time lighting effects resulting from the Proposed Development are assessed in <b>Section 10.6</b> Likely Impacts and Effects.
		The Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) lies approximately 35km east of the Site.	The Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) lies outside of the study area. No effects resulting from the Proposed Development are predicted.
		Scoping Report paragraph 5.6.15 refers to the potential need for mitigation as a result of significant effects on landscape character or visual amenity. The Applicant also refers to a detailed landscaping strategy including green infrastructure to be prepared with the local authorities as a requirement of the DCO. This should be cross referenced to the cultural heritage chapter of the ES and consideration should be given to integrating the landscape masterplan with any proposed ecological mitigation.  The species list for both Mid Nottinghamshire Farmlands and Trent Washlands Landscape Character Area should be referenced in developing the landscape strategy. When	Cultural heritage is considered in Chapter 14: Cultural Heritage and Appendix 14A: Desk Based Assessment (ES Volume II). A Landscaping and Biodiversity Management and Enhancement Plan (Application Document Ref. 7.5) accompanies the Application and references the cultural heritage chapter of the ES.  The landscape masterplan has been integrated with proposed ecological mitigation in the Landscaping and Biodiversity Management and Enhancement Plan (Application Document Ref. 7.5) and takes into account the species list for both Mid Nottinghamshire Farmlands and Trent



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		discussing mitigation requirements, the Applicant's assessment should also address the potential measures set out in NPS-EN1 and EN2.	Washlands Landscape Character Area, which have been referenced in developing the Plan.
Bassetlaw District Council	Email  (9 March 2017)  (Prior to submission of the EIA Scoping Report)	Seeking agreement on winter photography approach.	Winter photography has been undertaken in accordance with agreed viewpoints. Figures 10.6 – 10.20 (ES Volume III) present viewpoints with winter photography to illustrate worst-case effects.
	Email 6th July 2017 (Prior to submission of Preliminary Environmental Information (PEI) Report)	Seeking agreement on selection of representative viewpoints to be used within the Landscape and Visual Impact Assessment chapter.	No response has been received within timeframe of assessment. Therefore, viewpoints have been undertaken in accordance with those proposed.
West Lindsey District Council	June 2017 (Scoping Opinion)	The Landscape and Visual Impact Assessment (LVIA) should follow the guidance of the Landscape Institute 'Guidelines for Landscape and Visual Impact Assessment' 3rd Edition	The LVIA was undertaken following guidance contained within GLVIA3 (Ref 10-8).



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		(2013), as proposed. An iterative approach, which guides the layout and scheme design, should be followed.	
		The effect on landscape character should be assessed with reference to The West Lindsey Landscape Character Assessment (1999) which can be found through the following link: <a href="https://www.west-lindsey.gov.uk/my-services/planning-and-building/planning-policy/evidence-base-and-monitoring/landscape-character-assessment/">https://www.west-lindsey.gov.uk/my-services/planning-and-building/planning-policy/evidence-base-and-monitoring/landscape-character-assessment/</a>	Assessment of effects on landscape character in <b>Section 10.6</b> Likely Impacts and Effects were undertaken with reference to The West Lindsey Landscape Character Assessment (1999) (Ref 10-14).
		Scoping Report Paragraph 5.6.13 states that 'the stacks will be a maximum of 30-45 metres high and a Zone of Theoretical Visibility (ZTV) has been suggested as having a study area of 5km'. We consider this to be a reasonable study area.	A 5km study area was used throughout the assessment and is reflected in the ZTV presented as <b>Figure 10.4</b> (ES Volume III).
		Scoping Report Paragraph 5.6.14 states that 'The location of representative views and photomontages will be agreed in consultation with BDC, WLDC and Nottinghamshire County Council (NCC) as appropriate'. The consultation with WLDC is welcomed, however it is	BDC, WLDC and NCC were consulted regarding the location of representative viewpoints and viewpoints presented as Figures 10.6 – 10.20 reflect those agreed with consultees.



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		considered that all viewpoints taken from the West Lindsey District are accompanied by a photomontage unless agreed with the West Lindsey Local Planning Authority in advance.	
		There is not a list of identified viewpoints from the West Lindsey District in the Scoping Report. The viewpoints proposed shall be comprehensive and provide a good representation of the areas to be affected taking note of the downhill and uphill areas of Gainsborough plus the villages of Morton, Lea, Knaith Park and Marton and hamlets of Knaith and Gate Burton. All of these locations will be within or close to the 5km study area.	BDC, WLDC and NCC were consulted and viewpoints representative of visual receptors at Lea (Viewpoint 6), Knaith (Viewpoint 11), Knaith Park (Viewpoint 8) and Gainsborough (Viewpoint 3) have been included in the assessment presented in <b>Section 10.6</b> .
		The impact on residential amenity should be assessed within the ES. This should address the impact on all residential properties/communities within 1km (as a minimum) of the proposed development. The closest residential areas to the east of the application site are to the west of:  • Gainsborough Road, Lea  • Lea Road, Gainsborough	Noted. Viewpoints representative of visual receptors at these locations have been included in the assessment presented in <b>Section 10.6</b> .



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		Bridge Street, Gainsborough	
	Email (20 July 2017)	Response to AECOM email of 6 July 2017:  "I think a viewpoint from the Gate Burton/Marton area would be a position we would recommend and maybe some from Gainsborough such as the Gainsborough Riverside Walk and uphill Gainsborough."	Noted. Response received 20 July 2017 after summer photography completed on 18 July 2017. Viewpoints representative of visual receptors at Gate Burton/Marton and uphill Gainsborough have been included at this assessment. Viewpoint from Whitton's Mill apartments deemed representative of Gainsborough Riverside Walk and included in the assessment presented in <b>Section 10.6</b> .
Lincolnshire County Council	Email (6 July 2017)	Seeking agreement on selection of representative viewpoints to be used within the Landscape and Visual Impact Assessment chapter.	assessment and therefore viewpoints
Via East Midlands Ltd	Email (July 14 2017)	Confirmed that viewpoints proposed were acceptable. However, request for PRoW to be described using unique name and reference number.  Queried need for a viewpoint from eastern edge of North and South Wheatley and requested an additional representative viewpoint from the	Noted and actioned throughout chapter.  Noted. Viewpoint 7 deemed representative of view from North/South Wheatley. Additional viewpoint from Whitton's Mill apartments included in the assessment and presented in <b>Section 10.6</b> .



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		southern and western edges of Gainsborough, in the area of Whitton's Mill apartments on Bridge Street.  Confirmed that the study area of 5km is accepted for the LVIA, based on a maximum height of 45m for the stacks.  Noted that not been able to discuss/agree photomontages with Fiona Dunning at Bassetlaw District Council (more detailed knowledge of the area) and therefore provided advice on viewpoints to have photomontages produced, suggesting a total of 11 viewpoints.	Noted and used as the basis for assessment (see <b>Section 10.4</b> ).  A limited number of photomontages were produced to inform the formal consultation using Viewpoints 4 (Residents and PRoW at Bole) and Viewpoint 12 (PRoW, Long distance footpath a single residential property). No further photomontages were produced following Stage 1 consultation on the PEI Report.
Nottinghamshire County Council	June 2017 (Scoping Opinion)	The Landscape Character Assessment should refer to details of the following Policy Zones within the Bassetlaw Landscape Character Assessment Trent Washlands 23, 24, 25 and 49 and Mid Nottinghamshire Farmlands 02, 03 and 05, which are adjacent to the site. Landscape Character areas within the West Lindsey area of Lincolnshire will also be relevant.	Section 10.4 references the Policy Zones requested (see Table 10-5).
		The LVIA should refer to the Public Rights of Way with the appropriate reference number, so that it is clear exactly which PRoW is being referred to.	Appropriate reference numbers for PRoW have been presented throughout the assessment and ES. The source of data



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
			used <a href="https://www.rowmaps.com/">https://www.rowmaps.com/</a> (accessed February 2019) is as per the information provided by NCC.
		A 5km radius study area is accepted for the Landscape and Visual Impact Assessment. It is noted that the location of representative views and photomontages is to be agreed in advance with Bassetlaw District Council, West Lindsey District Council, and Nottinghamshire County Council.	A 5km study area was used throughout the assessment. BDC, WLDC and NCC were consulted regarding the location of representative viewpoints.
		It is noted that a landscape strategy is to be agreed In advance with Bassetlaw District Council, West Lindsey District Council, and Nottinghamshire County Council. This should make reference to the species list for both the Mid Nottinghamshire Farmlands and Trent Washlands Landscape Character Area.	The Landscaping and Biodiversity Management and Enhancement Plan (Application Document Ref. 7.5) has been prepared to accompany the Application, referencing the species lists noted. This will be agreed with BDC and other relevant authorities, as necessary during consultation on the draft DCO and formalised through a Statement of Common Ground between the parties.
		The structure of the LVIA, as set out in Guidelines for Landscape and Visual Impact	



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		Assessment Third Edition(GLVIA3), published by the Landscape Institute and the Institute of Environmental Management and Assessment – 2013, should be as follows:  Introduction, including the planning and legal context relevant to landscape and visual impact matters.  The scope of the assessment, including a definition of the study area, definitions of sensitivity and magnitude, and significance of landscape and visual impacts.  Methodology, including the approach to the cumulative landscape and visual effects assessment.  Description of the components of the development that are of particular relevance to the assessment of landscape and visual effects.  An explanation of how landscape and visual impact considerations have contributed to the scheme design.  A description of baseline conditions, including a description of the landscape character of the study area.	<ul> <li>Section 10.1 provides an Introduction to this Chapter. The planning and legal context relevant to landscape and visual matters is described in Section 10.2.</li> <li>The scope of the assessment, including a definition of the study area, definitions of sensitivity and magnitude and significance of landscape and visual impacts are provided within Appendix 10A (ES Volume II).</li> </ul>



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter	
		<ul> <li>Identification and description of the potential significant effects that are likely to occur.</li> <li>An assessment of the significance of landscape impacts, both physical impacts and impacts on landscape character.</li> </ul>	Proposed Development design.     Section 10.4 provides a description of baseline conditions, including a description of the landscape character of the study area.	
		<ul> <li>An assessment of the significance of visual impacts at the construction stage, at year 1 and 15 years after completion. As above Viewpoints should be agreed in advance with Bassetlaw District Council planning officers, West Lindsey District Council planning officers and Nottinghamshire County Council Landscape Architects (VIA East Midlands) to reflect potential views from adjacent residential properties, Public Rights of Way, and surrounding roads.</li> <li>A description of the mitigation measures incorporated into the design.</li> <li>A summary of the significant effects remaining after mitigation.</li> <li>Conclusion.</li> </ul>	<ul> <li>Section 10.6 provides an assessment of the landscape impacts, including physical impacts and impacts on landscape character and identifies and describes the resultant effects that are likely to occur.</li> <li>Section 10.6 provides an assessment of the significance of visual effects at the construction stage and after completion. For the purposes of this assessment, it is anticipated that visual impacts at year 1 and 15 years after completion are similar. BDC, WLDC and NCC were consulted regarding the location of representative viewpoints.</li> <li>Section 10.5 provides a description of the design and impact avoidance measures that would be incorporated into the Proposed Development, whilst Section 10.7 identifies additional</li> </ul>	



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
			mitigation measures.  • Section 10.9 provides a summary of the residual effects remaining after mitigation and a conclusion to this chapter.
Natural England	Stage 1 formal consultation (October 2017)	Natural England welcomes the detailed landscape and visual impact assessment (LVIA) that has been undertaken. Additionally, they support the use of guidance documents and reference to the National Character Areas (NCA). No effects will result from the proposed development on the nearest protected landscape (Lincolnshire Wolds AONB).	Noted. Comment only, no response required.
Historic England	Stage 1 formal consultation (October 2017) including on-site meeting 6 November 2017	Il listed buildings may require further assessment to determine if they can readily fall into the	The factors which define the significance of assets in Bole as a group and in the wider landscape context have been considered, including their setting within the wider context of the village, recognising the relationship with each other, as well as their setting as opposed to an approach which favours site specific analyses.  Photomontages of viewpoints with projected planar projection, including



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		listed assets located in the village of Bole as a group.	viewpoint 4 and 12 which have been created since the issue of the PEI Report, give a more accurate representation of the potential visual impact of the Proposed Development. Mitigation has been recommended within <b>Chapter 14</b> : Cultural Heritage in accordance with this.
			The mitigation of landscape effects is intrinsic within the development proposals, which seek to substantially retain existing well established vegetation within the Site. The existing vegetation along the Site boundary would be retained and managed to ensure its continued presence to aid the screening of low level views into the Site, and is incorporated into the Landscaping and Biodiversity Management and Enhancement Plan (Application Document Ref. 7.5) which is submitted as part of the Application for development consent and is proposed to be secured by a Requirement of the draft DCO (Application Document Ref 2.1). This offers the greatest potential for mitigation of potential impacts upon heritage assets.



Consultee or organisation approached	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
Bassetlaw District Council	March/April 2019	Provision of copies of final draft chapter and offer to:	of pre-application meeting to each consultee
Environment Agency		<ul> <li>discuss final proposals and assessments;</li> <li>obtain feedback prior to submission of Application; and</li> <li>agree an approach to drafting of Statements of Common Ground (SoCG) prior to submission of the Application.</li> </ul>	
Lincolnshire County Council			
Natural England		Further details on consultation undertaken can be	found in the Consultation Report
Nottinghamshire County Council		(Application Document Ref. 7.1).	
West Lindsey District Council			



# Summary of Key Changes to Chapter 10 since Publication of the Preliminary Environmental Information (PEI) Report

- 10.3.3 The PEI Report was published for statutory consultation in September 2017, 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.
- 10.3.4 The key changes since the PEI Report was published are summarised in **Table 10-3** below.

Table 10-3: Summary of key changes to Chapter 10 since publication of the PEI Report

PEI Report		
Summary of change since PEI Report	Reason for change	Summary of change to chapter text in the ES
A second site visit was conducted on 14November 2017 to enable the assessment to consider impacts on viewpoints with no leaf cover by taking winter viewpoint photography.	To assess the effect of no leaf cover (winter views) in addition to full leaf cover (summer views) undertaken previously and presented in PEI Report.	Generally it was found that there are no significant differences between seasonal views, due to the presence of evergreen trees. Winter viewpoint photographs are included at <b>Figures 10.6</b> – <b>10.20</b> (ES Volume III).
Photomontage of views at Viewpoint 4 and Viewpoint 12 were created to inform the Stage 1 formal consultation (including public exhibitions) but not presented in the PEI Report. The photomontages are now presented in the ES as Figures 10.21–10.30 (Viewpoint 4) and Figures 10.31–10.40 (Viewpoint 12).	To present photomontages proposed at Scoping stage to form part of the ES and requested by consultees.	Chapter text has not been amended after consideration of the photomontages. All photomontages are included at Figures 10.21-10.40.
The ZTV (Figure 10.4 (ES Volume III)) has been updated to assume a maximum final ground height of	To take into account proposed earthworks to provide a platform for the Proposed Development.	Rochdale Envelope text in <b>Section 10.3</b> amended. Conclusions of assessment presented at PEI stage reviewed but no



Summary of change since PEI Report	Reason for change	Summary of change to chapter text in the ES
+14m AOD, to establish the maximum stack height in m AOD for stacks up to 45m high.		changes required.
Extent of Proposed Power Plant Site added to viewpoint figure inset (Figures 10.6 – 10.19)	For clarity on the extent of the envelope assessed for the Proposed Development once operational.	None required.
Construction phase assessment year updated.	To reflect updated indicative construction programme.	Update of relevant paragraphs in <b>Section 10.6.</b>

#### **Assessment Methods**

#### Landscape

- 10.3.5 In assessing the predicted effects from any likely impacts to the landscape as a result of the Proposed Development, the following criteria have been considered:
  - landscape character;
  - landscape quality;
  - landscape value;
  - landscape sensitivity;
  - magnitude of likely impacts that may affect the landscape; and
  - significance of landscape effects.
- 10.3.6 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.
- 10.3.7 The relationship between sensitivity and magnitude of impact allows an assessment of the significance of predicted landscape effects to be made.
- 10.3.8 The sensitivity of the landscape to change is the degree to which a particular Landscape Character Area (LCA) or feature can accommodate changes or new features without unacceptable detrimental effects to its essential characteristics.
- 10.3.9 The magnitude of a predicted landscape impact relates to the size, extent or degree of change likely to be experienced as a result of the Proposed



Development (refer to **Table 10-4**). 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.

10.3.10 Table 10-4 provides a matrix used to describe this relationship, and to allow any predicted landscape effects to be categorised. Effects that are judged as being moderate or major are considered to be significant.

#### Visual

- 10.3.11 The assessment of effects likely to result from visual impacts is structured by receptor groups (residents, users of recreational spaces, business users and motorists). Individual receptors are identified through the definition of the ZTV (Figure 10.4 (ES Volume III)), within which views of the development are likely to be possible. Individuals are subsequently categorised into receptor groups within different areas. The sensitivity of each receptor group is then evaluated as being high, medium, low or very low dependent upon their susceptibility to changes in views and visual amenity and the value attached to particular views (in accordance with the criteria set by the Landscape Institute and Institute of Environmental Management and Assessment in the Guidelines for Landscape and Visual Impact Assessment (Ref 10-8)).
- 10.3.12 Views from each identified representative viewpoint as agreed with bodies identified in **Table 10-4** are photographed following current guidance. For each viewpoint a description of the view is recorded alongside the receptor types, location and direction of view.
- 10.3.13 Although the assessment considers all structures relating to the Proposed Development, the focus of the assessment within this chapter is the worst-case scenario. To facilitate the reader's interpretation of the information, photomontages (see **Figures 10.21 10.40**) include examples of the single large OCGT and up to five smaller gas turbine options, using the indicative layouts shown in **Figures 4.1a** and **4.1b** (ES Volume III).
- 10.3.14 The sensitivity of receptor is evaluated as being high, medium or low dependent upon its susceptibility to changes in the view and visual amenity, and the value attached to the view.
- 10.3.15 The magnitude of impact is evaluated as being high, medium or low dependant on the magnitude of change in relation to the baseline view resulting from the Proposed Development.
- 10.3.16 The sensitivity of receptor and the magnitude of impact are combined to establish the likely visual effect the Proposed Development has on the baseline view, as shown in **Table 10-4**. Effects that are judged as being moderate or major are considered to be significant.



## Study Area

- 10.3.17 The extent of the study area is determined by the potential visibility of the Proposed Development in the surrounding landscape and is proportionate to its size and scale and the nature of the surrounding landscape. Current guidance (Landscape Institute and IEMA (Ref 10-8)) 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'.
- 10.3.18 For the purposes of this assessment the study area has been defined by a combination of producing a ZTV (Figure 10.4 (ES Volume III)) and professional judgement of the likely extent of effects. Based upon the tallest element of the Proposed Development being the stack(s) (with a maximum height of 45m Above Ground Level (AGL)) it is considered that it is highly unlikely that significant effects would be possible from further than 5km from the centre of the stack(s). This 5km radius study area was agreed with relevant authorities (as listed in Table 10-2).

#### **Zone of Theoretical Visibility**

- 10.3.19 A computer generated ZTV was produced for the 5km study area (see **Figure 10.4** (ES Volume III)). The Ordnance Survey Terrain 5 Digital Terrain Model (DTM) was used together with an assumed maximum ground level height of +14m AOD across the Proposed Power Plant Site footprint, to present a worst-case. Screening effects of vegetation, buildings or other structures are not taken into account with this model. Consequently, for the production of this ZTV, OS Opendata has been incorporated into the DTM. Existing significant built structures located on the West Burton Power Station site were modelled at their actual heights; other significant built form was modelled at 7.5m in height and large areas of woodland were modelled at 15m in height to provide a more accurate ZTV than a bare-ground scenario (which does not take into account localised screening effects of vegetation and built form).
- 10.3.20 The Application envelope considers up to five OCGT units. Indicative layouts and elevations drawings are presented as **Figure 4.1a** and **4.1b** and **Figure 4.2a** and **4.2b** (ES Volume III)). Therefore to ensure that all potential locations for the tallest elements (stacks at up to 45m AGL) were assessed, as a worst-case, the whole of the Proposed Power Plant Site was modelled at a height of 45m AGL. The ZTV identifies any point within 5km which has a view of any part of the modelled area.
- 10.3.21 Potential viewpoints and receptors were identified throughout this area. The potential receptors and their existing views are described in **Table 10-8** and shown on **Figure 10.5** (ES Volume III).

## Significance Criteria

10.3.22 Direct and indirect impacts upon landscape elements and features (or components), as well as impacts upon the general landscape character of the



- surrounding area resulting from construction of the Proposed Development are considered.
- 10.3.23 In line with GLVIA3 (Ref 10-8), significance of effects is assessed as resulting from the sensitivity of receptor (landscape or visual) and magnitude of impact.
- 10.3.24 Table 10-4 provides a matrix used to describe this relationship, and to allow any predicted landscape effects to be categorised. Effects that are judged as being moderate or major are considered to be significant.

Table 10-4: Classification of effects

Magnitude of	Sensitivity/importance of receptor			
impact	High	Medium	Low	Very low
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Very low	Minor	Negligible	Negligible	Negligible

## Rochdale Envelope Parameters

- 10.3.25 Assessment has been undertaken with the context of the design of the Proposed Development being subject to on-going feasibility. A worst-case scenario, allowing for later choice of technology and dimensions and configuration of any buildings has therefore been derived.
- 10.3.26 As described in Chapter 4: The Proposed Development (Section 4.5.3), some earthworks may be required to re-profile the Site, to produce a level platform for the Proposed Power Plant Site and construction laydown area, excavate foundations and/or remove surplus material or remediate contaminated soils. Excess spoil material generated during construction would be stored temporarily within the Site and then, where reasonably practicable, reused as part of the construction works, in accordance with the Framework Construction Environmental Management Plan (CEMP) (Application Document Ref. No. 7.3) and in accordance with best practice. It is not anticipated that significant volumes of spoil would be required to be removed off-site and a material cut and fill balance would be used to minimise waste arisings where reasonably practicable. maximum final ground level of +14.0m AOD has been assumed by the Applicant. The ZTV presented as Figure 10.4 (ES Volume III) takes into account this maximum ground level and forms the basis for determining the locations of viewpoints assessed in this chapter.
- 10.3.27 Up to five slightly smaller stacks was considered more visually intrusive than a single large structure up to 45m AGL (i.e. to a maximum height of 59m AOD) for



the purposes of assessing impacts and therefore determining whether effects would be significant.

- 10.3.28 In particular, it has been assessed that a north-south configuration of the stacks would have greater visual effect than an east-west configuration for receptors, as this would increase the visual extent of the Proposed Power Plant Site as a whole within views towards West Burton Power Station. Whereas an east-west configuration would be either viewed against West Burton Power Station or substantially screened by it.
- 10.3.29 For the purposes of the assessment of impacts on landscape and visual receptors, this worst-case scenario assumes the parameters given in **Table 4-2** (**Chapter 4**: The Proposed Development) including:
  - up to five stacks, not exceeding a height of 45m above a maximum ground level of +14.0m AOD;
  - stacks being evenly spaced across the Proposed Power Plant Site, as illustrated in Figure 4.2b (ES Volume III); and
  - all other parameters being the maxima shown in Table 4-2.
- 10.3.30 The ZTV and assessment of effects in this chapter reflects maximum stack heights of up to 45m which would be up to 59m AOD across the Proposed Power Plant Site, recognising that the final locations of stacks will be constrained to be within a smaller defined area of the Proposed Power Plant Site in accordance with the draft Works Plans shown in Application Document Ref 3.2.
- 10.3.31 Worst-case assumptions, including for example, above ground (rather than below ground) cabling between the Proposed Development and the existing 400kV switchyard within WBB Power Station have been assessed, in accordance with the Rochdale Envelope. This assumes that above ground cabling would not exceed the height for other built structures in **Table 4-2** (**Chapter 4**: The Proposed Development). As such, such cabling, like other lower level built components and equipment, would be likely to be screened by existing vegetation
- 10.3.32 Consequently, the results presented in this assessment are representative of several different design options and the overall effect of the Proposed Development may be less than that presented, as the design to be taken forward may present lesser impacts on some receptors than presented in this assessment.
- 10.3.33 Use of the Rochdale Envelope parameters therefore does not change the conclusions of the impact assessment and does not result in any additional significant landscape or visual effects being identified; it is therefore considered that the retained optionality in the Proposed Development parameters as outlined in **Chapter 4**: Proposed Development does not have any material effect on the impact assessment presented in this chapter.



10.3.34 It is considered that a worst-case scenario has been assessed in line with the Rochdale Envelope approach.

#### 10.4 Baseline Conditions

### The Wider Landscape

#### **National Character**

- 10.4.1 The study area is located within NCA 48 Trent and Belvoir Vales as defined by NCA Profile 48: Trent and Belvoir Vales (NE429) (Ref 10-11). This NCA is characterised as low lying, open and wide, with power stations and associated overhead power lines located along the River Trent exerting a visible influence over a wide area. Descriptions for this NCA are provided in **Table 10-5**.
- 10.4.2 NCA 45 Northern Lincolnshire Edge with Coversands as defined NCA Profile 45: Northern Lincolnshire Edge with Coversands (NE554) (Ref 10-12) lies to the north at the outermost edge of the 5km study area. This NCA is characterised by a prominent ridge of limestone and scarp slope rising from adjacent low-lying land, with panoramic views, particularly to the west.

## Regional Character

- 10.4.3 At a regional level the study area lies within two Regional Character Areas (RCA) as defined by the Bassetlaw Landscape Character Assessment (BLCA) (Ref 10-13):
  - Trent Washlands RCA; and
  - Mid-Nottinghamshire Farmlands RCA.
- 10.4.4 Within the Trent Washlands RCA, the power stations of West Burton and Cottam and their associated overhead power lines are considered by the BLCA to be the most dominant and visually intrusive landscape features within this area.
- 10.4.5 The Mid-Nottinghamshire Farmlands RCA is considered by the BLCA to be an undulating landscape of predominantly rural, agricultural character.
- 10.4.6 The study area lies within one LCA as defined by the West Lindsey Landscape Character Assessment (WLLCA) (Ref 10-14) - Trent Valley LCA. Trent Valley LCA is described as low-lying and gently undulating with power stations along the River Trent and associated major transmission lines dominating views to the west.
- 10.4.7 Within the Trent Washlands and Mid-Nottinghamshire Farmlands, the study area lies within several Policy Zones as defined by the BLCA. These are Trent Washlands 23, 24, 25 and 49 and Mid-Nottinghamshire Farmlands 02, 03 and 05, which are adjacent to the Site.
- 10.4.8 Distinctive and defining characteristics of these landscape areas are provided in **Table 10-5**.



# **Table 10-5: Landscape Character Area Key Characteristics**

Landscape Character Area	Distinctive & Defining Landscape Characteristics	Sensitivity
Natural England NCA 48 – Trent and Belvoir Vales (NE429)	"A gently undulating and low-lying landform in the main, with low ridges dividing shallow, broad river valleys, vales and flood plains. The mature, powerful River Trent flows north through the full length of the area, meandering across its broad flood plain and continuing to influence the physical and human geography of the area as it has done for thousands of years.	Medium
	Agriculture is the dominant land use, with most farmland being used for growing cereals, oilseeds and other arable crops. While much pasture has been converted to arable use over the years, grazing is still significant in places, such as along the Trent and around settlements.	
	A regular pattern of medium to large fields enclosed by hawthorn hedgerows, and ditches in low-lying areas, dominates the landscape.	
	Very little semi-natural habitat remains across the area; however, areas of flood plain grazing marsh are still found in places along the Trent.	
	Extraction of sand and gravel deposits continues within the Trent flood plain and the area to the west of Lincoln. Many former sites of extraction have been flooded, introducing new waterbodies and new wetland habitats to the landscape.	
	Extensive use of red bricks and pantiles in the 19th century has contributed to the consistent character of traditional architecture within villages and farmsteads across the area. Stone hewn from harder courses.	
	A predominantly rural and sparsely settled area with small villages and dispersed farms linked by quiet lanes, contrasting with the busy market towns of Newark and Grantham, the cities of Nottingham and Lincoln, the major roads connecting them and the cross-country dual carriageways of the A1 and A46.	
	Immense coal-fired power stations in the north exert a visual influence over a wide area, not just because of their structures but also the plumes that rise from them and the pylons and power lines that	



Landscape Character Area	Distinctive & Defining Landscape Characteristics	Sensitivity
	are linked to them. The same applies to the gas- fired power station and sugar beet factory near Newark, albeit on a slightly smaller scale."	
Bassetlaw District Council Mid- Nottinghamsh ire Farmlands RCA (see Figure 10.2 and 10.3 in ES Volume III)	"Area of undulating landscape with a distinctively rural, agricultural character. Arable farming is the predominant land use on the clay soils, where mixed farming prevails  The region is relatively remote from major population centres and has a well-defined and largely undeveloped rural character. Industry is of little significance save for the occasional clay quarry and brick works. A number of main highways cross the area, but typically roads are narrow country lanes linking the scattered nucleated settlements. The villages are well integrated into the surrounding countryside with small-scale field patterns, unimproved pastures, species-rich hedgerows and remnant orchards forming common features along their edges.  A characteristic of the Mid-Nottinghamshire Farmlands is the strong sense of enclosure which exists over most of the region. Field patterns have remained largely intact although they have become somewhat eroded in the most intensively farmed areas, especially to the north and east. Ancient hedgerows are scattered throughout, hedgerow trees are usually ash and oak and have a localised importance in the landscape.  The landscape has a generally well-wooded character except over tracts of land to the far north and east. Woodlands tend to be mainly deciduous or mixed and are typically small to medium in size. A special feature of the area is the many ancient woodlands, often prominently sited on hilltops and rising ground."	High
Bassetlaw District Council Trent Washlands RCA (see Figure 10.2	"A number of pressures have greatly affected the traditional character of the region including the impact of power stations and pylon lines, mineral extraction, urban encroachment, road and rail developments and agricultural intensification. Away from the urban areas settlement is characterised	Medium



Landscape Character Area	Distinctive & Defining Landscape Characteristics	Sensitivity
and 10.3 in ES Volume III)	by a nucleated pattern of villages and isolated farmsteads. These have retained their distinctive vernacular character, being of red brick and pantile roof construction.	
	Arable cultivation now dominates large areas of the river corridors, whereas previously it was confined to the river terraces. The meandering river channels are dominant components of the river corridor landscapes; however, along the Trent, high floodbanks often shield the river from view."	
West Lindsey District Council	"Low-lying, gently undulating landform with higher terrain to east and south of Gainsborough.	Medium
LCA Trent Valley	Significant blocks of deciduous woodland, good hedgerows and hedgerow trees create a relatively enclosed landscape.	
	River Trent and its adjacent washlands are enclosed by steep flood embankments.	
	Historic parkland landscapes including a medieval deer park, and landmarks such as the ruins of Torksey Castle.	
	Main roads are significant features in the landscape; recent development concentrated along the main roads, bypassing original village centres.	
	Views towards the west are dominated by the power stations along the river Trent."	

# The Study Area

#### **Settlements**

10.4.9 Gainsborough is the largest settlement within the study area and lies approximately 3.5km to the north-east. The settlement pattern in the rest of the study area comprises small and medium sized villages including Bole and Saundby to the north-west, South Wheatley to the west, North Leverton with Habblesthorpe to the south-west, South Leverton to the south-west and Littleborough, Knaith and Lea to the east. Isolated properties and farmsteads are scattered throughout the study area.

#### **Communications**

10.4.10 A number of 'A' roads lie within the study area, linking Gainsborough in the northeast to larger settlements outside the study area: the A631, which runs east-west



through the study area, the A620, which runs south-west/north-east and the A156 which extends southwards from Gainsborough. Other roads are made up of a network of B-class roads and smaller unclassified roads which link the network of villages.

10.4.11 The Lincoln to Sheffield Railway Line runs directly to the north-west of the West Burton Power Station site.

#### Landscape Designations

- 10.4.12 No Registered Parks and Gardens lie within the study area. The Deserted Medieval Village of West Burton, designated as a Scheduled Monument, lies immediately to the south of the West Burton Power Station site. A number of Grade II listed buildings including Bole Manor House and attached outbuilding and the Church of St Martin, Bole are present approximately 1km to the north-west of the Site in Bole, with further Grade I and II listed buildings present in Saundby. Further details are provided in Chapter 14: Cultural Heritage.
- 10.4.13 Conservation Areas are located at Gainsborough, Saundby and North Wheatley as presented in **Figure 10.1** (ES Volume III).

#### Recreation and Public Rights of Way (PRoW)

- 10.4.14 A number of PRoW, including footpaths, bridleways and Byways Open to All Traffic (BOATs) exist within the study area, linking nucleated settlements and farmsteads as illustrated on **Figure 10.1** (ES Volume III). PRoW closest to Site include West Burton FP4, which runs along the west bank of the River Trent, Bole FP9#1 which runs north-west/south-east to the northern edge of the Site and Bole FP2 and Bole FP3, which run east from Bole to the railway line.
- 10.4.15 One long distance path, the Trent Valley Way, traverses the study area. This enters the study area from the south-east, below Sturton-le-Steeple and passes through North Wheatley and South Wheatley to Gringley-on-the-Hill to the north-west of the study area.

#### **Vegetation Cover**

- 10.4.16 Agricultural land predominates within the study area with vegetation cover comprising arable crops, boundary hedgerows, hedgerow trees and small blocks of woodland.
- 10.4.17 Chapter 3: Description of the Site contains a full description of the West Burton Power Station site, the Site and the Proposed Power Plant Site. The majority of the Proposed Power Plant Site comprises areas of hardstanding and grassland with small areas of broad leaved woodland, scrub and trees scattered throughout.



## **Landscape Designations**

10.4.18 The study area contains no landscape designations in relation to landscape quality or value. 35km to the east, Lincolnshire Wolds AONB is the nearest area designated for its landscape value.

#### Landscape Value

- 10.4.19 The study area, which covers the Site and the West Burton Power Station site, currently contains limited landscape features and thus has limited landscape value. BLCA identifies that the West Burton Power Station structures, pylons and associated overhead power lines have a strong visual influence within the study area (Ref 10-13).
- 10.4.20 Although the study area has no landscape designations relating to landscape value, there are a number of Scheduled Monuments, Conservation Areas and numerous listed buildings located within it. These are discussed in more detail within **Chapter 14**: Cultural Heritage and **Appendix 14A**: Desk Based Assessment (ES Volume II) and illustrated on **Figure 10.1** (ES Volume III). The study area used in **Chapter 14**: Cultural Heritage was determined with reference to the ZTV (**Figure 10.4** in ES Volume III). **Table 10-6** provides evidence on the landscape value and sensitivity of the study area and the Site.

# Landscape Sensitivity

10.4.21 An evaluation of sensitivity has been undertaken, based on a subjective assessment of the capacity of the landscape to absorb development. Landscape sensitivity for the Site and surrounding area has been assessed in accordance with current guidance and is recorded in **Table 10-6**.

**Table 10-6: Landscape Value** 

Factor	Study Area	Site
Landscape quality (condition)	Quality of the landscape varies across the study area from very poor and disparate, to very good and unified. Overall, the landscape immediately surrounding the Site is classed as good, due to the unified nature of the landscape, despite the detracting features of the West Burton Power Station site and overhead power lines.	of the Site is poor and
Scenic quality	No areas designated for	Poor landscape quality



Factor	Study Area	Site
	their scenic quality lie within the study area. Influenced by the West Burton Power Station site and associated overhead power lines, the landscape remains unified.	within the Site and the detracting influence of the West Burton Power Station site make the Site of little scenic value.
Rarity	The study area generally comprises agricultural landscape typical of the surrounding countryside.	The landscape of the Site is not typical of the wider surrounding countryside.
Representativeness	The landscape contains boundary hedgerows and historic field patterns.	No important landscape elements are evident on the Site.
Conservation interests	Historic field patterns are still evident throughout the study area. A Scheduled Monument lies immediately to the south of the West Burton Power Station site and a number of conservation areas, listed buildings and other Scheduled Monuments have been identified within the study area.	No conservation interests have been identified within the Site.
Recreation value	The landscape is of limited recreational value, this being related to the use of ProW and navigation/fishing interests on the River Trent.	has been identified
Perceptual aspects	No specific, relevant perceptual aspects which define landscape character have been identified.	No specific, relevant perceptual aspects that define landscape character have been identified.
Overall landscape sensitivity	Medium, due to the overall good condition of the landscape, the absence of designated landscapes, its limited recreational value and its ability to accommodate the Proposed Development.	Low, due to the low landscape value derived from the factors noted above and the resulting capacity to accommodate the Proposed



Factor	Study Area	Site
		Development.

# The Site and Its Immediate Setting

- 10.4.22 The location and context of the Site is illustrated on **Figure 10.1** (ES Volume III). The Site is located to the immediate north-west of the West Burton Power Station site. To the north lies grassland with shrubs and Wheatley Beck, with Bole Ings Drain and the Great Central Railway Line beyond. To the east lies scrub containing ponds with River Road and the River Trent beyond. River Road continues around the southern boundary of the wider West Burton Power Station site with open farmland beyond. The remainder of the coal stockpile associated with WBA Power Station lies to the immediate west of the Site. The WBA Power Station is immediately adjacent to the south-west of the Proposed Power Plant Site.
- 10.4.23 According to a recent topographical survey of the Site, the ground level varies from a low point of 2.6m AOD within the proposed southern drainage connection corridor, to a high point of 16.2m AOD on a raised mound at the northern end of the Proposed Power Plant Site. The majority of the Site lies between 10 and 14m AOD, including the Proposed Power Plant Site, the electricity connection route, and the western two-thirds of the proposed construction laydown area.
- 10.4.24 A notable steep ridge is present immediately to the east of the Proposed Power Plant Site and adjacent to the proposed electricity connection route, where ground descends from a plateau at approximately 12m AOD to approximately 3m AOD, over a short distance.
- 10.4.25 Levels across the landscaping and biodiversity management and enhancement area range from approximately 8m AOD at the base of the mound to 13m AOD on the plateau.
- 10.4.26 The West Burton Power Station site contains large buildings housing the WBA and WBB Power Station plant (turbines, boilers etc.), as well as stacks, cooling towers, ancillary structures and existing coal stockpile within a railway loop. The West Burton Power Station site is generally flat and low lying with slight changes in level ranging from approximately 2.6m AOD near to the existing on-site water treatment works to approximately 16.2m AOD on a mounded area of the Site. The heights of the larger existing structures on the West Burton Power Station site are provided in Table 10-7.

**Table 10-7: Existing Structures within West Burton Power Station Site** 

Structure	Height (m) above ground level (AGL)
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Structure	Height (m) above ground level (AGL)
West Burton A (WBA) Power Station stacks	198
WBA Power Station cooling towers	112
WBA Power Station boiler house	61
West Burton B (WBB) Combined Cycle Gas Turbine (CCGT) stacks	80
WBB Power Station CCGT heat recovery steam generator building (HRSG)	40
WBB Power Station CCGT turbine hall	28

10.4.27 The immediate setting of the Site therefore comprises generally flat, predominantly agricultural land of a rural character with open views across an extensive area. The existing West Burton Power Station site, Cottam Power Station nearby, associated pylon lines and rail development have a visual presence detracting from the rural character of the area.

#### Visual Baseline

10.4.28 Visibility within the study area is dictated by the screening effect of elements such as landform, hedgerows, woodland blocks and built development.

#### **Viewpoints**

- 10.4.29 Locations within the ZTV (**Figure 10.4** (ES Volume III)) where views of the Proposed Development would potentially be visible were identified through a desk-based assessment and the use of 1:25,000 Ordnance Survey maps. The viewpoints identified within the LVIA within the WBB Power Station Environmental Statement (2005) (Ref 10-15) were also cross-referenced. These locations were considered representative of those views that would be available of the Proposed Development from key visual receptors.
- 10.4.30 The locations were visited to assess and record the potential views that receptors would have of the Proposed Development. Field surveys have been carried out by a Landscape Architect on 23 March 2017, 18 July 2017 and 15 November 2017.
- 10.4.31 **Table 10-8** provides a list of the representative viewpoints assessed in this chapter, and a description of the view that is currently available from that location. **Figure 10.5** (ES Volume III) illustrates the locations of the representative viewpoints, while **Figures 10.6** to **10.19** provide photographs for each viewpoint.



10.4.32 The viewpoints that have been taken forward for assessment purposes are the views considered as the most representative of those found within the study area (based on the degree of view of the Site, the receptors' sensitivity and the nature of the view). These representative viewpoints have been selected in agreement with the consultees in Table 10-2.

**Table 10-8: Representative Viewpoints** 

Viewpoint reference	Receptor type	Description	NGR Co- ordinates	Approximate distance to centre of Site (m)
1	Users of PRoW	Footpath Saundby FP4 to east of Saundby Park Farm	476469, 388372	4,380

#### **Description of view towards the Site**

Medium distance, open view south-eastwards across farmland with structures within WBA and WBB Power Stations forming distinctive features on the horizon and viewed against the sky. WBB Power Station is partially screened by distant vegetation with associated pylons and overhead power lines extending to the left. Lower levels of WBA Power Station are partially obscured by gently rising landform and intervening vegetation.

2 Users of PRoW & adjacent residential	Footpath Saundby FP6 to south of Beckingham, Marsh Lane	479096, 388521	2,610
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#### **Description of view towards the Site**

Medium distance, open view south with WBA and WBB Power Stations forming distinctive features on the horizon and viewed against the sky. Gently sloping landform partially screens low level elements of WBA and WBB Power Stations. Large scale agricultural buildings within Hall Farm partially obscure the turbine hall, stacks and cooling towers within WBA Power Station. Pylons and overhead power lines extend left and right within the view, running northwards past the viewpoint.

Users of riverside footpath & Whittons Mill, Bridge St, Gainsborough Whittons Mill	481450, 389569	3,620
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#### **Description of view towards the Site**



Viewpoint reference	Receptor type	Description	ordinates	Approximate distance to centre of Site (m)
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Long distance view south-west restricted by vegetation along the west bank of the River Trent. WBA and WBB Power Stations are partially visible in the distance and screened by dominating large scale structures within the Kerry Ingredients site in the middle distance. Adjacent residential receptors at Whittons Mill are likely to obtain more open and less restricted views due to elevation above screening landscape elements.

Users of PRoW & residential receptors a Bole	Junction of Footpaths Bole FP3B and FP4, Bole	479147, 386946	1,350
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#### **Description of view towards the Site**

Short distance, open view south-eastwards across flat farmland, partially filtered and restricted by intervening boundary hedgerows and low hedgerow trees in the near distance. WBB Power Station is highly visible and dominant within the view due to close proximity and vertical extent within the view, compounded by associated pylons and overhead power lines to the left and right. Structures within WBA Power Station are partially visible with the existing coal pile screening lower elements and parts of WBB and WBA Power Stations.

5 Users of PRoW	Junction of Footpaths Lea 41/1, Lea 41/2, Gain 33/1	481619, 387353	1,780
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#### **Description of view towards the Site**

Short distance view south-west across Lea Marshes and vegetation along the River Trent to structures within the West Burton Power Station site beyond. Riverside vegetation partially obscures lower parts of these structures which remain highly prominent and dominating within the view. Pylons and overhead power lines extend to the left and right of the view.

Residential receptors at Lea	Green Lane, Lea	482459, 386994	2,340
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#### **Description of view towards the Site**

Elevated, medium distance view west across Lea Marshes to low hills in the far distance. The scene is well treed with intervening boundary hedgerows and hedgerow trees partially obscuring lower parts of structures within the West Burton Power Station site. Due to their prominence above the horizon these remain visually dominant. Pylons and overhead power lines extend to the left



Viewpoint reference	Receptor type	Description	NGR Co- ordinates	Approximate distance to centre of Site (m)
and right. Vi	ews are obliqu	e to the main elevatio	ns of the resident	ial properties.
7	Users of PRoW & residential receptors at West Burton	Footpath West Burton FP10	478619, 385867	1,680

# **Description of view towards the Site**

Narrow, short distance view east. Hedgerows, hedgerow trees and woodland enclose the view with rising landform and intervening vegetation partially obscuring WBB Power Station. Structures within WBA Power Station are generally obscured by hedgerows, with the stacks visually dominant due to close proximity. Pylons and overhead power lines are notably visible.

Users of 8 B1241 at Knaith Park	B1241 at Knaith Park	483828, 385875	3,575
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#### **Description of view towards the Site**

Medium distance view west across nearly flat, well maintained pasture with post and rail fencing associated with Moorhouse Farm in the near distance, deciduous woodland extending across a large portion of the view in the middle distance framing structures within the West Burton Power Station site beyond, prominent and extending above the horizon.

Users of PRoW & residential receptors at Sturton-le-Steeple	Junction of PRoW at Footpath Sturton-le-Steeple FP17, Restricted Byway Sturton-le- Steeple RB32, Common Lane	479127, 384535	2,010
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#### **Description of view towards the Site**

Short distance panoramic view north-eastwards across gently undulating open farmland. Intervening boundary hedgerows with low trees in the near distance partially obscuring WBB and WBA Power Stations. Stacks within WBB Power Station are clear and distinct. Cooling towers within WBA Power Station and associated pylons dominate the view due to close proximity and scale with overhead power lines extending across a large proportion of the view, running northwards past the viewpoint.



Viewpoint reference	Receptor type	Description	NGR Co- ordinates	Approximate distance to centre of Site (m)
10	Users of PRoW	Junction of Bridleway Sturton- Le-Steeple BW13, footpath Sturton- le-Steeple FP40 and Sturton-le- Steeple FP39	480148, 384852	1,340

#### **Description of view towards the Site**

Short distance view north across flat open farmland. Intervening boundary hedgerows with low trees in the middle and near distance partially obscure the base of WBB Power Station which otherwise remains visually prominent with its stack clearly visible. Cooling towers within WBA Power Station are visible to the left of view.

Users of A156 & residential receptors at Knaith	Junction of A165/Knaith Hill, Knaith	482934, 384763	3,020
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#### **Description of view towards the Site**

Wide, medium distance elevated view west across largely flat farmland to the horizon. Woodland blocks and boundary hedgerows partially enclose the landscape, filtering the view with low, maintained hedgerows to the roadside further obscuring the near view. Structures within the West Burton Power Station site are prominent on the horizon with WBA Power Station having a great presence than WBB Power Station to the right of view.

12	Users of PRoW/Trent Valley Way	Bridleway Sturton- le-Steeple BW7	481604, 383007	3,450
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#### **Description of view towards the Site**

Medium distance, panoramic view to the north-west across largely flat and featureless open farmland in the foreground. Pylons extend to the left, running past the viewpoint. Structures within WBA Power Station are highly prominent on the horizon with stacks, cooling towers and turbine hall distinct on the horizon. WBB Power Station is visually separate from WBA Power Station on the horizon with a lesser visual presence due to smaller scale. Stacks at WBB Power Station are clearly identifiable on the skyline. In conjunction with Kerry Industries mill and factory to the right of view and in the far distance, WBB Power Station and WBA Power Station exert a visual influence extending across the view. Some intervening vegetation comprising well-maintained hedgerows to field



Viewpoint reference	Receptor type	Description	NGR Co- ordinates	Approximate distance to centre of Site (m)		
boundaries with hedgerow trees in the middle distance providing filtering to low level elements and parts.						
13	Users of PRoW/Trent Valley Way	Byway open to all traffic North Leverton with Habblesthorpe BOAT15	479657, 381326	4,900		

#### **Description of view towards the Site**

Long distance, partially enclosed view to the north across largely flat and featureless open farmland in the foreground to WBB Power Station on the horizon. Intervening vegetation in the foreground obscures WBA Power Station with only the upper parts visible above. Intermittent hedgerows to field boundaries and occasional trees in the middle distance provide low filtering. WBB Power Station is prominent and clearly identifiable on the horizon. Pylons in the middle distance extend to the right, running past the viewpoint.

	Residential receptors	Gate Burton/Marton	483848, 382266	5,345
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Wide, long distance view west across largely flat farmland to the horizon. Sporadic hedgerow trees and boundary hedgerows filter the view with low, maintained hedgerows to the roadside further obscuring the near view. Structures within the West Burton Power Station site are prominent on the horizon with WBA Power Station having a greater presence than WBB Power Station.

Users of the park		15		Uphill Gainsborough	482019, 389273	3,583
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Medium-long distance view to the south-east from elevated land. Intervening vegetation lies in the foreground with built form within Gainsborough beyond. WBA Power Station and WBB Power Station are prominent within the view on the horizon and providing vertical elements in contrast to the surrounding landscape.

#### Visibility in the Wider Landscape

10.4.33 Structures within the existing West Burton Power Station site are visible within the majority of views within the study area. Generally, flat, low-lying landform, combined with field boundary vegetation and low level of tree cover does little to



reduce the visibility of the existing West Burton Power Station structures, due to their scale. Views towards the Site from within settlements are generally restricted by built form or screening boundary vegetation. Plumes emanating from cooling towers and stacks within the existing West Burton Power Station site increase the apparent massing and visibility of these structures, although visibility is operationally and weather dependant.

#### Visual Sensitivity

- 10.4.34 An evaluation of sensitivity has been undertaken, based on a subjective assessment of the susceptibility to change of the receptor and the value of the view at agreed representative viewpoints as shown on **Figure 10.5** (ES Volume III).
- 10.4.35 The visual sensitivity for each of these representative viewpoints has been assessed in accordance with current guidance and is recorded in **Table 10-9**. Where there is a range of susceptibility or value of view, then the highest criteria is used for the assessment of the sensitivity.

**Table 10-9: Visual Sensitivity** 

Viewpoint reference	Receptor type	Description	Susceptibility of receptor to specific change	Value of view	Receptor sensitivity
1	Users of the PRoW	Footpath Saundby FP4 to west of Saundby Park Farm	High	Medium	Medium
2	Users of the PRoW, Residents	Footpath Saundby FP6 to south of Beckingham, Marsh Lane	High	Medium	Medium
3	Users of riverside footpath, Residents	Whittons Mill, Bridge St, Gainsboroug h	High	Medium	Medium
4	Users of the PRoW, Residents	Junction of Footpaths Bole FP3B and Bole FP4, Bole	High	Medium	Medium



Viewpoint reference	Receptor type	Description	Susceptibility of receptor to specific change	Value of view	Receptor sensitivity
5	Users of the PRoW	Junction of Footpaths Lea 41/1, Lea 41/2 and Gain 33/1	High	Medium	Medium
6	Residents	Green Lane, Lea	High	Medium	Medium
7	Users of the PRoW, Residents	Footpath West Burton FP10	High	Low	Medium
8	Road users	B1241 at Knaith Park	Medium	Medium	Medium
9	Users of the PRoW, Residents	Junction of PRoW at Footpath Sturton-le- Steeple FP17, Restricted Byway Sturton-le- Steeple RB32, Common Lane	High	Low	Low
10	Users of the PRoW	Junction of Bridleway Sturton-Le- Steeple BW13, footpath Sturton-le- Steeple FP40 and Sturton- le-Steeple FP39	High	Low	Medium



Viewpoint reference	Receptor type	Description	Susceptibility of receptor to specific change	Value of view	Receptor sensitivity
11	Road users, Residents	Junction of A156/ Knaith Hill, Knaith	High/medium	Low	Medium
12	Users of the PRoW/Tre nt Valley Way	Bridleway Sturton-le- Steeple BW7	High	Medium	Medium
13	Users of the PRoW	Byway open to all traffic North Leverton with Habblesthorp e BOAT15	High	Low	Medium
14	Residents	Gate Burton/Marto n	High	Low	Medium
15	Residents, Users of the Park	Uphill Gainsboroug h	High	Low	Medium

10.4.36 The above assessment, including local area photography from viewpoints, was undertaken whilst construction of up to 20 battery storage units including a central control unit and associated cabling, was on-going, but not complete within the footprint of WBB Power Station. The battery units and associated power conversion systems (PCS) are arranged in pairs that measure 17.6m by 5.3m and are 2.9m in height. This development is not anticipated to have materially changed the baseline reported for the purposes of this assessment, as the units are not anticipated to result in any structures that are out of context with existing West Burton Power Station structures and in any case, are confined to a footprint within the existing structures of WBB Power Station. Construction works are now completed and the development is operational.

#### **Future Baseline Conditions**

10.4.37 For the purpose of this assessment, the future baseline has been set at 2020. The future baseline is a prediction of baseline conditions in the future, assuming the Proposed Development has not been, or is not being, constructed. In 2020, within



the wider study area, the future baseline conditions are assumed to be similar to the existing baseline. It is assumed that small amounts of development within existing settlement boundaries would have been constructed, but the general landscape character and features would remain in a similar condition as they are now.

10.4.38 It is anticipated that WBA Power Station would close by 2025 under current legislation; however, uncertainty regarding the future closure plans has precluded this scenario from consideration in this assessment.

# 10.5 Development Design and Impact Avoidance

- 10.5.1 Existing vegetation around the Site provides screening for low level operations and structures within the study area.
- 10.5.2 The mitigation of landscape effects is intrinsic within the Proposed Development which seeks to substantially retain and maintain existing well established vegetation within the Site.
- 10.5.3 The following impact avoidance measures would either be incorporated into the design or are standard construction or operational measures. These measures have been taken into account as part of the impact assessment process:
  - suitable materials would be used where reasonably practicable, in the construction of structures to reduce reflection and glare and to assist with breaking up the massing of the buildings and structures (refer to **Application Document Ref 7.1:** Planning Statement);
  - the selection of finishes for the buildings and other infrastructure would be informed by the finishes of the adjacent developments and agreed with relevant consultees and approved by BDC at the detailed design stage and is proposed to be secured through the discharge of a Requirement of the draft DCO (Application Document Ref 2.1) in order to minimise the visual impact of the Proposed Development;
  - lighting required during the operation stage of the Proposed Development would be designed to reduce unnecessary light spill outside of the Site boundary, in accordance with the Lighting Strategy (Application Document Ref. No. 7.4); and
  - the existing vegetation along the Site boundary would be retained and managed to ensure its continued presence to aid the screening of low level views into the Site. This has been incorporated into the Landscaping and Biodiversity Management and Enhancement Plan (Application Document Ref. 7.5) which is submitted as part of the Application for development consent.



# 10.6 Likely Impacts and Effects

#### Landscape

#### **Construction**

- 10.6.1 The Proposed Development may affect landscape character. The removal of characteristic landscape elements, and introduction of uncharacteristic elements which contrast with the existing landscape character are likely to result in adverse effects, whilst the creation of elements that re-establish characteristic features in order to achieve biodiversity/landscape objectives are likely to result in beneficial effects.
- 10.6.2 Construction activities undertaken as part of the Proposed Development would introduce mobile plant which may include piling rigs, heavy plant machinery and cranes. These construction activities would result in the temporary loss of an area of grassland and vegetation within part of the Site, which would be utilised as the construction laydown area. If required, works to facilitate construction of the southern drainage connection corridor and, to a lesser extent, the other two drainage options under consideration, are likely to require removal of a small amount of existing vegetation within areas of scrub near the approach to the River Trent. No other on-site or off-site landscape features would be impacted as a result of construction activities.
- 10.6.3 The extent, scale and impact of these landscape effects, taking the design into account, is described in the assessment of landscape effects provided in Table 10-10.

Table 10-10: Assessment of Landscape Effects - Construction

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of Effect
Natural England NCA 48 – Trent and Belvoir Vales (NE429)	Medium	The Proposed Development would introduce construction activity onto the existing West Burton Power Station site and into the Trent and Belvoir Vales NCA. Due to the large scale of the NCA, the construction activities are unlikely to give rise to any impacts on its	Very low	Negligible adverse (not significant)



Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of Effect
		overall character. Effects would be temporary, indirect and medium term.		
Bassetlaw Mid Nottingham shire Farmlands RCA	High	Construction activities would have an impact on the Mid-Nottinghamshire RCA, through the introduction of construction compounds and laydown area, machinery and other related activities. Impacts arising from the presence of construction machinery and activity would be temporary, of medium term and of low magnitude, due to the localised influence of the existing West Burton Power Station on the condition and quality of the wider RCA. Construction of the Proposed Development would have a low magnitude of impact on the RCA.	Low	Minor adverse (not significant)
Bassetlaw Trent Washlands RCA	Medium	Construction activities would have a direct impact on the Trent Washlands RCA through the introduction of	Low	Minor adverse (not significant)



Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of Effect
		machinery and associated activities. Impacts arising from the presence of construction machinery and activity would be temporary, of medium term and of low magnitude, given the localised influence the existing West Burton Power Station exerts on the condition and quality of the wider RCA. Development would have a low magnitude of impact on the RCA.		
West Lindsey Trent Valley LCA	Medium	The Site lies outside of, but in close proximity to the Trent Valley LCA. The introduction of machinery and construction activity within the Site would have little direct impact on the wider LCA, occurring within and adjacent to the existing West Burton Power Station site. Temporary, medium term effects on perceived tranquillity of the LCA means that construction would have a low magnitude of impact on the RCA.	Very low	Negligible adverse (not significant)



Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of Effect
The Site	Low	Construction activity would result in a direct effect on landscape features within the Site. The removal of existing grassland and vegetation to allow introduction of construction compounds and laydown area would not necessitate changes to features characteristic of the wider landscape, resulting in a low magnitude of impact.	Low	Negligible adverse (not significant)

# **Operation**

10.6.4 The Proposed Development would result in increased built form and structures within the existing West Burton Power Station site, as detailed in **Chapter 4**: Proposed Development. The extent, scale and impact of these landscape effects, taking the design into account, is described in the assessment of landscape effects provided in **Table 10-11**.

**Table 10-11: Assessment of Landscape Effects - Operation** 

Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of Effect
Natural England NCA 48 – Trent and Belvoir Vales (NE429)	Medium	The Proposed Development would introduce further built structures into the West Burton Power Station site. Due to the large scale of the NCA and the similarity of use and scale between proposed	Very low	Negligible adverse (not significant)



Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of Effect
		and existing structures, the Proposed Development is considered unlikely to give rise to any impacts on its overall character.		
Bassetlaw Mid Nottinghamshir e Farmlands RCA	High	The introduction of additional structures to the West Burton Power Station site would have a direct, but relatively localised impact on the Mid-Nottinghamshire RCA that would not impact on its condition or quality overall. Impacts arising from their presence would be long-term, reversible and of low magnitude.	Low	Minor adverse (not significant)
Bassetlaw Trent Washlands RCA	Medium	During operation, the Proposed Development would have a direct impact on the Trent Washlands RCA; however, the introduction of additional power generating structures within the West Burton Power Station site would have a long-term low magnitude of	Low	Minor adverse (not significant)



Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of Effect
		impact on the RCA.		
West Lindsey Trent Valley LCA	Medium	The Site lies outside of, but in close proximity to the Trent Valley LCA. The operation of the Proposed Development would have little direct impact on the wider LCA. Temporary, medium-term impacts on perceived tranquillity of the LCA means that the operation of the Proposed Development would have a very low magnitude of impact on the RCA.	Very low	Negligible adverse (not significant)



Landscape type	Sensitivity of receptor	Description of impact	Predicted magnitude of impact	Classification of Effect
Landscape features	Low	Reinstatement of the grassland after use as a construction laydown area and the mitigation of ecological impacts through a scheme of landscape and biodiversity management and enhancement would provide a beneficial impact to the Site. This impact would be long- term, low in magnitude and reversible.	Low	Negligible beneficial (not significant)

10.6.5 **Table 10-12** provides a summary of the landscape effects during construction and operation.



**Table 10-12: Summary of Landscape Effects** 

Receptor	Sensitivity of receptor			Operation	
		Magnitude of impact	Classification of effect	Magnitude of impact	Classification of effect
Natural England NCA 48 – Trent and Belvoir Vales (NE429)	Medium	Very low	Negligible adverse (not significant)	Very low	Negligible adverse (not significant)
Bassetlaw Mid Nottinghamshire Farmlands RCA	High	Low	Minor adverse (not significant)	Low	Minor adverse (not significant)
Bassetlaw Trent Washlands RCA	Medium	Low	Minor adverse (not significant)	Low	Minor adverse (not significant)
West Lindsey Trent Valley LCA	Medium	Very low	Negligible adverse (not significant)	Very low	Negligible adverse (not significant)
Site Landscape features	Low	Low	Negligible adverse (not significant)	Low	Negligible beneficial (not significant)



#### **Visual Amenity**

#### **Construction**

- 10.6.6 Changes in views may give rise to adverse or beneficial visual effects through obstruction in views, alteration of the components of the view and the opening up of new views, by removal of screening. Potential visual effects arising from the construction activities may include:
  - the introduction of stationary and moving plant (potentially including pilling rigs), cranes and other high level construction machinery;
  - the introduction of low level construction operations, including heavy plant movements, welfare facilities, laydown and storage areas;
  - construction vehicles entering and leaving the Site;
  - the progressive construction of tall structures; and
  - construction lighting.

#### **Operation**

- 10.6.7 The components of Proposed Development assessed are set out in **Chapter 4**: The Proposed Development (paragraph 4.2.1 4.2.5). The maximum building and fixed designed parameters set out in **Tables 4.1** and **4.2** (**Chapter 4**: The Proposed Development) have been taken into account in assessing impacts and the resultant classification of effects.
- 10.6.8 A series of photomontages have been prepared (**Figures 10.21 to 10.40** (ES Volume III)) which illustrate the likely visibility of the Proposed Development at two of the assessed viewpoints. These viewpoints were chosen in consultation with BDC, WLDC and NCC as a range of representative views of the Proposed Development and illustrate the following indicative scenarios:
  - large single gas turbine with one stack up to 45m high; and
  - up to five smaller gas turbines with individual stacks up to 45m high.
- 10.6.9 The visual effects of the Proposed Development at each representative viewpoint during these stages are described in detail in **Table 10-13**.

**Table 10-13: Effects on Visual Amenity** 

Viewpoint 1: Footpath Saundby FP4 to east of Saundby Park Farm					
Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from centre of Site (m)	Direction of View	
476469, 388372	Users of PRoW (Footpath)	40	4,380	South-east	



Viewpoint 1: Footpath Saundby FP4 to east of Saundby Park Farm				
Visual susceptibility to change	Value of View	Sensitivity of receptor		
High	Medium	Medium		

# Size/Scale, Duration & Reversibility of Effect

#### Construction

Long distance views of construction operations would be visible to the left of existing structures within WBB Power Station. Views of ground level construction operations would be limited due to distance and intervening vegetation, with construction of the tallest structures proposed visible in the context of existing large scale structures. The existing structures at WBA Power Station, distinct from WBB Power Station, would still dominate views from this location due to their scale and massing in relation to the construction operations associated with the Proposed Development.

Impacts would occur over a limited geographical extent, be temporary and reversible.

II
r adverse (not ficant)

# **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Medium	Medium

The completed development would extend the visual extent of the existing WBB Power Station. An increased level of built form including tall structures would be observed. Proposed structures are likely to be visible with upper parts of associated structures including stack(s) within the view.

A long distance view of structures similar in form, but of smaller mass and scale to existing structures, occurring over an extended, but still small geographical extent would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

**Viewpoint 2: Footpath Saundby FP6 to south of Beckingham, Marsh Lane** 



Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
479096, 388521	Users of PRoW & adjacent residential	6	2,610	South
Visual susc change	eptibility to	Value of Vie	ew	Sensitivity of receptor
High		Medium		Medium

#### Size/Scale, Duration & Reversibility of Effect

#### Construction

Construction operations would be visible to the left of WBB Power Station. Views of ground level construction operations would be limited due to distance, intervening landform and vegetation, with construction of the tallest structures proposed visible in the context of existing large scale structures. The existing WBA Power Station structures, distinct from WBB Power Station, would still dominate views from this location due to their scale and massing in relation to the construction operations for the Proposed Development.

A medium distance view of construction operations would be observed, occurring over a medium geographical extent and would be generally similar in form, but of smaller mass and scale to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small	
Classification of Effect	Minor adverse (not significant)	

#### **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Medium	Medium

The Proposed Development, once completed, would extend the visual extent of development within the West Burton Power Station site. An increased level of built form, including tall structures, would be visible in the left of the existing scene. Proposed structures are likely to be partially visible, but limited to the tallest structures (i.e. the stack(s), which are likely to be clearly identifiable within the view). These would be seen in the context of the larger, taller existing development at WBA and WBB Power Stations.

A long distance view of structures similar in form, but of smaller mass and scale to existing structures, occurring over an extended, but still small in geographical extent would be observed. The impact would be long-term and reversible.



Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)



#### Viewpoint 3: Whittons Mill, Bridge St, Gainsborough

Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
481450, 389569	Users of riverside footpath, residents of Whitton's Mill	8	3,620	South-west
Visual susceptibility to change		Value of View		Sensitivity of receptor
High		Medium		Medium

#### Size/Scale, Duration & Reversibility of Effect

#### Construction

Construction operations would be partially visible in front of the existing structures within WBB Power Station, but substantially screened by the large structures within the Kerry Ingredients site and intervening vegetation. Where visible, the construction of the tallest proposed structures would be visible in the context of existing large scale structures.

A long distance view of construction operations would be observed, occurring over a small geographical area and generally similar in form, but of smaller mass and scale to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small	
Significance of Effect	Minor adverse (not significant)	

#### **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Medium	Medium

Once constructed, it is predicted that the intervening screening provided by large structures within the Kerry Ingredients site and intervening vegetation would result in the Proposed Development being barely visible from the Riverside Walk and as such, easily missed by the casual observer.

A long distance view of structures similar in form, but of smaller mass and scale to existing structures, occurring over an extended, but still small geographical area would be observed. The impact would be long-term and reversible.



Medium

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

Grid Reference	Receptor Type	Elevatio n (m AOD)	Approximate Distance from Site (m)	Direction of View

Viewpoint 4: Junction of Footpaths Bole FP3B and FP4, Bole

Visual suscep	tibility to change	Value of V	iew	Sensitivity of receptor
479147, 386946	Users of PRoW & residents at Bole	14	1,350	South-east

Medium

# Size/Scale, Duration & Reversibility of Effect

#### Construction

High

Construction operations would be partially visible to the left of existing structures within WBB Power Station. Views of ground level construction operations would be limited due to intervening landform and vegetation, with construction of the tallest structures proposed visible in the context of existing large scale structures and against the sky. The existing WBB Power Station structures would still dominate views from this location due to their scale and massing in relation to the proposed construction operations.

A medium distance view of construction operations would be observed, occurring over a medium geographical area, with structures generally similar in form, but of smaller mass and scale to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Medium	
Classification of Effect	Moderate adverse (significant)	

#### **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Medium	Medium



The Proposed Development, once completed, would be prominent within the view, with taller structures, including stack(s), visible against the sky, and extending the proportion of the view characterised by large-scale built form.

A medium distance view of the Proposed Development, occurring over a medium geographical extent, with structures generally similar in form, but of smaller mass and scale to existing structures. The impact would be long-term and reversible.

Magnitude of Impact	Medium
Classification of Effect	Moderate adverse (significant)

### Viewpoint 5: Junction of Footpaths Lea 41/1, Lea 41/2 and Gain 33/1

Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
481619, 387353	Users of PRoW	5	1,780	South-west
Visual suscep	tibility to change	Value of View		Sensitivity of receptor
High		Medium		Medium

#### Size/Scale, Duration & Reversibility of Effect

#### Construction

Construction operations would be partially visible in front of the existing WBB Power Station. Views of ground level construction operations would be limited due to intervening vegetation with construction of the tallest structures proposed visible in the context of existing large scale structures within the West Burton Power Station site.

A medium distance view of construction operations would be observed, occurring over a medium geographical extent with structures generally similar in form, but of smaller mass and scale to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small
Significance of Effect	Minor adverse (not significant)



# Operation Visual susceptibility to change Value of View Sensitivity of receptor High Medium Medium

Completed structures would be visually assimilated into WBA and WBB Power Stations. An observable increase in the level of tall structures is likely, with taller structures including stack(s) seen against WBB and WBA Power Stations behind.

A medium distance view of structures similar in form, but of smaller mass and scale to existing structures, occurring over an extended, but still small geographical extent would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

Viewpoint 6:	Green Lane, Lea			
Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
478619, 385867	Residential receptors at Lea	17	2,340	West
Visual susce	ptibility to change	Value of Vi	ew	Sensitivity of receptor
High M		Medium		Medium
Size/Scale, D	uration & Reversibi	lity of Effect		
Construction	ı			



Construction operations would be partially visible in front of the existing structures within the West Burton Power Station site. Views of ground level construction operations would be limited, due to intervening vegetation with construction of taller structures proposed visible against existing large scale structures within the West Burton Power Station site behind.

A medium distance view of construction operations would be observed, occurring over a small geographical area, with structures generally similar in form, but of smaller mass and scale to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

#### **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Medium	Medium

Completed structures would be visually assimilated into the existing WBB and WBA Power Stations. An observable increased geographical extent would occur, with taller structures including stack(s) seen against WBA and WBB Power Stations immediately behind.

A medium distance view of structures similar in form, but of smaller mass and scale to existing structures, occurring over an extended, but still small geographical area would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

#### **Viewpoint 7: Footpath West Burton FP10**

Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
478619, 385867	Users of PRoW & residents at West Burton	13	1,680	East
Visual suscept	ibility to change	Value of Vie	ew	Sensitivity of receptor



High	Low	Medium

#### Size/Scale, Duration & Reversibility of Effect

#### Construction

Views of construction operations would be substantially obscured by intervening landform, vegetation and structures within WBB Power Station. Where visible, construction of the tallest structures within the Proposed Development would be viewed in the context of existing large scale structures at WBB Power Station, to the forefront of the Site.

A medium distance view of construction operations would occur over a negligible geographical area and would be generally similar in form, but of smaller mass and scale, to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small
Significance of Effect	Minor adverse (not significant)

#### **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Low	Medium

Completed structures would extend the visibility of large power related structures, but these would be viewed in the context of WBB Power Station. A visible increase in the level of tall structures is likely to be noticeable, with low level structures likely to be screened by hedgerows in the middle distance.

A medium distance view of structures similar in form, but of smaller mass and scale to existing structures, occurring over an extended, but still small, geographical area would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

# Viewpoint 8: B1241 at Knaith Park

Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
483828, 385875	Users of B1241 at Knaith Park	25	3,575	West



Visual susceptibility to change	Value of View	Sensitivity of receptor
Medium	Medium	Medium

#### Size/Scale, Duration & Reversibility of Effect

#### Construction

Views of construction operations would be substantially limited by distance and intervening vegetation. Construction of the tallest structures proposed would be visible in the context of existing large scale structures within the West Burton Power Station site.

A long distance view of construction operations would be observed, occurring over a small geographical extent and would be generally similar in form, but of smaller mass and scale, to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

#### **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
Medium	Medium	Medium

Completed structures would marginally increase the visual extent of built development within the West Burton Power Station site, but they would predominantly be visually assimilated into it. Proposed structures are likely to be partially visible, but seen in the context of the taller adjacent WBB Power Station.

A long distance view of structures similar in form, but of smaller mass and scale, to existing structures, occurring over a small geographical area would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)



# Viewpoint 9: Junction of PRoW at Footpath Sturton-le-Steeple FP17, Restricted Byway Sturton-le-Steeple RB32, Common Lane

Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
479127, 384535	Users of PRoW & residents at Sturton le Steeple	10	2,010	North-east
Visual susceptibility to change		Value of View		Sensitivity of receptor
High Low		Low		Low

#### Size/Scale, Duration & Reversibility of Effect

#### Construction

Medium distance views of a large proportion of construction operations would be restricted by the existing structures of WBB Power Station. The movement of taller elements such as cranes and the construction of stacks may be partially visible.

A medium distance view of construction operations would be partially observed, occurring over a negligible geographical area, with structures generally similar in form, but of smaller mass and scale to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small
	Negligible adverse (not significant)

#### **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Low	Low



Completed structures would be substantially screened by the existing development within the foreground of the scene (WBB Power Station) and vegetation along field boundaries and the periphery of the West Burton Power Station site. The upper part of a new stack(s) may be visible above the WBB Power Station structures, but it is anticipated that these could be easily missed by the casual observer.

A short distance view of structures similar in form, but of smaller mass and scale to existing structures, occurring within a medium geographical area would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small
Classification of Effect	Negligible adverse (not significant)

# Viewpoint 10: Junction of Bridleway Sturton-le-Steeple BW13,footpath Sturton-le-Steeple FP40 and Sturton-le-Steeple FP39

Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
480148, 384852	Users of PRoW	17	1,340	North
Visual susceptibility to change		Value of View		Sensitivity of receptor
High	Low			Medium

#### Size/Scale, Duration & Reversibility of Effect

#### Construction

Views of construction operations would be limited by intervening vegetation and built form at WBB Power Station. Construction of the tallest structures proposed would be visible behind and in conjunction with WBB Power Station.

A short distance view of construction operations would be partially observed, occurring over a small geographical area, with structures generally similar in form, but of smaller mass and scale compared to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)
Operation	



Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Low	Medium

Completed structures would increase observable built form and would be visually assimilated into WBB Power Station. Lower structures are likely to be partially screened by WBB Power Station and intervening vegetation, with an increase in the level of tall structures including stacks clearly identifiable and seen in conjunction with those at WBB Power Station.

A short distance view of structures similar in form, but of smaller mass and scale compared to existing structures, occurring over a medium geographical area would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

# Viewpoint 11: Junction of A165/Knaith Hill, Knaith

Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
480148, 384852	Users of A156 & residents	17	3,020	North-west
Visual susceptibility to change		Value of View		Sensitivity of receptor
High/medium		Low		Medium

#### Size/Scale, Duration & Reversibility of Effect

#### Construction

Views of construction operations would be limited by intervening vegetation and distance. Construction of taller structures proposed would be visible in the context of existing large scale structures at WBB and WBA Power Stations.

A medium distance view of construction operations would be observed, occurring within a small geographical extent and generally similar in form, but smaller in mass and scale, compared to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small
Significance of Effect	Minor adverse (not significant)
Operation	



Visual susceptibility to change	Value of View	Sensitivity of receptor
High/medium	Low	Medium

Completed development would extend the visual presence of the West Burton Power Station site through an observable increase in the level of tall structures, although low level structures are likely to be partially screened by intervening vegetation.

A long distance view of structures similar in form, but of smaller mass and scale, compared to existing structures, occurring within a small geographical extent would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

# Viewpoint 12: Bridleway Sturton-le-Steeple BW7

Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
481604, 383007	Users of PRoW/Trent Valley Way	6	3,450	North-west
Visual susceptibility to change		Value of View		Sensitivity of receptor
High		Medium		Medium

# Size/Scale, Duration & Reversibility of Effect

#### Construction

Views of high level construction operations would be possible; with low level activities screened by intervening vegetation along field boundaries and the periphery of the West Burton Power Station site and built form at WBB Power Station. The construction of taller structures would be visible in conjunction with large scale structures at WBB and WBA Power Station.

A long distance view of construction operations would be observed, occurring over a small geographical extent and generally similar in form, but of smaller mass and scale, to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

Construction



Operation		
Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Medium	Medium

The operational Proposed Development would be partially visible in the far distance and in the context of much larger developments such as WBA and WBB Power Stations. Views would continue to be dominated by WBA Power Station and visually assimilated into WBB Power Station, extending its visual presence. Lower structures would be partially screened by intervening vegetation with an observable increase in the level of tall structures. Proposed structures are likely to be partially visible with taller structures including stack(s) clearly identifiable.

A short distance view of structures similar in form, but of smaller mass and scale compared to existing structures, occurring over an extended, but still small geographical extent would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (significant)

# Viewpoint 13: Byway open to all traffic North Leverton with Habblesthorpe BOAT15

Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
479657, 381326	Users of PRoW/Trent Valley Way	9	4,900	North
Visual susceptibility to change		Value of View		Sensitivity of receptor
High		Low		Medium
Size/Scale, Duration & Reversibility of Effect				



Views of construction operations would be limited by intervening vegetation and built form at WBB Power Station. The construction of taller structures proposed would be visible in conjunction with large scale structures of WBB Power Station and pylons in the foreground of the view.

A long distance view of construction operations would be observed, occurring over a small geographical extent and generally similar in form, but of smaller mass and scale to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small
Significance of Effect	Minor adverse (not significant)

#### **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Low	Medium

The completed development would be visually assimilated into the existing WBB Power Station increasing its apparent visual extent. Lower structures are likely to be screened by intervening vegetation but taller structures (such as the stack(s)) are likely to be partially visible behind and in conjunction with WBB Power Station.

A long distance view of structures similar in form, but of smaller mass and scale compared to existing structures, occurring over a small geographical extent would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small	
Classification of Effect	Minor adverse (not significant)	

#### **Viewpoint 14: Gate Burton/Marton Approximate** Distance Direction of Elevation Receptor **Grid Reference** from Site Type (m AOD) View (m) 483848, Residents 12 5,345 North-west 382266 Sensitivity of Visual susceptibility to change Value of View receptor High Low Medium



#### Size/Scale, Duration & Reversibility of Effect

#### Construction

Views of construction operations would be limited by intervening vegetation and built form at WBB Power Station. The construction of taller structures proposed would be visible in conjunction with large scale structures of WBB Power Station.

A long distance view of construction operations would be observed, occurring over a small geographical extent and generally similar in form, but of smaller mass and scale to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

#### **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Low	Medium

The completed development would be visually assimilated into the existing WBB Power Station increasing its apparent visual extent. Lower structures are likely to be screened by intervening vegetation but taller structures (such as the stack(s)) are likely to be partially visible behind and in conjunction with WBB Power Station.

A long distance view of structures similar in form, but of smaller mass and scale compared to existing structures, occurring over a small geographical extent would be observed. The impact would be long-term and reversible.

Magnitude of Impact	Small
Classification of Effect	Minor adverse (not significant)

#### **Viewpoint 15: Uphill Gainsborough**

Grid Reference	Receptor Type	Elevation (m AOD)	Approximate Distance from Site (m)	Direction of View
482019, 389273	Residents, Users of the park	28	3.583	South-east



Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Low	Medium

#### Size/Scale, Duration & Reversibility of Effect

#### Construction

Views of construction operations would be limited by intervening vegetation in the foreground. The construction of taller structures proposed would be visible in conjunction with large scale structures of WBB Power Station.

A long distance view of construction operations would be observed, occurring over a small geographical extent and generally similar in form, but of smaller mass and scale to existing structures. The impact would be temporary and reversible.

Magnitude of Impact	Small	
Significance of Effect	Minor adverse (not significant)	

#### **Operation**

Visual susceptibility to change	Value of View	Sensitivity of receptor
High	Low	Medium

Structures within the completed development are likely to be partially screened by intervening vegetation in the foreground. The elevated position means that the tops of taller structures (such as the stack(s)) are likely to be partially visible against the sky with lower elements below the horizon. The Proposed Development, once completed, would be visually assimilated into the existing WBB Power Station, increasing its apparent visual extent.

A long distance view of structures similar in form, but of smaller mass and scale compared to existing structures, occurring over a small geographical extent, would be observed. The impact would be long-term and reversible.

Magnitude of Impact		Small	
	Classification of Effect	Minor adverse (not significant)	

10.6.10 **Table 10-14** provides a summary of the effects on visual amenity during construction and operation.



**Table 10-14: Summary of Visual Amenity Effects** 

Vioumoint	Sensitivity	Construction		Оре	eration
Viewpoint reference	of Receptor	Magnitude of impact	Classificatio n of effect	Magnitude of impact	Classificatio n of effect
1	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
2	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
3	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
4	Medium	Medium	Moderate adverse (significant)	Medium	Moderate adverse (significant)
5	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
6	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
7	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
8	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
9	Low	Small	Negligible adverse (not significant)	Small	Negligible adverse (not significant)
10	Medium	Small	Minor	Small	Minor



Vieweeint	Sensitivity	Construction		Оре	eration
reference	viewpoint reference of Receptor	Magnitude of impact	Classificatio n of effect	Magnitude of impact	Classificatio n of effect
			adverse (not significant)		adverse (not significant)
11	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
12	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
13	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
14	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)
15	Medium	Small	Minor adverse (not significant)	Small	Minor adverse (not significant)

# Lighting

- 10.6.11 The effects of lighting have been reviewed as part of the landscape and visual amenity assessment, to determine its effects on the landscape character of the Site and the surrounding area, during operation of the Proposed Development. The visual impact of lighting as described in the Lighting Strategy (Application Document Ref. No. 7.4) has been considered on the relevant viewpoints around the Proposed Development.
- 10.6.12 Lighting within the Proposed Development has been assessed within the context of lighting for the existing WBB and WBA Power Stations. Lighting for the West Burton Power Station site generally adopts a similar lighting strategy to that outlined below whereby critical lighting to maintain safety of operations and aviation warning lighting is provided through the night. Other activities requiring lighting at night (e.g. the coal stockyard area, where fuel for WBA Power Station needs to be available on a 24 hour basis) are also present.



- 10.6.13 The Lighting Strategy for the Proposed Development (**Application Document Ref. 7.4**) applies a 'reduced light site' design philosophy as the Proposed Power Plant site will only be intermittently in operation and remotely operated. Permanent lighting provided would be for general pedestrian movement, safety and security purposes only. Any lighting that may be required for maintenance purposes will be produced by temporary lighting sets specific to the required task. Lighting shall be further reduced to only critical lighting from 23.00 to 05.00 hrs to reduce the impact of impact of obtrusive lighting on the local environment.
- 10.6.14 Due to the screening effect of intervening vegetation and the restrictions placed on lighting by the Lighting Strategy (refer to **Application Document Ref. 7.4**) it is anticipated that overall, the effects of night-time lighting at sensitive receptors resulting from the Proposed Development will not significantly increase above current baseline levels from WBA and WBB Power Stations.

### Decommissioning

- 10.6.15 Changes in views may give rise to adverse or beneficial visual effects through obstruction in views, alteration of the components of the view and the opening up of new views by removal of screening. Potential visual effects arising during the decommissioning process may include:
  - the introduction of stationary and moving cranes and other high level machinery;
  - the introduction of low level operations including heavy plant movements, welfare facilities, and storage areas;
  - vehicles entering and leaving the Site; and
  - the progressive deconstruction of tall structures.
- 10.6.16 The landscape and visual effects during decommissioning would be similar to those described for construction.
- 10.6.17 Once the decommissioning process has been complete, it is anticipated that the resulting conditions would be similar to those currently existing in the baseline descriptions.

# 10.7 Mitigation and Enhancement Measures

10.7.1 Significant adverse visual impacts were identified at a single viewpoint only, (Viewpoint 4 Users of PRoW Bole FP3B / Bole FP4 / residents at Bole) during construction, operation and decommissioning. The opportunity for mitigation of the visual effects of the Proposed Development is limited due to the size and scale of the Proposed Development. As shown in the assessment, the effects on visual amenity largely relate to the height of the tallest structures, as such it is considered that the addition of landscape features such as trees and woodland would not be effective in reducing the effects on visual amenity.



- 10.7.2 Viewpoint 4 (Users of PRoW Bole FP3B / Bole FP4 / residents at Bole) is located to the north-west of the Proposed Development. As such, trees proposed as part of the Landscape and Biodiversity Management and Enhancement Plan (Application Document Ref. 7.5) are not considered to reduce visual effects observed at this location, but are proposed in part to reduce visual impacts for receptors located nearby. Due to the height of structures comprising the Proposed Development and the location of this viewpoint, it is considered that the addition of landscape features within the Site would not affect the significance of visual effects resulting from the Proposed Development. An integrated design approach that considers massing and the disposition of taller structures within the Site to minimise potential wall effects is considered to have potential to reduce visual impacts of the Proposed Development.
- 10.7.3 As stated in **Section 10.2.6**, Section 2.65 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."

(paragraph 2.6.5).

10.7.4 The final finishes of the buildings and exact sizes of component parts would not be finalised until the final detailed design is complete. However, given the nature of the Proposed Development, it is anticipated that it would have a close visual relationship with existing structures on the West Burton Power Station site. Implementation of detailed design parameters is proposed to be secured by a Requirement of the draft DCO (Application Document Ref 2.1). Further details are presented in the Planning Statement (Application Document Ref 7.1).

#### 10.8 Limitations or Difficulties

- 10.8.1 The parameters outlined in **Chapter 4**: Proposed Development do not have any material effect on the impact assessment presented in this chapter.
- 10.8.2 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 Site; rather they provide a representative sample for the purpose of the landscape and visual amenity assessment, using viewpoints agreed with key consultees.

# 10.9 Summary of Likely Residual Significant Effects

- 10.9.1 The LVIA has been undertaken within technical parameters defined by **Chapter 4**: The Proposed Development.
- 10.9.2 A single significant adverse effect has been identified as resulting from the Proposed Development (Viewpoint 4, users of PRoW Bole FP3B / Bole FP4 / residents at Bole) during construction, operation and decommissioning. Due to



the scale of the Proposed Development and open and elevated nature of the view, the Proposed Development would increase the proportion of large scale power related development within the scene. Since it is considered that mitigation measures would not be effective in reducing this visibility, none are proposed. Visual effects resulting from the Proposed Development are seen in the context of WBB and WBA Power Stations to the right of the Site. As such, these significant adverse effects would remain.

10.9.3 Likely significant residual effects are as summarised in **Table 10-15**.

Table 10-15: Likely residual significant effects summary table

<b>Predicted Impact</b>	Duration	Mitigation	Residual Effect
Moderate adverse visual impact (significant) at Viewpoint 4	Long-term	None	Moderate adverse visual impact (significant)

#### 10.10 References

- Ref 10-1 Council of Europe, Cultural Heritage, Landscape and Spatial Planning Division and Directorate of Culture and Cultural and Natural (2008) European Landscape Convention and Reference Documents.
- Ref 10-2 Department for Energy and Climate Change (2011b) Overarching National Policy Statement for Energy EN-1.
- Ref 10-3 Department for Energy and Climate Change (2011b) *National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2).*
- Ref 10-4 Ministry of Housing, Communities and Local Government (2019) National Planning Policy Framework.
- Ref 10-5 The Bassetlaw District Council (2011b) Core Strategy and Development Management Policies Development Plan Document for Bassetlaw.
- Ref 10-6 The Bassetlaw District Council (2011) *Draft Local Plan*
- Ref 10-7 Sturton Ward Planning Group (2015) The Sturton Ward Neighbourhood Plan 2015-2030.
- Ref 10-8 Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment Third Edition.
- Ref 10-9 Natural England (2014) An Approach to Landscape Character Assessment.
- Ref 10-10 Landscape Institute (2011) Advice Note 01/11 Photography and photomontage in landscape and visual impact assessment.



- Ref 10-11 Natural England (2013) NCA Profile 48: Trent and Belvoir Vales (NE429).
- Ref 10-12 Natural England (2013) NCA Profile 45: Northern Lincolnshire Edge with Coversands (NE554).
- Ref 10-13 FPCR (2009) Bassetlaw Landscape Character Assessment.
- Ref 10-14 Environmental Resources Management (1999) West Lindsey Landscape Character Assessment.
- Ref 10-15 PB Power (2005) West Burton CCGT Power Station Environmental Statement.