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## 7. Traffic and Transport

### 7.1 Introduction

7.1.1 This chapter of the Environmental Statement (ES) addresses the potential effects of the construction, operation (including maintenance) and decommissioning of the proposed WBC gas fired generating station on the site of the West Burton Power Station (the Proposed Development) on traffic and transport. The assessment considers:

- the present-day and future baseline conditions during construction and at opening;
- the effects of construction traffic on the local road network as a result of the Proposed Development;
- the effects of operational traffic on the local road network as a result of the Proposed Development; and
- the potential effects of the eventual decommissioning of the Proposed Development.

7.1.2 The assessment of cumulative traffic and transport effects associated with the Proposed Development and other committed developments in the vicinity are described in **Appendix 7A: Transport Assessment (ES Volume II)** and in **Chapter 16: Cumulative and Combined Effects**.

### 7.2 Legislation, Planning Policy and Guidance

#### Planning Policy Context

7.2.1 This section outlines the planning policy of relevance to traffic and transport. An overview of all relevant planning policy is provided in **Chapter 5: Legislative Context and Planning Policy Framework**, which also sets out the primacy of National Policy Statements (NPS) in decision-making on nationally significant infrastructure projects (NSIPs), such as the Proposed Development.

#### *National Planning Policy*

7.2.2 The National Policy Statement for Energy (NPS EN-1) (Ref 7-1) was published in 2011. Section 5.13 of EN-1 outlines the planning policy for traffic and transport, including guidance on the carrying out of the relevant parts of the Environmental Impact Assessment (EIA) which have been taken into account in producing this assessment.

7.2.3 Section 2.2 of EN-2 (Ref 7-2) outlines the planning policy for traffic and transport, specifically in respect of fossil fuel generating stations such as the Proposed Development.

7.2.4 **Table 7-1** provides a summary of relevant NPS advice regarding traffic and transport, including signposting to where matters are considered in this chapter.

**Table 7-1: Summary of relevant NPS advice regarding traffic and transport**

Summary of NPS	Consideration within the Chapter
<b>NPS EN-1</b>	
Paragraph 5.13.3 states: <i>“If a project is likely to have significant transport implications, the applicant’s ES should include a transport assessment, using the NATA/WebTAG139 methodology stipulated in Department for Transport guidance, or any successor to such methodology. Applicants should consult the Highways Agency and Highways Authorities as appropriate on the assessment and mitigation.”</i>	See <b>Appendix 7A</b> : Transport Assessment (ES Volume II)
Paragraph 5.13.4 states: <i>“Where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts.”</i>	See <b>Appendix 7A</b> : Transport Assessment (ES Volume II)
Paragraph 5.13.5 states: <i>“If additional transport infrastructure is proposed, applicants should discuss with network providers the possibility of co-funding by Government for any third-party benefits. Guidance has been issued in England which explains the circumstances where this may be possible, although the Government cannot guarantee in advance that funding will be available for any given uncommitted scheme at any specified time.”</i>	Not relevant
Paragraph 5.13.6 outlines the requirement to provide mitigation measures for any transport impacts associated with the project, including during the construction phase.	See <b>Appendix 7A</b> : Transport Assessment (ES Volume II)

7.2.5 The current National Planning Policy Framework (NPPF) (Ref 7-3) was published in February 2019 and sets out the Government’s current planning policies.

7.2.6 Section 9 of the NPPF, Promoting Sustainable Transport, outlines the important role that the planning system has in enabling sustainable development stating in paragraph 103:

*“Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health.”*

7.2.7 In determining planning applications, paragraph 109 states that:

*“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”*

7.2.8 Paragraph 111 states that all developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

### **Local Development Plan Policy**

7.2.9 The Local Transport Plan for Nottinghamshire (Ref 7-4) sets out a number of objectives which have been developed from previous plans and sets out how Nottinghamshire County Council (NCC) will manage, maintain and improve the transport system for the benefit of people living and travelling in the county. The objectives of the LTP in relation to traffic and transport can be summarised as:

- improving accessibility;
- improving safety;
- improving quality of life;
- reduce congestion;
- improving air quality;
- supporting economic regeneration; and
- making best use of the existing infrastructure.

7.2.10 The Bassetlaw District Core Strategy (Ref 7-5) includes requirements for development proposals in the area with regards to sustainable transport, in particular:

- to minimise the need to travel by private car;
- to provide linkages, or develop new, footways, cycle paths and bridleways giving access, to key local facilities (especially town centres);
- to provide appropriate facilities to support access to high quality public transport;
- to be consistent with, and contribute to the implementation of, the Nottinghamshire Local Transport Plan (see above); and
- the relevant parking standards to be complied with in respect of different types of proposals.

7.2.11 The above policies have been taken into account in this assessment.

7.2.12 Bassetlaw District Council (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 7-6) in January 2019. The draft Local Plan makes specific reference to the need for development to provide ease of movement and access for all users and have a transport user hierarchy applied which considers the most vulnerable users first (Policy 22: Design). Policy 8: Rural Bassetlaw notes that development generating economic growth must also be sensitive to its surroundings, not have unacceptable impacts on the environment and should exploit opportunities to improve access to sustainable modes of transport, where possible.

### Other Guidance

#### *Planning Practice Guidance*

7.2.13 Planning Practice titled 'Travel plans, transport assessments and statements in decision-taking' (Ref 7-7) has been used to inform this assessment.

#### *Guidelines for the Environmental Assessment of Road Traffic*

7.2.14 The Guidelines for the Environmental Assessment of Road Traffic (Ref 7-8) provide a basis for a comprehensive and consistent approach to the appraisal of traffic and transport impacts. Extensive reference has been made to these guidelines throughout the preparation of this chapter.

#### *Department for Transport Circular 02/2013: The Strategic Road Network and the Delivery of Sustainable Development*

7.2.15 Circular 02/2013 (Ref 7-9) sets out the way in which Highways England will engage with the development industry to deliver sustainable development and, thus, economic growth, whilst safeguarding the primary function and purpose of the strategic road network. This document has been used to inform the assessment.

#### *The Strategic Road Network: Planning for the Future*

7.2.16 The Strategic Road Network: Planning for the Future 'A Guide to Working with Highways England on Planning Matters' (Ref 7-10) offers advice and information regarding the information it expects to see within a planning proposal. This document has been used to inform the **Appendix 7A: Transport Assessment** (ES Volume II).

## 7.3 Assessment Methodology and Significance Criteria

### Overview

7.3.1 The environmental impact of the traffic predicted to be generated by the Proposed Development has been assessed with reference to the Guidelines for the Environmental Assessment of Road Traffic (Ref 7-8) and other guidance as detailed in **Section 7.2**. In accordance with guidance, issues including severance,

driver delay, pedestrian amenity and delay, accidents and safety associated with the Proposed Development have been investigated and are reported herein.

- 7.3.2 Any likely significant environmental effects relating to noise and vibration and emissions to air, generated by traffic associated with the Proposed Development are considered in the relevant chapters of this ES (i.e. **Chapter 6: Air Quality and Chapter 8: Noise and Vibration**).

### Extent of Study Area

- 7.3.3 The study area for this assessment has been defined by reference to the Guidelines for the Environmental Assessment of Road Traffic (Ref 7-8). These guidelines set out two rules as follows:

- Rule 1: include highway links where traffic flows are predicted to increase by more than 30% (or where the number of Heavy Goods Vehicles (HGVs) is predicted to increase by more than 30%); and
- Rule 2: include any other specifically sensitive areas where the traffic flow (or HGV component) are predicted to increase by more than 10%.

- 7.3.4 The road links that have been considered in the assessment of traffic effects, which is set out in **Section 7.6**, to determine that these rules are satisfied are:

- C2 Gainsborough Road, south of the West Burton Power Station site main entrance;
- C2 Sturton Road, north of the West Burton Power Station site main entrance;
- A620 Gainsborough Road, west of Sturton Road roundabout; and
- A620 Saundby Road, north of Sturton Road roundabout.

### Sensitivity of Receptors

- 7.3.5 The sensitivity of a road, or the immediate area through which it passes, can be defined by the type of user groups who may use them. Vulnerable users include elderly residents and children. It is also necessary to consider footpath and cycle route networks that cross the roads within the study area.

- 7.3.6 A desktop exercise has been undertaken to classify the baseline sensitivity of the existing routes within the study area. The classification of the link sensitivity is based on professional judgement. For example, if the route passes a school, care home or similar it would have a higher sensitivity due to the presence of vulnerable users. Similarly, if the route went through the middle of a town or village, it would have a higher sensitivity than if there was limited frontage development in the study corridor. **Table 7-2** identifies the links, the assigned sensitivity rating and the justification.

**Table 7-2: Sensitivity of receptors**

Link no.	Link Description	Link Sensitivity	Rationale
1	Gainsborough Road (south of West Burton Power Station main entrance)	Medium	The two-lane single carriageway Gainsborough Road between the West Burton Power Station main site entrance and Station Road passes through open country. A pedestrian footway is provided along the eastern side of the carriageway. Very little frontage development. Continuing south, the road passes through the villages of Sturton-le-Steeple, North and South Leverton, Treswell and East Drayton to the A57.
2	Sturton Road (north of West Burton Power Station main site entrance)	Low	The two-lane single carriageway Sturton Road between the West Burton Power Station main entrance and the A620 roundabout passes through open country. There are no pedestrian facilities along the road, however, a public footpath crosses Sturton Road to the north of Middle Farm.
3	A620 Gainsborough Road (west of Sturton Road roundabout)	Medium	The two-lane single carriageway A620 between Sturton Road roundabout and Retford passes through largely open country. However, the A620 passes through the village of Clarborough with residential development fronting onto the A620. Pedestrian facilities are provided at certain points along the route.
4	A620 Saundby Road (north of Sturton Road roundabout)	Low	The two-lane single carriageway A620 between the Sturton Road roundabout and the A631 passes through open country. A pedestrian footway is provided along the eastern side of the carriageway. Very little frontage development is present along the route. A public footpath crosses the A620 at the junction with Ramper Road.

### Assessment Methods

7.3.7 The assessment methodology adopted in this chapter, as contained in the Guidelines for the Environmental Assessment of Road Traffic (Ref 7-8), is recognised as the industry standard methodology for the assessment of traffic and highway impacts. The guidelines outline the issues and the respective changes in volume and composition of traffic regarded as necessary before each issue results in traffic and transport impacts.

### 7.3.8 The following assessment scenarios have been assessed:

- Construction phase – although, subject to the necessary consents being granted and an investment decision being made, construction of the Proposed Development could potentially start as early as Quarter 3 (Q3) 2020, given background traffic growth, a worst-case for assessment purposes would be a scenario where construction commences later in the programme. 2027 has therefore been assumed for this chapter, with a peak of construction in 2029;
- Opening Year - for the purposes of assessment in this chapter, 2030; and
- Decommissioning - it is envisaged that the Proposed Development would have an operational life of up to circa 40 years. Taking into account the assessed opening year, decommissioning activities within this chapter are assumed to commence after 2070.

### 7.3.9 The following environmental effects are susceptible to changes as a result of the Proposed Development.

- **Severance:** Severance occurs in a community when a major artery separates people from places and other people. Severance occurs from difficulty of crossing a road or where the road itself creates a physical barrier. Severance can be caused to pedestrians or motorists. The Guidelines for the Environmental Assessment of Road Traffic (Ref 7-8) suggest that changes in total traffic flow of 30%, 60% and 90% result in slight, moderate and substantial changes in severance respectively.
- **Pedestrian Amenity:** Pedestrian amenity is broadly defined as the relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition, pavement width and separation between vehicles and pedestrians. The impact manifests itself in fear and intimidation, exposure to noise and vehicle emissions. The Guidelines for the Environmental Assessment of Road Traffic (Ref 7-8) suggest that a doubling or halving of total traffic flow or the HGV composition could lead to perceptible negative or positive impacts upon pedestrian amenity.
- **Fear and Intimidation:** The volume of traffic and its HGV composition are the factors that contribute to fear and intimidation. In the absence of thresholds set out in the Guidelines for the Environmental Assessment of Road Traffic, this ES considers that changes in total traffic flow of 30%, 60% and 90% are considered to result in slight, moderate or substantial impacts.
- **Highway Safety:** Highway safety is assessed by the frequency and severity of injury accidents that are attended by the police and recorded in official accident statistics. Intensification of use or changes in the composition of traffic has the potential to have an effect on collision rates. The examination of recent collision statistics on routes within the study area will highlight any hotspots that need further examination.



- **Driver Delay:** The use of industry standard junction capacity modelling programs provides a methodology to quantify junction delay. Driver delay is only likely to be significant where the existing study area highway network is at or close to capacity.

### Significance Criteria

7.3.10 Using the information set out above, the magnitude of traffic impacts is defined in **Table 7.3**.

**Table 7-3: Traffic and transport assessment framework – magnitude of impacts**

Type of Impact	Magnitude of Impact			
	Very Low	Low	Medium	High
Severance	Change in total traffic flow of <30%	Change in total traffic flow of 30% to 60%	Change in total traffic flow of 60% to 90%	Change in total traffic flow of >90%
Pedestrian amenity	Change in traffic flow (or HGV component) < 50%	Change in traffic flow (or HGV component) of 51% to 100%	Change in traffic flow (or HGV component) of 101% to 150%	Change in traffic flow (or HGV component) of > 151%
Fear and intimidation	Change in total traffic flow of <30%	Change in total traffic flow of 30% to 60%	Change in total traffic flow of 60% to 90%	Change in total traffic flow of >90%
Highway safety	Magnitude of impact derived using professional judgment informed by the frequency and severity of collisions within the study area and the forecast increase in traffic.			
Driver delay	Magnitude of impact derived using professional judgment informed by the increase in vehicle delay and whether a junction is at, or close to capacity.			

7.3.11 By combining the receptor sensitivity with the magnitude of impact using the assessment matrix shown in **Table 7-4**, traffic effects are classified as negligible, minor, moderate or major (adverse or beneficial).

**Table 7-4: Classification of effects**

Type of Impact	Sensitivity/Importance of Receptor			
	High	Medium	Low	Very Low
High	Major	Major	Moderate	Minor

Type of Impact	Sensitivity/Importance of Receptor			
	High	Medium	Low	Very Low
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Very Low	Minor	Negligible	Negligible	Negligible

7.3.12 Only moderate and major effects are considered to be significant.

### Sources of Information/Data

7.3.13 As set out in detail in **Appendix 7A: Transport Assessment (ES Volume II)**, a series of 7-day automatic traffic counts (ATCs) were undertaken between Thursday 8 and Wednesday 14 June 2017 to provide a baseline for comparison on the roads. These counts are considered to be representative for the Application, as they are less than three years old and conform with published guidance.

7.3.14 In addition to the ATC counts, it was agreed with NCC that the impact of the Proposed Development would be examined at the following junctions on the local highway network for the overall network morning (AM) and evening (PM) peak hours:

- A631/A620/Station Road Roundabout; and
- A620/Saundby Road/Sturton Road Roundabout.

7.3.15 These junction surveys were undertaken on Wednesday 7 June 2017 between the hours of 07:00 and 19:00 hours. These counts are considered to be representative for the Application as they are less than three years old and conform with published guidance.

### Consultation

7.3.16 The consultation undertaken with statutory consultees to inform this chapter, including a summary of comments raised via the formal EIA Scoping Opinion (**Appendix 1B** in ES Volume II) and in response to the statutory consultation is summarised in **Table 7-5**.

**Table 7-5: Consultation summary table**

Consultee or organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
Nottinghamshire County Council	May 2017 (e-mail)	NCC agreed to the traffic count locations proposed by AECOM.	Traffic counts were commissioned by AECOM in June 2017 (refer to <b>Section 7.3</b> ).
Secretary of State	June 2017 (Scoping Opinion)	<p>A full Transport Assessment is required to be undertaken.</p> <p>The applicant should take account of the NPS preference for rail and water-borne transportation, where feasible, over road transport to reduce traffic and associated impacts.</p> <p>Further justification for the criteria assessed should be provided in the ES.</p> <p>The full traffic survey method should be detailed within the ES.</p> <p>The Construction Workers Travel Plan and Construction Traffic Management Plan should clearly cross reference to the relevant effects within the ES and be secured in the draft DCO requirements.</p>	<p>Full details provided within the Transport Assessment (refer to <b>Appendix 7A</b> (ES Volume II)). As detailed in <b>Section 7.5</b>, the Applicant will implement a range of good practice mitigation measures during the construction phase to minimise traffic impacts upon local highways. This includes implementation of a Construction Workers' Travel Plan (CWTP) and a Construction Traffic Management Plan (CTMP). A Framework CTMP and CWTP are provided in <b>Application Document Ref 7.6</b> and <b>7.7</b>.</p>
Highways England	June 2017 (Scoping Opinion)	Environmental impacts arising from any disruption during construction, traffic volume, composition or routing change and transport infrastructure modification should be fully assessed and	Full details are provided within the Transport Assessment (refer to <b>Appendix 7A</b> (ES

Consultee or organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		<p>reported.</p> <p>Information should be provided regarding the likely traffic impacts on the wider SRN in order to determine any need for highway impact assessment and capacity improvements.</p>	Volume II)).
Nottinghamshire County Council	June 2017 (Scoping Opinion)	The proposed ES methodology meets with the County Council's strategic transport planning requirements.	Noted.
West Lindsey District Council	June 2017 (Scoping Opinion)	The primary focus of the Transport Assessment on the construction phase is expected from a development of this size and type, although the operational and decommissioning phase should be acknowledged.	Noted.
MMO (PRoW)	June 2017 (Scoping Opinion)	There are a number of public rights of way within 500 metres of the project site, including a footpath which passes along the eastern bank of the River Trent. The ES should contain details on the potential impacts of the Project on any other users of the River Trent, such as recreational fisherman, recreational boat users and any proposed mitigation measures should these be necessary.	Full details are provided within the Transport Assessment (refer to <b>Appendix 7A</b> (ES Volume II)).
Doncaster Metropolitan District Council	July 2017 (email in response to TA Scoping Report)	No assessment of the A631/A638 junction in Bawtry is required.	Noted.

Consultee or organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
Nottinghamshire County Council	August 2017 (email in response to TA Scoping Report)	<p>A formal HGV routing agreement should be put in place.</p> <p>Concern regarding HGVs, particularly high loads using the A620 to the west through Welham due to low bridges.</p> <p>Junctions should be modelled that are likely to experience greater than 30 two-way peak hour movements.</p>	<p>These matters are considered in the Framework CTMP (<b>Application Document Ref 7.6</b>) and the Transport Assessment ( <b>Appendix 7A</b> (ES Volume II)).</p>
Lincolnshire County Council	August 2017 (email in response to TA Scoping Report)	No issues with the Scoping Report.	Noted.
Highways England	August 2017 (email in response to TA Scoping Report)	No further assessment will be required for the Strategic Road Network.	Noted.
Nottinghamshire County Council	October 2017 (statutory consultation response to PEI Report)	<p>NCC requested that as part of the mitigation for this development that the routes highlighted in pink on the attached plan are created as definitive public rights of way with the status of footpath. It is noted that some of these routes are within the mitigation area as shown on Works Plan No 10. NCC would be grateful if you would liaise with Neil Lewis, the Team Manager of Countryside Access Team, about this matter.</p>	<p>Noted. Although the Applicant is supportive of the use of this non-definitive ProW, the Applicant's preference is to maintain a non-definitive status, given that increased human presence in these areas (especially with dogs) could impact on wildlife</p>

Consultee or organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
			susceptible to disturbance (grass snake, breeding birds).
North Leverton with Hablesthorpe Parish Council	October 2017 (statutory consultation response to PEI Report)	<p>The main concern identified related to the numbers of HGV lorries and other traffic (subcontractors and the Applicant's vehicles) which may affect the village – both in the construction phase and thereafter as increased operational traffic. They stated that the village roads are relatively narrow, congested around the main cross roads and already suffer from potholes and road surface degradation. It was stated that heavy HGV vehicles would only make this worse and subcontractor traffic has often been identified by village speed watch teams as the culprits in ignoring speed limits.</p> <p>The Parish Council wish to know what measures will be put in place to mitigate these effects, ideally routing traffic away from the small villages towards Gainsborough.</p>	<p>All construction HGVs associated with the Proposed Development will be required to arrive and depart the West Burton Power Station site entrance to the north, avoiding North Leverton with Hablesthorpe. Further details are provided within the Framework CTMP (<b>Application Document Ref 7.6</b>).</p> <p>A detailed assessment has been carried out of the impact of traffic on local roads as a result of construction of the Proposed Development. This is set out in this chapter, which also signposts numerous other technical assessments and mitigation strategies (refer to <b>Appendix 7A: Transport Assessment (ES Volume II)</b>) including a Framework CTMP (<b>Application Document Ref</b></p>

Consultee or organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
			<p><b>7.6).</b></p> <p>Prior to the construction of the Proposed Development, the appointed contractor will be required to prepare a Construction Traffic and Routing Management Plan to manage construction traffic. It is proposed that this will be secured by a Requirement of the draft DCO (<b>Application Document Ref 2.1</b>). That Plan will be in accordance with the Framework CTMP (refer to <b>Application Document Ref 7.6</b>) and include a number of measures such as use of a designated HGV route (i.e. to arrive/depart the Site to/from the north via the A620 and onwards to the A631).</p> <p>Based on worker profiles, it is anticipated that the majority of construction worker vehicle movements will be to/from the north via the A620 towards</p>

Consultee or organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
			<p>Retford and the A631. It is estimated that there would be no more than eight construction worker vehicle movements in any one hour to/from the south.</p>
<p>Sturton-le-Steeple Parish Council</p>	<p>October 2017 (statutory consultation response to PEI Report)</p>	<p>The Parish Council is particularly concerned about the potential movements of Abnormal Indivisible Loads (AILs) on the roads between Cottam and West Burton Power Stations. During the construction of West Burton B CCGT plant several loads were transported by river to Cottam Power Station and then by road through South and North Leverton and Sturton-le-Steeple. This resulted in the felling of important trees on the route, damage to the road surfaces and delays to traffic. A later movement of an AIL in 2016 also affected the movement of traffic. They state that this could have been avoided if the components had been off loaded from the barges at West Burton rather than at Cottam. The Parish Council therefore disputes the conclusion of paragraph 7.6.6 which stated:</p> <p><i>“This AIL route is therefore already an established route option and no further assessment of this route is considered necessary, should the Proposed Development require AILs”.</i></p> <p>They state that damage to the road surface and disruption, are unacceptable and avoidable, and must be taken into account when making the final decision.</p>	<p>During construction, the Applicant will implement a Construction Traffic and Routing Management Plan to manage construction traffic including AILs. It is proposed that this will be secured by a Requirement of the draft DCO (<b>Application Document Ref 2.1</b>) with the plan agreed by Highways England and the local highway authority.</p> <p>Further clarity on AIL movements and routing will be provided prior to commencement of construction, once the final details of the size and origin of loads are known. However, the opportunity to offload AILs at West Burton Power Station</p>



Consultee or organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		<p>The Parish Council urges the Applicant to offload the components directly at West Burton. Where this is not possible, they seek the use of the strategic road network.</p> <p>Concerns were raised over the level and timing of movements by the contractors in the construction stage, including 24 hour working for some activities. They state that abnormal hours must be kept to a minimum and mitigation measures applied rigorously and without exception. Construction vehicles which exceed the permitted weight must access the site from the north and not through the villages.</p>	<p>site was considered during construction of WBB Power Station and could not be achieved due to the absence of an adequate jetty and supporting infrastructure. The same situation will apply for the Proposed Development.</p> <p>A detailed assessment has been carried out of the impact of traffic on local roads as a result of construction of the Proposed Development. This is set out in <b>Appendix 7A: Transport Assessment</b> (ES Volume II). It is anticipated that the majority of construction worker vehicle movements will be to/from the north via the A620 towards Retford and the A631. It is estimated that there would be no more than eight vehicle movements in any one hour to/from the south.</p> <p>Section 3.2 of the Framework CTMP (<b>Application Document Ref 7.6</b>) states that</p>

Consultee or organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
			<p>the core construction working hours for the Proposed Development would be restricted to 07:00 to 19:00 Monday to Friday (except bank holidays) and 08:00 to 18:00 on Saturday in order to minimise disruption to the public. Key exceptions to these working hours could include activities that must continue beyond these hours and non-noisy activities with night working if required.</p> <p>HGV arrivals, including deliveries, will be managed as far as reasonably practicable, such that they are spread evenly over the day between the hours of 07:00 and 19:00. HGV deliveries will not be permitted outside core working hours, unless agreed with the local planning authority on a case by case basis.</p> <p>All construction HGVs would be required to arrive and</p>

Consultee or organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
			<p>depart the West Burton Power Station site entrance to the north, therefore avoiding Sturton-le-Steeple. The Construction Traffic and Routing Management Plan, proposed to be secured by a Requirement of the draft DCO (<b>Application Document Ref 2.1</b>), will be agreed with the highway authority and Highways England. The Plan will include a number of measures including a designated HGV route which will require all construction HGVs to arrive/depart the Site to/from the north via the A620 and onwards to the A631.</p>
<p>Clarborough and Welham Parish Council</p>	<p>October 2017 (statutory consultation response to PEI Report)</p>	<p>Traffic during construction was identified as their main concern. They stated that in the past the Applicant has been very good at working with the Parish Council to lessen the impact of traffic through their villages.</p> <p>They seek: the prevention of lorries travelling in convoys, restricting to no more than two lorries travelling in tandem; getting HGVs to avoid travelling through the villages during the school run times (8:30am &amp; 3:30pm); and supplying them with a point of</p>	<p>Section 5.2 of the Transport Assessment (<b>Appendix 7A</b> in ES Volume II) confirms that all construction HGVs would route via the A631 due to the bridge height restrictions near Welham on the A620 towards Retford.</p>

Consultee or organisation	Date and nature of consultation	Summary of Response	How comments have been addressed in this Chapter
		<p>contact just in case of a problem.</p> <p>They state that the A620 in Welham has a very low bridge with height restrictions. Over height vehicles have to take a B road that links Clarborough &amp; Retford via a back route. This B road has a 4 tonne limit for all other traffic, which is used as a short cut. They request that the Applicant would advise drivers not to use this route unless their vehicle was over the height limit</p> <p>They seek these arrangements when construction begins.</p>	<p>The Framework CTMP (<b>Application Document Ref 7.6</b>) includes a number of measures to mitigate the impact of construction HGVs. This includes a HGV routing plan and signage.</p> <p>A local liaison committee, to ensure a point of contact for the local community, and who can respond to any queries or concerns, is proposed to be secured by a Requirement of draft DCO (<b>Application Document Ref 2.1</b>).</p>
<p>Bassetlaw District Council</p> <p>Lincolnshire County Council</p> <p>Nottinghamshire County Council</p> <p>West Lindsey District Council</p>	<p>March/April 2019</p>	<p>Provision of copies of final draft chapter and offer of pre-application meeting to each consultee to:</p> <ul style="list-style-type: none"> <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> <p>Further details on consultation undertaken can be found in the Consultation Report (<b>Application Document Ref. 7.1</b>).</p>	

## Summary of Key Changes to Chapter 7 since Publication of the Preliminary Environmental Information (PEI) Report

- 7.3.17 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.
- 7.3.18 The key changes since the PEI Report was published are summarised in **Table 7-6**.

**Table 7-6: Summary of key changes to Chapter 7 since publication of the PEI Report**

Summary of change since PEI Report	Reason for change	Summary of change to chapter text in the ES
A new measure has been added to Section 3 of the Framework CTMP ( <b>Application Document Ref 7.6</b> ). This new measure involves the Applicant providing a regular update bulletin on the construction of the power station to residents living in the Sturton-le-Steeple, Wheatley, Bole, Littleborough, Fenton and North Leverton Parish Councils, which will be posted on the Sturton Ward website. The update bulletin will also include a contact name and number for members of the public should they have any issues regarding construction traffic.	To address a comment raised by a local resident at the public exhibitions associated with the formal consultation (September 2017).	Additional measure included in Section 3.6 of the Framework CTMP ( <b>Application Document Ref 7.6</b> ).
It is confirmed that no HGV deliveries will take place outside the core construction working hours of 0700 and 1900 hours on Monday to Friday; and 0800 and 1800 hours on a Saturday.	To address comments raised by Clarborough and Welham Parish Council.	Text has been updated in <b>Section 3.2</b> of the Framework CTMP ( <b>Application Document Ref. 7.6</b> ).
The Framework CTMP	To address comments	Text has been updated in

Summary of change since PEI Report	Reason for change	Summary of change to chapter text in the ES
<p><b>(Application Document Ref. 7.6)</b> has been updated to ensure that all construction HGVs associated with the Proposed Development arrive and depart the site to the north via the A620 and onwards to the A631 only. No construction HGVs will route along the A620 towards Retford due to the bridge height restrictions near the village of Welham.</p>	<p>raised by both Nottinghamshire County Council and Clarbrough and Welham Parish Council.</p>	<p><b>Section 3.1</b> of the Framework CTMP <b>(Application Document Ref. 7.6)</b>.</p>
<p>Updated Personal Injury Accident (PIA) data has been obtained to 30.09.18 to provide a representative baseline for the Application.</p>	<p>To ensure that the most recent dataset is available for assessment purposes.</p>	<p>Paragraphs 7.4.6 – 7.4.10</p>
<p>Construction phase assessment year has been updated.</p>	<p>To reflect the updated indicative construction programme.</p>	<p>Paragraph 7.4.11</p>

### Rochdale Envelope

7.3.19 The traffic and transport assessment has been undertaken with reference to the Rochdale Envelope. The construction assessment has been based on the worst-case assumption of activities not commencing until 2027, assuming that consent is granted in Q3 2020 and is valid for up to seven years. Consequently, the results presented in this assessment are representative of earlier assessment years and the overall effect of the Proposed Development may be less than that presented, as background traffic is expected to increase year on year. Use of the Rochdale Envelope therefore does not change the conclusions of the impact assessment and does not result in any additional significant traffic effects being identified. It is considered that a worst-case scenario has been assessed in line with the Rochdale Envelope approach.

## 7.4 Baseline Conditions

### Existing Baseline

#### Site Location

- 7.4.1 The West Burton Power Station site is located approximately 3.5km to the south-west of Gainsborough and 1km to the north-east of Sturton-le-Steeple.
- 7.4.2 The West Burton Power Station site lies close to the junction of the A631 and A620. The A631 runs east-west from the Sheffield/Rotherham area, crossing the A1(M) at Tickhill and providing one of the few crossings of the River Trent at Gainsborough. The A620 follows a more south-west/north-east orientation between Ranby and its junction with the A631 at Beckingham, en-route passing through the market town of Retford and the villages of Clarborough and Welham. These two routes provide direct links to the A1 and the areas to the west of the A1. The A631 Gainsborough river crossing provides a link with areas to the east of the River Trent.
- 7.4.3 The West Burton Power Station site is accessed from a C-class road, the C2 (Gainsborough Road), which joins the A620 at Bole Corner.

#### Existing Traffic Flows

- 7.4.4 The following highway links form the agreed highway network of interest for this assessment:
- C2 Gainsborough Road, south of the West Burton Power Station site main entrance;
  - C2 Sturton Road, north of the West Burton Power Station site main entrance;
  - A620 Gainsborough Road, west of Sturton Road roundabout; and
  - A620 Saundby Road, north of Sturton Road roundabout.
- 7.4.5 Baseline 24 hour annual average daily traffic (AADT) two-way link flows measured in June 2017 for the agreed study area are provided in **Table 7-7**.

**Table 7-7: 2017 Baseline Traffic Flows (24 hour AADT)**

Link no.	Link Description	Total Vehicles	Total HGVs
1	C2 Gainsborough Road (south of West Burton Power Station main site entrance)	2,315	205
2	C2 Sturton Road (north of West Burton Power Station main site entrance)	2,531	215
3	A620 Gainsborough Road (west of	4,634	588

Link no.	Link Description	Total Vehicles	Total HGVs
	Sturton Road roundabout)		
4	A620 Saundby Road (north of Sturton Road roundabout)	6,944	721

### Baseline Accident Record

7.4.6 Personal Injury Accident (PIA) data covering a five year period (01/10/2013 – 30/09/2018) has been obtained from NCC. The area of investigation included the A620 from its junction with the A631 to its junction with Sturton Road in addition to Sturton Road and Gainsborough Road.

7.4.7 In total, 15 accidents were recorded within the analysed area. Of these, eight were recorded as ‘slight’ and seven as ‘serious’. **Table 7-8** summarises the accidents that have occurred over the specified period.

**Table 7-8: Summary of recorded accidents (01/10/2013 – 30/09/2018)**

Location	Accident Severity			
	Slight	Serious	Fatal	Total
A631/A620 Junction	2	4	0	6
A620 (between A631 and Sturton Road)	4	1	0	5
A620/Sturton Road Junction	0	0	0	0
Sturton Road (north of West Burton Power Station site entrance)	0	1	0	1
West Burton Power Station site Entrance	1	1	0	2
Station Road/Gainsborough Road Junction	1	0	0	1
Total	8	7	0	15

7.4.8 As can be seen from **Table 7-8**, the study area has a generally low accident record. The main accident cluster occurred at the A631/A620 roundabout where six accidents were recorded over the five year study period, of which two were of



slight severity and four of serious severity. Of these, three involved two vehicles colliding on the roundabout and three involved driver loss of control.

7.4.9 Two accidents that included one of slight severity and one of serious severity occurred at the West Burton Power Station site entrance over the five year study period. Both involved a car turning right out of the West Burton Power Station site entrance and colliding with an oncoming vehicle travelling southbound towards Sturton-le-Steeple. As there have been no other reoccurrences of incidents throughout the five year study period at this location, it is considered that the incidents are likely to be a unique occurrence that would not be exacerbated by traffic from the Proposed Development. In addition warning signage is already present on Gainsborough Road prior to the West Burton Power Station site entrance, warning of lorries turning ahead.

7.4.10 None of the 15 accidents to occur within the study area involved a HGV.

### Future Baseline

7.4.11 It is currently anticipated that (subject to the necessary consents being granted and an investment decision being made), the earliest date that construction work would commence is around Q3 2020 and continue for a period of up to four years. As the Development Consent Order (DCO) would be valid for up to seven years after receipt and could be started at any time, it is necessary to derive a realistic worst-case future baseline assessment year.

7.4.12 Baseline traffic flows on the road network are projected to increase year on year. For the purposes of this assessment and to represent a realistic worst-case scenario, a 36-month build programme starting in Q3 2027 and end in Q3 2030 has been chosen.

7.4.13 Future year baseline traffic flows for the assessment year of 2029 for the peak of construction have been derived by applying the national standard programme Trip End Model Presentation Program (TEMPRO) to derive traffic growth factor the flows, as indicated in **Table 7-9**. These growth factors have been taken into account when comparing the baseline and future traffic scenarios.

**Table 7-9: TEMPRO traffic growth factors (average day)**

Year	Vehicle Type	Growth Factor
2017 – 2029	All	1.1700

7.4.14 Future year baseline scenarios are not detailed for 2030 (opening) due to the very low traffic flows generated by the operation of the Proposed Development. Therefore, a quantitative assessment of operational traffic has not been necessary, as the vehicle numbers generated would be considerably lower than those that would be experienced during the construction period.

7.4.15 Future year baseline traffic flows for the assessment year of 2029 peak of construction are presented in **Table 7-10**.

**Table 7-10: 2029 Baseline traffic flows (24 hour AADT)**

Link no.	Link Description	Total Vehicles	Total HGVs
1	C2 Gainsborough Road (south of West Burton Power Station main site entrance)	2,709	240
2	C2 Sturton Road (north of West Burton Power Station main site entrance)	2,961	252
3	A620 Gainsborough Road (west of Sturton Road roundabout)	5,422	688
4	A620 Saundby Road (north of Sturton Road roundabout)	8,125	844

7.4.16 The assessment has had regard to the traffic generated by ‘committed’ developments, in accordance with the methodology for assessing potential cumulative effects with other schemes, as detailed in **Chapter 16: Cumulative and Combined Effects**; as follows:

- ash processing facility within the West Burton Power Station site. Although not a committed development, the development of this facility commenced in July 2017, after the traffic counts were undertaken in June 2017. It is therefore appropriate to consider any traffic generation from this development;
- 49MW battery storage facility within the West Burton Power Station site. Although not a committed development given that operation commenced in January 2018, traffic counts were undertaken in June 2017, before operation commenced. It is therefore appropriate to consider any traffic generation from this development;
- construction of quarry access road at Cowpasture Lane Gravel Pit;
- 61 dwelling residential development, Gainsborough;
- mixed-use development including 220 homes, Gainsborough; and
- 16 dwelling residential development, Gainsborough.

7.4.17 Committed development flows associated with Cowpasture Lane Gravel Pit are set out in Section 7 of the Transport Assessment (**Appendix 7A**, ES Volume II) and summarised in **Table 7-11** below.

7.4.18 No Transport Assessment was submitted as part of the consented application for the mixed-use development scheme at Gainsborough and has instead been

conditioned. No information has therefore been provided on proposed vehicle generations or assignment of trips to the network.

7.4.19 Vehicle movements associated with the remaining committed developments would not generate any significant levels of traffic, resulting in a negligible impact on the local highway network. As such, any development traffic associated with these remaining developments would be incorporated within background growth applied to the 2017 baseline flows.

7.4.20 The total committed development two-way flows for each link road within the study area are shown in **Table 7-11**.

**Table 7-11: Committed development flows (24 hour AADT)**

Link no.	Link Description	Total Vehicles	Total HGVs
1	C2 Gainsborough Road (south of West Burton Power Station main site entrance)	192	192
2	C2 Sturton Road (north of West Burton Power Station main site entrance)	192	192
3	A620 Gainsborough Road (west of Sturton Road roundabout)	0	0
4	A620 Saundby Road (north of Sturton Road roundabout)	192	192

7.4.21 **Table 7-12** summarises the future year baseline including committed development traffic flows for the assessment year 2029 peak of construction. Further detail on growth factors used and committed development flows taken into account can be found in Sections 6 and 7, respectively of **Appendix 7A: Transport Assessment** (ES Volume II).

**Table 7-12: 2029 Baseline + Committed Development (24 hour AADT)**

Link no.	Link Description	Total Vehicles	Total HGVs
1	C2 Gainsborough Road (south of West Burton Power Station main site entrance)	2,901	432
2	C2 Sturton Road (north of West Burton Power Station main site entrance)	3,153	444
3	A620 Gainsborough Road (west of Sturton Road roundabout)	5,422	688

Link no.	Link Description	Total Vehicles	Total HGVs
4	A620 Saundby Road (north of Sturton Road roundabout)	8,317	1,036

## 7.5 Development Design and Impact Avoidance

- 7.5.1 As set out in **Chapter 4: The Proposed Development**, there are areas for which there is currently variability in the design that could affect the assessment. The Rochdale Envelope defined for building sizes and limits of deviation for building locations do not affect this assessment and is therefore not considered further.
- 7.5.2 Traffic movements would be controlled during the Proposed Development construction phase in order to minimise potential impacts on the surrounding road network, namely construction HGVs arriving or departing the West Burton Power Station site would travel to/from the north via the A620 and onwards to the A631. Signage is already in place at the West Burton Power Station site entrance directing HGVs north towards the A620. In addition, a routing plan would be provided, which HGV drivers would be required to adhere to, controlled by a Requirement of the draft DCO (**Application Document Ref. 2.1**).
- 7.5.3 In addition to the above, the Applicant would implement a range of good practice mitigation measures during the construction phase to minimise traffic impacts upon local highways, including:
- implementation of the CWTP which includes measures and procedures to encourage construction workers to adopt modes of transport which reduce reliance on single occupancy private car use (a Framework CWTP is provided in **Application Document Ref. 7.7**);
  - liaison with the appointed contractor for the potential to implement construction worker minibuses and car sharing options (considered as part of the CWTP); and
  - implementation of the CTMP to include measures to control the routing and impact of HGVs on the local road network during construction (**Application Document Ref. 7.6**). It is proposed that all construction HGVs would be required to arrive and depart the West Burton Power Station site from the north via the A620 and onwards to the A631 avoiding the village of Sturton-le-Steeple and the bridge height restrictions near Welham on the A620 towards Retford.
- 7.5.4 Once the Proposed Development is operational, up to 15 permanent operational roles would be created of which some are expected to be undertaken by existing West Burton/Cottam Power Station employees. Due to the very low traffic flows this would generate, no impact avoidance measures are proposed.

7.5.5 Decommissioning would be expected to require some traffic movements associated with the removal (and recycling, as appropriate) of material arising from demolition and potentially the import of materials for land restoration and reinstatement. To minimise the impacts of decommissioning upon local highways, it is anticipated that a Decommissioning Traffic Management Plan (DTMP) would be prepared to control the routing and impact of HGVs. It is proposed that this would be secured by a Requirement of the draft DCO (**Application Document Ref. 2.1**).

## 7.6 Likely Impacts and Effects

### Construction

7.6.1 Access to and from the West Burton Power Station site for construction workers would be via the existing site entrance, located off the C2 Gainsborough Road.

7.6.2 It is currently anticipated that (subject to the necessary consents being granted and an investment decision being made), the earliest date that construction work would commence is around Q3 2020 over a period of up to four years. A more likely construction programme would be within three years from commencement. However as the DCO would be valid for seven years after receipt and therefore construction could potentially not start until Q3 2027 lasting 36 months (starting in Q3 2027 and ending Q3 2030), this scenario has been considered in order to represent a worst-case scenario for traffic assessment purposes. This is based upon the Applicant's experience of developing generating stations.

7.6.3 The assumed worst-case is that the construction workforce would peak at circa 200 workers per day in months 25 – 27 (i.e. Q3 2029). A profile of the anticipated daily workforce each month through the construction period is provided in **Appendix 7A: Transport Assessment (ES Volume II)**. The core construction working hours for the Proposed Development would be 07:00 to 19:00 Monday to Friday (except bank holidays) and 08:00 to 18:00 on Saturday. Key exceptions to these core working hours could include activities that must continue beyond these hours and non-noisy activities with night working. HGV arrivals, including deliveries, will be managed as far as reasonably practicable, such that they are spread evenly over the day between the hours of 07:00 and 19:00. However, no HGV deliveries would be undertaken outside of core working hours, unless agreed with the local planning authority on a case by case basis.

7.6.4 Based on the methodology contained within the Transport Assessment (**Appendix 7A (ES Volume II)**), the weekday construction worker shift is likely to generate approximately 113 vehicular trips (one-way) during the AM arrival and PM departure periods at the peak of construction.

7.6.5 HGVs delivering construction materials would access the West Burton Power Station site from the existing site entrance located off the C2 Gainsborough Road, with all HGVs arriving and departing to/from the north via the A620 and onwards to the A631. The volume of HGVs associated with construction of the Proposed Development on the network would be at its maximum of 112 two-way daily

vehicle movements (56 in and 56 out) at the peak of construction in months 25 – 27.

- 7.6.6 A number of AIL movements are expected to be required during the construction programme. The ports of Goole, Hull and Immingham are situated nearest the Site. Historically, delivery of AILs to the West Burton Power Station site have been received at the Port of Hull and barged down the River Trent to a jetty at Cottam Power Station (also owned and operated by the Applicant). The components have then been transported for the final six mile road journey to the West Burton Power Station site through the villages of Treswell, South and North Leverton and Sturton-le-Steeple. This AIL route is an established potential route option and is considered suitable for the transportation purposes required.
- 7.6.7 The potential to deliver AILs straight to the West Burton Power Station site was reviewed at the time of construction of WBB Power Station but there is not the required jetty infrastructure at the site to allow this to be undertaken. For this reason, Cottam Power Station was used as the river offloading point. The same situation applies for the construction of the Proposed Development.
- 7.6.8 The alternative would be to bring AILs via the strategic road network. Detailed consideration would be given to the appropriate delivery option during the detailed design. However, it is a reasonable assumption that all major ports are able to accommodate AILs and that adequate access to the strategic road network is achievable. On this basis, only the AIL route from the strategic network to the West Burton Power Station site requires assessment. This would be completed as part of the Construction Traffic and Routing Management Plan, proposed to be secured by a Requirement of the draft DCO (**Application Document Ref 2.1**).
- 7.6.9 It is particularly worthy of note that the historical heavy load route to the West Burton Power Station site utilises the A614 and A631 from the A1. This route has historically been used to deliver heavy electrical generation and transmission equipment of up to approximately 250 tonnes (Ref 7-11). This AIL route is, therefore, already an established heavy load route and is considered suitable for the transportation purposes required. Any routing would be controlled by the Construction Traffic and Routing Management Plan.
- 7.6.10 **Table 7-13** summarises the expected profile of construction phase peak traffic levels (refer to the Transport Assessment in **Appendix 7A** (ES Volume II) for further details).

**Table 7-13: Daily construction vehicle profile (peak month of construction)**

Hour Beginning	Construction worker vehicles		Construction HGVs	
	Arrival	Departure	Arrival	Departure
00:00	0	0	0	0

Hour Beginning	Construction worker vehicles		Construction HGVs	
	Arrival	Departure	Arrival	Departure
01:00	0	0	0	0
02:00	0	0	0	0
03:00	0	0	0	0
04:00	0	0	0	0
05:00	0	0	0	0
06:00	34	0	0	0
07:00	62	0	4	4
08:00	11	0	4	4
09:00	6	0	5	5
10:00	0	0	5	5
11:00	0	0	5	5
12:00	0	0	5	5
13:00	0	0	5	5
14:00	0	0	5	5
15:00	0	0	5	5
16:00	0	6	5	5
17:00	0	17	4	4
18:00	0	84	4	4
19:00	0	6	0	0
20:00	0	0	0	0
21:00	0	0	0	0
22:00	0	0	0	0

Hour Beginning	Construction worker vehicles		Construction HGVs	
	Arrival	Departure	Arrival	Departure
23:00	0	0	0	0
<b>Total</b>	<b>113</b>	<b>113</b>	<b>56</b>	<b>56</b>

7.6.11 Based on the vehicle assignment contained within the Transport Assessment (**Appendix 7A**, ES Volume II), summarises the likely changes in link flows within the agreed study area for the assessment year 2029 peak of construction. As detailed in the Transport Assessment (**Appendix 7A**, ES Volume II), HGV traffic has been assigned to/from the north to the A631 via the A620. The construction workers assignment has been based on the geographic split of population within a 30 minute drive-time of the Site.

**Table 7-14: 2029 base + committed + Proposed Development daily two-way traffic flows**

Link no.	Link Description	Baseline Flow (inc. com dev)		Construction traffic		Percentage Increase	
		Total veh.	Total HGVs	Total veh.	Total HGVs	Total veh.	Total HGVs
1	C2 Gainsborough Rd (south of West Burton Power Station site entrance)	2,901	432	20	0	0.7%	0.0%
2	C2 Sturton Rd (north of West Burton Power Station site entrance)	3,153	444	318	112	10.1%	25.2%
3	A620 Gainsborough Road	5,422	688	20	0	0.4%	0.0%
4	A620 Saundby Road	8,317	1,036	298	112	3.6%	10.8%

7.6.12 The assessment matrix (**Table 7-4**) has been used to assess the transportation effects associated with construction traffic at the peak of construction by combining the receptor sensitivity with the magnitude of impact.



### **Severance**

7.6.13 The predicted change in total traffic associated with Proposed Development construction activities is considerably less than 30% on each link road (very low impact). Therefore, the severance effect would be negligible (not significant).

### **Pedestrian Amenity**

7.6.14 The change in total traffic (or HGV component) is considerably less than 50% on each link road (very low impact). Therefore, the effect for pedestrian amenity would be negligible (not significant).

### **Fear and Intimidation**

7.6.15 The change in total traffic is considerably less than 30% on each link road (very low impact). Therefore, the effect on fear and intimidation would be negligible (not significant).

### **Highway Safety**

7.6.16 Accident data for the most recent five years has been acquired for the study area and is summarised in **Section 7.4**. The statistics provide information on the location and severity of each Personal Injury Accident (PIA). Given that the level of increase in traffic flow resulting from the Proposed Development is negligible, the effect on highway safety would be negligible (not significant).

### **Driver Delay**

7.6.17 The performance of a junction is judged by the ratio of flow to capacity (RFC). As a general guide, a junction operating below a threshold of 0.85 is considered to operate within its design capacity. Junction modelling has been undertaken at two key junctions in the vicinity of the West Burton Power Station site (the results of which are provided in the Transport Assessment (**Appendix 7A**) in ES Volume II for the AM and PM peak hours (07:00 – 08:00 and 17:00 – 18:00). This demonstrates that each junction would operate within its design capacity at the peak of construction (Q3 2029). Junction modelling, therefore, indicates that the driver delay effect of the Proposed Development would be negligible (not significant).

### **Overview**

7.6.18 In summary, the effects of Proposed Development construction traffic on all road links and junctions within the study area are considered to be negligible, and therefore not significant.

### **Opening and Operation**

7.6.19 Up to 15 permanent operational roles would be created of which some are expected to be undertaken by existing West Burton/Cottam Power Station

employees (refer to **Chapter 13: Socio-economics**). As indicated in **Chapter 13: Socio-economics**, of these up to 15 roles, taking into account gross operation worker requirements and the additionality factors, up to approximately five net operational roles would be generated. However, for the purposes of this assessment, it is assumed that 15 operational roles would be created. Conservatively assuming car occupancy of one, this could equate to an additional 15 cars accessing the West Burton Power Station site per day (30 vehicle movements).

- 7.6.20 There would also be additional HGV traffic generated by deliveries associated with operations and maintenance plant/equipment. This is expected to equate to a maximum of four HGVs per day. Fuel for the Proposed Development would be natural gas, which arrives at Site via pipeline, therefore, there would be no vehicular movements associated directly with the transport of gas to the Site.
- 7.6.21 Due to the very low traffic flows which would result once the Proposed Development is operational (for the purposes of this assessment, assumed to be 2030), the vehicle numbers generated would be considerably lower than those anticipated during the construction period. The overall traffic effects during Proposed Development operation would be negligible (not significant).

### Decommissioning

- 7.6.22 Decommissioning would be expected to require some traffic movements associated with the removal (and recycling, as appropriate) of material arising from demolition and potentially the import of materials for land restoration and re-instatement. However, vehicle numbers are not expected to be higher than those experienced during the Proposed Development construction period.
- 7.6.23 Current baseline data collected for the purposes of this assessment would not be valid at the year of Proposed Development decommissioning (i.e. for the purposes of this assessment 2070). However, as it is unlikely that baseline traffic figures on local roads would reduce appreciably over the next circa 40 years, it is considered that the percentage increase in traffic due to Proposed Development decommissioning would be negligible. Therefore, overall the effects of decommissioning traffic would be no greater than that of the construction traffic as detailed herein. Effects are, therefore, anticipated to be not significant.

## 7.7 Mitigation and Enhancement Measures

- 7.7.1 The assessment as presented herein indicates that the Proposed Development is not anticipated to generate any significant traffic-related effects. Therefore, no measures additional to those as indicated in **Section 7.5** are considered to be necessary.

## 7.8 Limitation or Difficulties

- 7.8.1 Detailed construction information is not yet available as the construction contractor has not yet been appointed. Therefore, this assessment draws upon the experience and assessments undertaken for other similar projects. It is considered that the assumptions made have resulted in the assessment being robust.

## 7.9 Summary of Likely Significant Residual Effects

- 7.9.1 The additional traffic due to Proposed Development construction activities would result in small, temporary increases of traffic flows, including HGVs, on the roads leading to the West Burton Power Station site. In line with the significance criteria presented herein and in the Transport Assessment (refer to **Appendix 7A** (ES Volume II)), the residual effects of construction traffic on all road sections and junctions are anticipated to be negligible and thus not significant. Notwithstanding, a number of traffic management measures would be implemented during the Proposed Development construction phase to minimise traffic impacts upon the local road network (refer to **Section 7.5**).
- 7.9.2 The generation of traffic during Proposed Development operation would be minimal when compared to the construction phase. Therefore, Proposed Development operational phase residual traffic effects are also considered to be negligible and thus not significant.
- 7.9.3 The generation of traffic during the decommissioning phase is expected to involve traffic movements associated with the removal (and recycling, as appropriate) of material arising from demolition and potentially the import of materials for land restoration and re-instatement. However the residual effects of decommissioning traffic would be no greater than that of the construction traffic and are, therefore, anticipated to be negligible and thus not significant. Notwithstanding, a Decommissioning Traffic Management Plan (DTMP) would be implemented during the decommissioning phase to control the impact and routing of HGVs.

## 7.10 References

- Ref 7-1 Department for Energy and Climate Change (2011a) *National Policy Statement for Energy* (EN-1).
- Ref 7-2 Department for Energy and Climate Change (2011b) *National Policy Statement for Fossil Fuel Electricity Generating Infrastructure* (EN-2).
- Ref 7-3 Ministry of Housing, Communities and Local Government (2019) *National Planning Policy Framework*.
- Ref 7-4 Nottinghamshire County Council (2011) *Nottinghamshire Local Transport Plan 2011 – 2026*.
- Ref 7-5 Bassetlaw District Council (2011), *Bassetlaw District Core Strategy & Development Policies DPD*

- Ref 7-6 Bassetlaw District Council (2019) *The Bassetlaw District Council – Draft Local Plan.*
- Ref 7-7 Ministry of Housing, Communities and Local Government - Planning Practice Guidance (2014, as amended) *Travel Plans, Transport Assessment and Statements in Decision-taking.*
- Ref 7-8 Institution of Environmental Management and Assessments (IEMA) (1993) *Guidelines for the Environmental Assessment of Road Traffic.*
- Ref 7-9 Department for Transport Circular 02/2013 (2013) *The Strategic Road Network and the Delivery of Sustainable Development.*
- Ref 7-10 Highways England (2015) *The Strategic Road Network: Planning for the Future – A Guide to Working with Highways England on Planning Matters.*
- Ref 7-11 Wynns Ltd. (2011) *Beckingham Marshes Access Survey.*