# Supporting Statement

Client: Monckton Energy Limited

Proposal: Monckton Gas Peaking Scheme

Site: Monckton Coke and Chemical Works

Date: September 2016

Ref: HG3317

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# 1.0 Introduction

**Overview**

1.1 This document comprises a Supporting Statement and has been prepared by WYG Planning Limited ('WYG') on behalf of our client, Monckton Energy Limited ('MEL'), a Hargreaves plc company. The Supporting Statement is part of a package of documents being submitted to Barnsley Metropolitan Borough Council ('BMBC') in support of a planning application for the proposed Monckton Gas Peaking Scheme for the generation of up to 10 megawatts ('MW') of electricity, during periods of peak demand or stress on the National Grid, over a temporary 20 year operational period on part of the Monckton Coke and Chemical Works ('Scheme'), near Royston, Barnsley, South Yorkshire.

1.2 The planning application site covers some 0.3 hectares of land ('Site'), as shown on Figure 1 Site Location Plan and Figure 2 Application Site Plan. The Site includes some 0.2 hectares of land for the proposed gas peaking facility compound on a parcel of land within the southern part of the Monckton Coke and Chemical Works ('Monckton Works') and would replace the disused biological effluent treatment plant. The remaining 0.1 hectare of the Site includes an existing internal hard surfaced road to the southern site access for the Monckton Works to the B6428 Lund Hill Lane.

1.3 Some 5 x 2 MW generator sets would be installed within the proposed gas peaking compound. The generator sets would be housed within acoustically attenuated metal containers, each with adjoining air inlet and extractor attenuators, radiators and emissions flue. Within the compound there would be low voltage ('LV') and high voltage ('HV') apparatus housed within metal containers, with associated underground cable connection to the 11/400v TX transformer. The above ground infrastructure within the compound would be positioned onto concrete pad foundations that would be laid on Site. The containers for the peaking plant, along with the LV and HV equipment, would be coloured olive green. The compound would be securely fenced with Palisade fencing and access gates to the north east side at the intersection with the internal access road.

1.4 The 11kV electricity output from the HV room would be connected by underground cable to the existing Monckton Works 11kV grid connection. The proposed generator sets would be connected by underground apparatus to the existing mains gas skid which is located on the Monckton Works site to the north west side of the northern part of the internal access road for the Scheme. Such main gas and electrical connections would be progressed by the relevant

statutory undertakers or an appointed contractor, as appropriate, under permitted development rights.

1.5 The Scheme would provide a flexible modular energy supply which could rapidly deliver between 2 to 10 MW of power in response to the demands of the National Grid. The generator sets would use a mains gas supply, which would be connected to the gas peaking plant, in order to generate electricity during periods of peak demand or stress on the National Grid. It is anticipated that the generators would run around 800 hours per year as standby electricity generation when the local area is in shortage/stress, with peak times anticipated to be between 1600 to 1930 hours Monday to Friday during the months of November to March inclusive. In this respect, it is worth noting that without such contingencies electricity shortages could be experienced resulting in blackouts. As such, National Grid are supporting the development of small local distributed electricity generation to cover times of such potential shortage.

**Benefits of and Need for the Scheme**

1.6 National energy policy is addressed in Chapter 4 of this Supporting Statement. However, it is worth noting at this stage that in May 2015 the Government updated its policy on Maintaining Energy Security. Central to UK energy security is the Government's policy in respect of Electricity Market Reform ('EMR'). EMR is designed to deliver the Government's core objectives of:

- Security of Supply;
- Climate Change, and
- Affordability.

1.7 The EMR sets out two mechanisms for incentivising investment in the nation's energy infrastructure, namely:

- Contracts for Difference ('CfD'), which provides long term price stabilisation, allowing investment to come forward at a lower capital cost; and
- Capacity Agreements (within a capacity Market), which provides payments for reliable capacity to be available when needed, helping to ensure security of supply.

1.8 Capacity Agreements enhance energy security by ensuring that sufficient reliable capacity is in place to meet the demand required from the national grid. In return for capacity payments facilities such as the Scheme, must be able to deliver the necessary energy when requested, or face financial penalties.

1.9 The cost of this Capacity Market is kept to a minimum by an auction process which sets the level of capacity payments for specified periods and technologies.

1.10 The Scheme would serve the Capacity Market and would provide the type of significant capital investment that the Government envisaged would come forward through the mechanisms promoted through EMR.

1.11 The national policy message on energy security is strong and unambiguous. There is a clear need to ensure security of supply through the development of a diverse energy generation system to support the increased deployment of renewable energy and increased peak demands.

1.12 The Scheme would provide the type of significant capital investment that the Government envisaged would come forward through the mechanisms promoted through EMR and meet the need for a flexible modular energy supply in order to rapidly supply 2 to 10 MW of power in response to the demands of the National Grid.

**The Structure of this Supporting Statement**

1.13 This supporting statement includes the following sections:

- Section 1 sets out the introduction to the Scheme;
- Section 2 describes the Site and its surroundings;
- Section 3 provides a project description of the Scheme;
- Section 4 deals with need and benefits matters;
- Section 5 addresses planning policy matters;
- Sections 6 to 12 assess the impact of the Scheme in relation to ecology, landscape and visual impact, hydrology and hydrogeology, noise, transport, air quality, contamination and coal mining legacies respectively;
- Section 13 deals with socio-economic matters; and
- Section 14 sets out a summary and conclusion.

# 2.0 Existing Site

### Introduction

2.1 This chapter provides a description of the Site and its surroundings, including the road network, rights of way and services. Further details of the baseline conditions of the Site with regard to specific environmental disciplines are provided later in this Supporting Statement along with the related appendices where appropriate.

### Site and Surroundings

2.2 Monckton Works operated for more than 130 years prior to ceasing production at the end of 2014. Many of the surface buildings, with associated infrastructure including chimneys remain in place on Site in 2016.

2.3 The planning application Site for the Scheme covers some 0.3 hectares of land, as shown on Figure 1 Site Location Plan and Figure 2 Application Site, within the southern part of the Monckton Works, north east of Royston, in Barnsley Metropolitan Borough.

2.4 The Site includes some 0.2 hectares of land for the proposed gas peaking facility compound on a parcel of land within the southern part of the Monckton Coke and Chemical Works ('Monckton Works') and would replace the disused biological effluent treatment plant. The remaining 0.1 hectare of the Site includes an existing internal hard surfaced road to the southern site access for the Monckton Works to the B6428 Lund Hill Lane. The centre of the proposed compound is located at Ordnance Survey ('OS') grid reference 437461 411818.

2.5 The ground level of the peaking plant compound is at approximately 62 metres above Ordnance Datum ('AOD'), and the internal access track rises to between 67 and 68 metres AOD at the southern Monckton Works Site access to the B6428 Lund Hill Lane. The topography of the land to the north of the peaking plant compound rises to the north to approximately 74 metres AOD then falls to around 70 metres AOD in the central part of the Monckton Works. Land levels fall to the south east, south and south west of the peaking plant compound, with the B6428 at approximately 51.3 metres AOD adjacent to the railway bridge to the south west of the Monckton Works.

2.6 Established tree and shrub cover is located beyond the Site boundary on land around the proposed peaking plant compound and the majority of the internal access road to the southern Site access to the B6428 Lund Hill Lane.

2.7 The B6428 Lund Hill Lane generally runs along the east and south sides of the Monckton Works. Rabbit Ings Country Park and an industrial estate are located east and north east of the Site beyond the B6428. The nearest residential property is located to the south west of the Site, beyond the intervening tree and shrub cover on the Monckton Works site and to the south of the B6428.

2.8 A railway line generally runs north to south to the west of the Monckton Works. Royston Village is located to the west of the Site, beyond the railway line, along with intervening some tree cover and fields.

**Road Network**

2.9 Road access to the Site is provided by a bellmouth onto the B6428 Lund Hill Lane and which was used as the southern access to the Monckton Works.

**Rights of Way**

2.10 There are no public rights of way within the Site nor the Monckton Works.

2.11 Footpath 11 (Royston) is located to the south of the Site and runs from the south side of the B6428 Lund Hill Lane in a south east then south direction.

2.12 There are various recreational routes within Rabbit Ings Country Park to the south east of the Site beyond the intervening tree and shrub cover and the B6428 Lund Hill Lane.

**Services**

2.13 Within the proposed Site compound there are no existing services.

2.14 The Monckton Works has an 11kV connection to the National Grid which is situated to the north west of the Works office block.

2.15 There is an existing mains gas skid located on the Monckton Works site to the north west side of the northern part of the internal access road for the Scheme.

2.16 Surface water from the Site, along with the wider Monckton Works, generally percolates into the underlying strata. The Monckton Works process water discharges were carried out in accordance with relevant environmental permits/ discharge consents. Following the cessation of production at Monckton Works it is understood that there are no such process water discharges off-site.

2.17 Various other services are present within the remainder of the Monckton Works which would be unaffected by the Scheme.

# 3.0 Project Description

## Introduction

3.1 This chapter provides a description of the proposed gas peaking Scheme for the generation of up to 10 MW of electricity during periods of peak demand on the National Grid over a temporary 20 year period.

## Proposed Gas Peaking Scheme

Process

3.2 The proposed gas peaking plant would use mains gas fired reciprocating engines. This Scheme together with other developments of this type comprise an important component of the UK energy policy.

3.3 The gas peaking plant would set aside two time slots of five hours each per day for the Capacity and the Short Term Operating Reserve ('STOR') markets (as defined by Ofgem and the National Grid). The time allocated for the capacity market would be set in accordance with the predictive demands of the grid which will be managed by a third party company with the relevant software, expertise and experience in managing the capacity market, and are already providing such service to the National Grid. Within these time slots, the plant will be called on for a maximum of two hours to produce the electricity.

3.4 The remaining time outside the slots may be used to produce baseload electricity if there is a commercial case for production. However, at the current prices of gas the engines will be switched off and be in stand-by mode during the non-capacity market time as it is not efficient to produce gas based electricity at normal market prices of electricity day ahead market.

3.5 The proposed generator sets would be connected by underground apparatus to the existing mains gas skid which is located on the Monckton Works site to the north west side of the northern part of the internal access road for the Scheme.

3.6 The 11kV electricity output from the HV room would be connected by underground cable to the existing Monckton Works 11kV grid connection, for onward supply to the National Grid.

3.7 The mains gas and electrical connections referred to above would be progressed by the relevant statutory undertakers or an appointed contractor, as appropriate, under permitted development rights.

Site Selection

3.8 Gas peaking plant sites are primarily chosen for their access to the local electricity market network, which should be capable of accepting their export of electricity at an acceptable cost and which could then provide valuable support to local customers in terms of stress on the local and wider electricity network.

3.9 The Site has been chosen for its proximity to the existing Monckton Works 11kV supply which is connected to the National Grid network, keeping connection costs to an acceptable level.

3.10 The Site is currently brownfield forming part of the Monckton Works.

3.11 The combination of the factors above means that the Site is an economically viable option for the proposed Scheme, helping to improve the security of electricity supply notably for local residents and businesses.

Access

3.12 Road access to the Site is provided by a bellmouth onto the B6428 Lund Hill Lane and which was used as the southern access to the Monckton Works, as shown on Figures 1 and 2.

3.13 Vehicles associated with the construction of the peaking plant facility would then use the exiting internal hard surfaced road which extends to the proposed peaking plant compound within the southern part of the Monckton Works.

3.14 In the event that it is necessary to remove any materials following the demolition of the disused biological effluent treatment plant, which is currently located on the peaking plant part of the Site, then such vehicular movements would use the southern access to the Monckton Works. However, at this stage it is envisaged that the majority of material from the demolition of this existing disused facility would be recycled for re-use on Site or within the wider Monckton Works where possible. However, scrap metal would be transported off-site for recycling elsewhere.

3.15 The gas peaking plant would be controlled remotely and would therefore operate on an unmanned basis during its temporary 20 year operational life. Vehicular movements associated with the periodic maintenance of the peaking plant facility would use the Site access referred to above.

Design of the Gas Peaking Facility Compound

3.16 The proposed gas peaking facility compound would involve some 0.2 hectares of land in the southern part of the Monckton Works, as shown on Drawing No. 01 Rev. A, following the demolition and removal of the disused biological effluent treatment plant. The plan layout and elevation detail for the peaking plant and ancillary equipment to be installed within the facility compound is shown on the following drawings:

- Drawing No. 02 Peaking Plant Plan and Elevation Detail;
- Drawing No. 03 HV Room Plan and Elevations;
- Drawing No. 04 LV Room Plan and Elevations; and
- Drawing No. 05 Palisade Fencing Elevations.

3.17 Some 5 X 2 MW generator sets would be installed on-site. The generator sets would be housed within acoustically attenuated metal containers, each with adjoining air inlet and extractor attenuators, radiators and emissions flue. Within the compound there would be an 11/400V TX transformer, along with low voltage ('LV') and high voltage ('HV') apparatus housed within metal containers, with associated underground cable connection to the 11kV grid connection on the Coke Work. The generator sets would be connected with the mains connected gas skid on the Monckton Works. The above ground infrastructure would be positioned onto concrete pad foundations that would be laid within the existing hardcore on Site to a finished ground level of 62 metres AOD. The peaking plant compound would be securely fenced with Palisade fencing and access gates at the north east corner. The transformer compound would also be secured by a Palisade fence with access gate to the south side.

3.18 The Scheme would provide a flexible modular energy supply which could rapidly deliver between 2 to 10 MW of power in response to the demands of the National Grid and would be available for use 24 hours per day 7 days per week. The generator sets would use a mains gas supply, which would be connected to the gas peaking plant, in order to generate electricity primarily during periods of peak demand on the National Grid. It is anticipated that the generators would normally run around 800 hours per year as standby electricity generation when the local area is in shortage/stress, which could occur at any time of day. However, it is expected that such periods of shortage/stress are likely to occur between 1600 to 1930 hours Monday to Friday during the months of November to March inclusive. In this respect, it is worth noting that without such contingencies electricity shortages could be experienced resulting in blackouts. As such, National Grid are supporting the development of small local distributed electricity generation to cover times of such potential shortage.

Generators

3.19 The Scheme provides for the installation of 5 X 2 MW generator sets to produce standby electricity generation for National Grid. Each proposed generator would be housed within an acoustically attenuated metal container and shown on Drawing No. 02 Each container would be approximately 12 metres in length (extending to 16 metres allowing for the above ground attenuators at either end of the containers), by 3.2 metres in width and 3.5 metres in height. Each generator container, with attenuators and radiators would be finished in an olive green colour. The exhaust flue would be located on top of each generator container and metallic silver in colour. The top of the exhaust flue would be some 7.1 metres above ground level.

3.20 A bank of radiators would be located adjacent to west side of each of the generator container and would assist with cooling the generator together with the exhaust flue in order to allow the safe dispersion of exhaust gases. Additional studies have been provided on noise and air quality in order to demonstrate that the emissions do not breach guideline limits at nearby receptors and these matters are further addressed respectively in Chapters 9 and 11 of this document.

3.21 The engine technology to be used would consist of the Best Available Technology ('BAT') for the purpose of small scale, rapid start standby generation. In addition, such generators would be connected to the nearby electricity distribution network close to the point of use and hence offers additional efficiency improvements over larger scale plants.

3.22 The proposed engines are more efficient than those used in open cycle gas turbines and coal fired power stations, which predominantly operate within a lower efficiency range. On the basis that the generating station would be connected to the electricity distribution network close to the point of use, there would be carbon efficiency savings when compared with the long distance transmission losses associated with open cycle gas turbines and coal fired power stations. The overall carbon impact is further reduced because the generating plant only operates for a low number of hours per year.

High Voltage Room

3.23 The purpose of the HV room is to take the electricity from the generators and convert it to a normalised 11kV voltage, before transfer off-site by underground cables to the 11Kv grid connected supply within the Monckton Works. The HV room would include involve two adjoining containers giving an overall dimension of approximately 12 metres length, 4.9 metres width and 2.9 metres height as shown on Drawing No. 03. The HV container would be finished in an olive green colour.

Low Voltage Room

3.24 The LV Room would include the metering equipment to measure the amount of electricity generated on the Site, as required by the Distribution Network Operator. The metal container overall dimensions would be approximately 6.1 metres in length, 2.5 metres in width and 2.5 metres in height as shown on Drawing No. 4. The container would be finished in an olive green colour.

11/400kV Transformer

3.25 The 11/400kV transformer would be installed on the Site measuring up to 2 metres in width, by 2 metres in length and 1.5 metres in height. The compound for the transformer would measure 5.2 metres in length by 4 metres in width, with Palisade style security fencing and access gate.

Security Fencing

3.26 The security fencing and access gates would seek to ensure that the gas peaking facility compound and transformer compound remain secure at all times.

3.27 The proposed fencing, with access gates, would be installed around the perimeter of the gas peaking compound at a height of 2.4 metres and of a Palisade style with a metallic silver colour, as shown on Drawing No. 05. Such Palisade fencing would replace the existing chain link fencing around the gas peaking compound part of the Site.

3.28 Palisade style fencing and access gate to 2.4 metres in height would also be provided around the transformer compound and finished with a metallic silver colour.

Drainage

3.29 Surface water from the Site would drain into the underlying strata in non-hard surfaced areas along with any flow off-Site which would generally flow to the south across vegetated areas within the south part of the Monckton Works site. The rate of surface water run-off from the Site would not increase from that existing on-site at present.

3.30 There would no foul drainage arising within the proposed compound.

Lighting

3.31 During the operational phase of the Scheme the gas peaking plant would be controlled by an automated process controlled from a remote site. Service personnel would also visit the Site once per week for the periodic monitoring and maintenance of the equipment on Site. Hence,

the external lighting requirements for the compound would therefore be limited to the parking area and security lighting.

3.32 The lighting proposals would be designed in accordance with the requirements of Workplace (Health, Safety and Welfare) Regulations 1992. Such lighting would be designed to reduce unnecessary light spill outside the Site boundary, as advised by Institute of Light Engineers (ILE) Guidance Notes for the Reduction of Light Pollution. The lighting proposals for the Scheme would be subject to prior agreement with BMBC.

Waste

3.33 On-site waste arising as a result of the periodic servicing of the plant and associated infrastructure would be collected and removed from Site by the service operative for recycling or disposal at a suitably licensed facility.

**Construction Operations**

3.34 The start date for the construction programme will depend on a number of factors including the outcome of the planning process, procurement of components and availability of contractors. It is anticipated that on-site construction would take 12 weeks to complete including three main phases:

1. Ground Works
    a. Demolition of biological effluent treatment plant and associated infrastructure;
    b. Trench and lay cables;
    c. Excavate and pour concrete for foundations;
2. Gas Peaking and Ancillary Plant Installation
    a. Deliver large components;
    b. Employ a crane;
    c. Install Plant Components;
3. Commissioning
    a. Electrical connections;
    b. Commissioning (checking and setting in operation);
    c. Site reinstatement.

3.35 A draft Construction Environment Management Plan (CEMP) will be produced by the Contractor for review and approval by BMBC prior to construction.

3.36 The construction works would carried out during the normal working hours (0700 to 1900 hours Monday to Friday and 0700 to 1300 hours on Saturdays). No such construction operations would be carried out on Sundays, public or Bank Holidays.

3.37 Excavated material would be reused on the Site where possible. Alternatively, such excavated material could potentially be used, where suitable, as fill material for the reclamation of the Colliery Tip.

3.38 Concrete pads would be used for the foundations of the proposed peaking plant and ancillary equipment on Site. The concrete pads would be formed using imported ready mixed concrete from a suitable nearby site.

3.39 The construction lighting requirements would comply with the requirements stipulated by the Health and Safety Regulations. Security lighting would also be maintained on-site during the construction period. Such lighting would be designed in order to comply with the requirements of Workplace (Health, Safety and Welfare) Regulations 1992 and reduce unnecessary light spill outside the Site boundary.

3.40 During the 12 week construction phase of the Scheme the HGV movements would be as follows:

- 1 HGV to Site with plant for the demolition of the disused biological effluent treatment plant and the excavation of trenches and foundations;
- 1 HGV to Site in order to remove any waste material to a suitable recycling or licensed disposal site;
- 1 HGV to Site to deliver sand;
- 1 HGV to Site to deliver cement;
- 1 HGV to Site for the delivery of each gas peaking generator set (x 5);
- 1 HGV to Site for the delivery of acoustic drop overs;
- 1 HGV to Site for the delivery of all electrical switchgear;
- 1 HGV to Site for the delivery of all cable requirements;
- 1 HGV to Site for the delivery of palisade fencing and gates;
- 1 crane on Site for the duration of all offloads.

3.41 The numbers of people on Site during the construction phase of the Scheme would be as follows:

- 1 site manager during the construction phase with 1 car;
- 1 install team consisting of 4 engineers and 2 service vans;
- Lift and shift crew consisting of up to 6 people and 2 service vans;
- 1 commissioning engineer once the units are installed with 1 service van.

3.42 In this respect, it is anticipated that there would be a total of 28 HGV movements (14 in and 14 out) during the 12 week construction period. Assuming a 5.5 workings days per week (Monday to Friday 0700 to 1900 hours and Saturday 0700 to 1300 hours) this equates to an average of less than 1 HGV movement in and out of the Site per operational day. In terms of worst case it is assumed that there would be no more than 8 HGV movements (4 in and 4 out) on any working day.

3.43 In terms of staff working on Site during the construction period it is anticipated that there would be no more than 10 car and/or service van movements (5 in and 5 out) per working day. It is envisaged that staff movements to and from the Site during the construction period would occur outside peak travel periods on the local highway network.

**Staff**

3.44 The construction phase of the Scheme would involve some 12 workers on Site periodically during the 12 week construction period.

3.45 During the operation of proposed peaking plant, over a temporary 20 year period, there would be no permanent operational staff on Site and the facility would be managed remotely. However, maintenance engineers would visit the Site approximately once per week in order to monitor and service the peaking plant and ancillary equipment.

3.46 In addition, site security staff would be used in order to safeguard the security of the facility for its construction and operational life.

3.47 The Scheme is part of a wider business strategy to develop additional generating facilities elsewhere in the UK and additional staff opportunities would be created for overall management of the business and the trading of energy with the National Grid.

**Decommissioning**

3.48 At the end of a 20 year operational period, the gas peaking plant would be decommissioned and the land would be restored to a beneficial afteruse which would be subject to a scheme to be submitted to and approved by BMBC. The above ground equipment would be removed from the Site. Unless otherwise agreed, the upper section of the concrete foundations would be removed to a depth of 0.5 metres and any underground cables would be left in place.

# 4.0 Need and Benefits

**Introduction**

4.1 This chapter of the Supporting Statement considers the strategic need for and benefits of the Scheme based on a review of Government Policy and Strategy.

**National Energy Policy and Strategy**

National Policy Statements

4.2 In July 2011, the Department of Energy and Climate Change (DECC) Published the Overarching National Policy Statement (NPS) for Energy EN-1 ('NPS EN-1').

4.3 NPS EN-1 sets out national policy for energy infrastructure and *'…is likely to be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended)'* (paragraph 1.2.1).

4.4 With regard to the matter of energy security, Policy Statement EN-1 states (our emphasis) that *'…It is critical that the UK continues to have secure and reliable supplies of energy as we make the transition to a low carbon economy…'* (paragraph 2.2.20) since '…energy is vital to economic prosperity and social well-being…' (paragraph 2.2.1).

4.5 Paragraph 3.6.2 of NPS EN-1 states that:

*'Fossil fuel generating stations contribute to security of energy supply by using fuel from a variety of suppliers and operating flexibly. Gas will continue to play an important role in the electricity sector – providing vital flexibility to support an increasing amount of low-carbon generation and to maintain security of supply'. (emphasis added)*

4.6 Paragraph 3.6.3 of NPS EN-1 goes on to state that:

*'Some of the new conventional generating capacity needed is likely to come from new fossil fuel generating capacity in order to maintain security of supply, and to provide flexible back-up for intermittent renewable energy from wind. The use of fossil fuels to generate electricity produces atmospheric emissions of carbon dioxide. The amount of carbon dioxide produced depends, amongst other things, on the type of fuel and the design and age of the power station. At present coal typically produces about twice as much carbon dioxide as gas, per unit of electricity generated'. (emphasis added)*

4.7 Paragraph 3.6.8 of NPS EN-1 also states that:

*'a number of fossil fuel generating stations will have to close by the end of 2015. Although this capacity may be replaced by new nuclear and renewable generating capacity in due course, it is clear that there must be some fossil fuel generating capacity to provide back-up for when generation from intermittent renewable generating capacity is low and to help with the transition to low carbon electricity generation'. (emphasis added)*

4.8 It is clear from a review of NPS EN-1 that the Government expect new gas generation stations to come forward through the planning system to ensure energy security and to support low carbon electricity generation. As such the Scheme is considered to be consistent with the aims of NPS EN-1.

Planning Our Electric Future: A White Paper for Secure, Affordable and Low Carbon Energy (July 2011)

4.9 In July 2011, DECC published the White Paper 'Planning our Electrical Future: a White Paper for Secure, Affordable and Low-Carbon Electricity' under its Electricity Market Reform agenda. The White Paper set out the Government's commitment to transform the UKs electricity system to ensure that future electricity supply is secure, low-carbon and affordable. The reforms outlined seek to ensure that, by 2030, the UK will have a flexible, smart and responsive electricity system, powered by a diverse and secure range of low-carbon sources of electricity. The Paper recognises that, in order to ensure continued international competitiveness, a number of unprecedented challenges need to be addressed, namely:

- security of supply is threatened as existing plants close (over the current decade around a quarter (20 GW) of existing generation capacity will be lost as old plant closes);
- decarbonise electricity generation (the need to transform the UK permanently into a low-carbon economy to meet renewable energy targets);
- increased demand for electricity (despite improvements in domestic and non-domestic energy efficiency, overall demand for electricity is likely to double by 2050); and
- electricity price rise (whilst we may experience short-term fluctuation, it is likely that there will be overall increases in wholesale costs, the carbon price and stricter environmental policies, which combined with large investment costs, are likely to lead to higher overall electricity cost).

4.10 The Scheme would help to ensure energy security and would assist in the move to decarbonised energy generation by supporting renewable energy through addressing intermittency of supply from these technologies.

Energy Security Strategy (November 2012)

4.11 Paragraph 4.7 of the Energy Security Strategy states that:

*'To date, we have largely relied on competitive markets to deliver a diverse electricity mix. The nature of electricity and the fact that it cannot be stored cheaply means that we need a mix of baseload plants which run all year round and at all times of the day, combined with more flexible plants that can operate on a "mid-merit" or "peaking" basis as needed. Different technologies suit these different purposes and the market price signal has provided the incentives for these different technologies to come forward' (emphasis added)*

4.12 Paragraphs 4.16 and 4.17 go on to state that:

*'…gas currently forms an integral part of the UK's generation mix. For instance, in 2011 combined cycle gas turbines (CCGTs) generated around 40 per cent of our electricity. Gas plants are quick to build, have relatively low capital costs, emit around half the carbon of coal power stations, and are a reliable and flexible source of electricity.*

*The Government expects that gas will continue to play a major role in our electricity mix over the coming decades, alongside low-carbon technologies as we decarbonise our electricity system. The role gas plays will be determined by the market, whilst keeping emissions within the limits set out in the carbon budgets. Unabated gas will continue to play a crucial role in our generation mix for many years to come and the amount of gas capacity we will need to call on at times of peak demand will remain high. In the long term, the development of cost competitive CCS should ensure gas (and coal) can continue to play a full role in a decarbonised electricity sector.' (emphasis added)*

4.13 The Scheme would utilise clean burning gas engines to provide energy security and flexibility to the National Grid and would be less polluting than coal, diesel or other forms of fossil fuel generation.

Energy Act 2013 (December 2013)

4.14 The Energy Act 2013 focuses on new incentives for low-carbon and secure electricity generation, needed to achieve the UK's carbon emissions caps to 2020 and 2025 under carbon budgets.

4.15 The Energy Act expresses the Government view that the UK is at a critical juncture in the way it generates electricity (both for domestic and non-domestic use). Around a fifth of the capacity (available at 2011) is set to close over this decade, at a time when demand for electricity is expected to double from its current level by 2050. Set against this, the Government considers it is imperative that the right mechanisms are in place to attract the £110 billion investment needed to ensure that the UK can meet its requirements for secure flexible supplies at affordable prices.

4.16 The Scheme represents a significant financial investment and would contribute to meeting the investment requirements and energy security needs set out in the Energy Act.

Draft Energy Strategy and Policy Statement Consultation (August 2014)

4.17 In August 2014 DECC published the Draft Energy Strategy Policy Statement Consultation Document and consultation responses are currently being reviewed. The document sought views on the (then Coalition) Government's proposed draft prepared in accordance with the Energy Act 2013 (which provides the powers for the Secretary of State to designate a Strategy Policy Statement). The statement was designed to provide context and guidance about priorities and desired outcomes of Government to the regulator, and provides the opportunity to define a strategic vision of the likely needs over the long term.

4.18 The strategy identified priorities for delivering the UK's energy policies. The draft strategy sought to: 'unlock investment in the UKs energy infrastructure that will support economic growth' and 'play a leading role in efforts to secure international action to reduce greenhouse gas emissions and tackle climate change.' Regarding the need to unlock the necessary investment, the strategy states that (paragraph 13);

4.19 'Substantial investment in generation, transmission and distribution infrastructure is needed by 2020 to ensure energy security, maintain system resilience and support the transition to a low carbon economy.'

4.20 The Scheme represents a significant financial investment and would help meet the substantial investment needed to ensure energy security, maintain system resilience and support the transition to a low carbon economy as set out in the Draft Energy Strategy and Policy Statement Consultation.

Maintaining UK Energy Security (May 2015)

4.21 In May 2015 the Government updated its policy on Maintaining Energy Security. Central to UK energy security is the Government's policy in respect of Electricity Market Reform ('EMR'). EMR is designed to deliver the Government's core objectives of:

- Security of Supply;
- Climate Change, and
- Affordability.

4.22 The EMR sets out two mechanisms for incentivising investment in the nation's energy infrastructure, namely:

- Contracts for Difference, which provides long term price stabilisation, allowing investment to come forward at a lower capital cost, and
- Capacity Agreements (within a capacity Market), which provides payments for reliable capacity to be available when needed, helping to ensure security of supply.

4.23 Capacity Agreements enhance energy security by ensuring that sufficient reliable capacity is in place to meet the demand required from the national grid. In return for capacity payments facilities, such as the Scheme, must be able to deliver the necessary energy when requested, or face financial penalties.

4.24 The cost of this Capacity Market is kept to a minimum by an auction process which sets the level of capacity payments for specified periods and technologies.

4.25 The Scheme would serve the Capacity Market and would provide the type of significant capital investment that the Government envisaged would come forward through the mechanisms promoted through EMR.

**Conclusion**

4.26 It can be seen from the above review that the national policy message on energy security is strong and unambiguous. There is a clear need to ensure security of supply through the development of a diverse energy generation system to support the increased deployment of renewable energy and increased peak demands

4.27 The Scheme would provide the type of significant capital investment that the Government envisaged would come forward through the mechanisms promoted through EMR. It would provide a flexible modular energy supply which could almost instantly deliver 2-10MW of power in response to the demands of the National Grid.

# 5.0 Planning Policy

**Introduction**

5.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that '*If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise.'*

5.2 In relation to the Scheme the development plan comprises the following documents:

- Saved policies of the Barnsley Unitary Development Plan (2000); and
- Barnsley Local Development Framework Core Strategy 2011 – 2026 (2011).

5.3 Other material planning policy considerations include the following documents:

- National Policy Statement for Energy EN-1 (NPS EN-1);
- National Planning Policy Framework (2012) ('NPPF');
- National Planning Practice Guidance (2014), as amended ('NPPG'); and
- Emerging Barnsley Local Plan (Publication Draft).

5.4 This chapter refers to the development plan documents listed above, including saved policies which are considered to be relevant to the Scheme, and then addresses other material planning policy considerations. The NPPF sets out the Government's planning policies for England and comprises a significant material planning consideration.

5.5 Paragraph 215 of the NPPF confirms that '…due weight should be given to relevant policies in existing plans according to their degree of consistency with this Framework (the closer the policies in the plan to the policies in the Framework, the greater the weight that may be given).'

5.6 Paragraph 216 of the NPPF confirms that 'decision-takers may also give due weight to relevant policies in emerging plans' according to 'the stage of preparation of the emerging plan…; the extent to which there are unresolved objections to relevant policies…; and …the degree of consistency of relevant policies in the emerging plan to the policies in this Framework.'

5.7 Each subsequent chapter of this Supporting Statement that deals with environmental and socio-economic matters (Chapters 6 to 13 inclusive) considers the extent to which the Scheme

accords with relevant planning policies, then Chapter 14 Summary and Conclusion deals with the extent to which the Scheme accords with the development plan unless material considerations indicate otherwise.

**Local Development Plan**

i. Saved policies of the Barnsley Unitary Development Plan 2000

5.8 The Barnsley Unitary Development Plan was adopted in December 2000 ('Barnsley UDP'). The Secretary of State issued a direction in 2007 that 'saved' a number of policies in the Barnsley UDP and such policies which are relevant to the Scheme are referred to below. The UDP Proposals Map identifies the Site as an Existing Employment Area.

5.9 Policy ED7 Existing Employment Areas confirms that defined employment policy areas will remain in employment use, unless otherwise stated in community area volumes, development will normally be permitted for business, industry, and storage and distribution. Other employment generating uses may also be permitted if they are compatible with adjoining uses.

5.10 Policy RO4 Employment Policy Areas states that in accordance with Policy ED7, as described above, Monckton Coke and Chemical Works (RO4/2) will remain in employment use.

ii. Barnsley Local Development Framework: Core Strategy 2011 – 2026 (2011)

5.11 The Barnsley Core Strategy (CS) was adopted in September 2011 and replaces many of the saved policies within the Barnsley UDP.

5.12 CSP 4 Flood Risk confirms, amongst other things, the extent and impact of flooding will be reduced by not permitting new development where it will be at an unacceptable risk of flooding or would give rise to flooding elsewhere.

5.13 CSP 19 Protecting Existing Employment Land advises that existing employment land will be retained in order to safeguard existing or potential jobs.

5.14 CSP 26 New Development and Highway Improvement requires all new development to be designed and built to provide safe, secure and convenient access for all road users.

5.15 CSP 36 Biodiversity and Geodiversity expects development to conserve and enhance the biodiversity and geological features of the borough by protecting and improving habitats, species, sites of ecological value and sites of geological value. Development which may harm

a biodiversity or geological feature will not be permitted unless effective mitigation and/or compensatory measures can be ensured.

5.16 CSP 39 Contaminated and Unstable Land confirms that where the future users or occupiers of a development would be affected by contamination or stability issues, proposals must be accompanied by a report which shows the investigations have been carried out to work out the nature and extent of contamination or stability issues and the possible effect it may have on the development and its future users, the natural and historic environment.

5.17 CSP 40 Pollution Control and Protection states that development will be expected to demonstrate that it is not likely to result, directly or indirectly, in an increase in air, surface water, groundwater, noise, smell, dust vibration, light or other pollution which would unacceptably affect or cause a nuisance to the natural and built environment or to people.

**National Policy and Guidance**

National Policy Statement for Energy 2011 (NPS-EN1)

5.18 NPS-EN1 sets out national policy for energy infrastructure and is a material consideration in decisions on planning applications. NPS-EN1 has been addressed in Chapter 4 Need and Benefits. It is not proposed to re-iterate the matters covered in relation to this document other than to note that the Scheme is considered to be consistent with the aims of NPS-EN1.

National Planning Policy Framework 2012

5.19 The NPPF was published in March 2012 and sets out the Government's planning policies for England. Paragraph 2 confirms that the NPPF '…is a material consideration in planning decisions.'

5.20 Paragraph 6 of the NPPF confirms that 'The purpose of the planning system is to contribute to the achievement of sustainable development...' Paragraph 7 of the NPPF refers to three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles:

- '***an economic role*** *– contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;*

- ***a social role*** *– supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and*
- ***an environmental role*** *– contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.'*

5.21 Paragraph 8 of the NPPF confirms that '*to achieve sustainable development, economic, social and environmental gains should be sought jointly and simultaneously through the planning system.'*

5.22 Paragraph 9 of the NPPF notes that 'Pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life, including (but not limited to): making it easier for jobs to be created in cities, towns and villages; moving from a net loss of bio-diversity to achieving net gains for nature; …improving the conditions in which people live, work, travel and take leisure.'

5.23 Paragraph 11 of the NPPF confirms that '…applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise.'

5.24 Paragraph 12 of the NPPF advises that '…Proposed development that accords with an up-to-date Local Plan should be approved, and proposed development that conflicts should be refused unless other material considerations indicate otherwise.' Paragraph 12 then confirms that 'It is highly desirable that the local planning authorities should have an up-to-date plan in place.'

5.25 Paragraph 13 confirms that the NPPF constitutes guidance as a material consideration in determining applications.

5.26 Paragraph 14 confirms that at the heart of the NPPF is a: '….presumption in favour of sustainable development……' Paragraph 14 also confirms that for decision taking this means approving development proposals that accord with the development plan without delay; and where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless: any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the NPPF taken as a whole; or specific policies in the NPPF indicate development should be restricted.

5.27 The NPPF includes 12 core planning principles (paragraph 17), which confirm that planning should, amongst other matters: 'proactively drive and support sustainable economic development to deliver homes, businesses and industrial units, infrastructure and thriving local places that the country needs…'; '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 .... protecting the Green Belts around them, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it'; 'contribute to conserving and enhancing the natural environment and reducing pollution...'; and 'conserve heritage assets in a manner appropriate to their significance...'

5.28 The NPPF paragraph 18 confirms that the Government is committed to securing economic growth in order to create jobs and prosperity, building on the country's inherent strengths, and to meeting the twin challenges of global competition and of a low carbon future.

5.29 Paragraph 19 of the NPPF details that the Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth and significant weight should be placed on the need to support economic growth through the planning system.

5.30 NPPF paragraph 20 states that to help achieve economic growth, local planning authorities should plan proactively to meet the development needs of business and support an economy fit for the 21st century.

5.31 Paragraph 32 advises that developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment and, amongst other things, plans and decisions should take account of whether: the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure; and development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

5.32 NPPF paragraph 75 notes that planning policies should protect and enhance public rights of way and access, then confirms local authorities should seek opportunities to provide better facilities for users, for example by adding links to existing rights of way networks.

5.33 NPPF paragraph 96 confirms that in determining planning applications, local planning authorities should expect new development to: comply with adopted Local Plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the

applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.

5.34 The NPPF paragraph 109 confirms that the planning system should contribute to and enhance the natural and local environment by a range of matters involving: protecting and enhancing valued landscapes, geological conservation interest and soils; recognising the wider benefits of ecosystem services; minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate. In this respect, the NPPF then includes specific policy guidance that is relevant to planning decisions and these are addressed below.

5.35 The NPPF paragraph 111 advises that planning decisions should encourage the effective use of land by re-using land that has been previously developed (brownfield land), provided that it is not of high environmental value.

5.36 The NPPF paragraph 118 advises that when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- proposed development on land within or outside a SSSI likely to have an adverse effect on a SSSI (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSI;
- development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;

- opportunities to incorporate biodiversity in and around developments should be encouraged;
- planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss; and
- the following wildlife sites should be given the same protection as European sites: potential Special Protection Areas and possible Special Areas of Conservation; listed or proposed Ramsar sites; and sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

5.37 The NPPF paragraph 120 guides that to prevent unacceptable risks from pollution and land instability, planning decisions should ensure that new development is appropriate for its location. Paragraph 120 then requires that the effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account and where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.

5.38 The NPPF paragraph 121 advises that planning decisions should also ensure that, amongst other things, the site is suitable for its new use taking into account ground conditions and land instability, including from former activities such as mining.

5.39 NPPF paragraph 122 confirms that local planning authorities should focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes. NPPF paragraph 122 also notes that local planning authorities should assume that these regimes will operate effectively.

5.40 Paragraph 123 of the NPPF confirms that planning decisions should aim to:

- avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;
- mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions;

- recognise that development will often create some noise and existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established; and

- identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.

5.41 The NPPF paragraph 125 notes that by encouraging good design, planning decisions should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

5.42 Paragraph 128 of the NPPF states that in determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. Paragraph 128 then advises that the level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.

5.43 NPPF paragraph 129 advises that local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal, including by development affecting the setting of a heritage asset, taking account of the available evidence and any necessary expertise. Paragraph 129 then advises that the local planning authority should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.

5.44 Paragraph 131 of the NPPF states that in determining planning applications, local planning authorities should take account of: the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and the desirability of new development making a positive contribution to local character and distinctiveness.

5.45 Paragraph 132 of the NPPF advises that when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed

building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and WHSs, should be wholly exceptional.

5.46 Paragraph 133 of the NPPF states that where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: the nature of the heritage asset prevents all reasonable uses of the site; no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and the harm or loss is outweighed by the benefit of bringing the site back into use.

5.47 Paragraph 134 of the NPPF advises that where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

5.48 The NPPF paragraph 135 confirms that the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application and that in weighing applications that affect directly or indirectly non-designated assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

5.49 Paragraph 136 of the NPPF advises that local planning authorities should not permit loss of the whole or part of a heritage asset without taking all reasonable steps to ensure the new development will proceed after the loss has occurred.

5.50 Paragraph 139 of the NPPF notes that non-designated heritage assets of archaeological interest that are of demonstrably equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.

5.51 NPPF paragraph 197 confirms that in assessing and determining proposals, local planning authorities should apply the presumption in favour of sustainable development.

National Planning Practice Guidance

5.52 The NPPG suite was issued by the Government in March 2014 and includes various sections that are relevant to the Scheme and referred to below.

5.53 NPPG Air quality provides guidance in relation to planning and air quality, including when air quality is relevant to a planning decision, the level of detail for an air quality assessment, mitigation measures and how considerations about air quality fit into the development management process.

5.54 NPPG Before submitting an application refers to pre-application engagement including with the local planning authority, statutory and non-statutory consultees, elected members and local people.

5.55 NPPG Climate change deals with planning and climate change and notes, amongst other things, that planning can help increase the resilience to climate change impact through the location, mix and design of development (paragraph 1). The NPPG Climate change refers to relevant legislation and primarily provides guidance on climate change in relation to plan making. This document notes at paragraph 5 that climate changes need to be taken into account in a realistic way and local planning authorities will need to consider matters including the potential vulnerability of a development to climate change risk over its whole lifetime.

5.56 NPPG Conserving and enhancing the historic environment confirms that protecting and enhancing the historic environment is an important component of the NPPF's drive to achieve sustainable development (paragraph 1) and includes guidance on decision-taking.

5.57 NPPG Consultation and pre-decision matters provides guidance on local planning authority consultation including for planning applications in relation to the public, along with statutory and non-statutory consultees.

5.58 NPPG Determining a planning application provides guidance on the determination of planning applications, with reference to the development plan and material planning considerations.

5.59 NPPG Environmental Impact Assessment provides guidance on the EIA process. This document confirms in paragraph 2 that the aim of EIA is to protect the environment by ensuring that a local planning authority when deciding whether to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process.

5.60 NPPG Flood Risk and Coastal Change sets out the planning approach to flood risk and coastal change including planning objectives to appraise, manage and reduce the risk of flooding.

5.61 NPPG Health and wellbeing confirms that, amongst other things, local planning authorities should ensure that health and wellbeing are considered in planning decision making

(paragraph 1). This document confirms the range of matters that could be considered through the decision making process in respect of health including, '…development proposals can…help create healthy living environments which should, where possible, include making physical activity easy to do…' and '…potential pollution and other environmental hazards, which might lead to an adverse impact on human health, are accounted for in the consideration of new development proposals…' (paragraph 2).

5.62 NPPG Land Affected by Contamination notes that, amongst other things, '…To ensure a site is suitable for its new use and to prevent unacceptable risk from pollution, the implications of contamination for a new development would be considered by the local planning authority to the extent that it is not addressed by other regimes.' (paragraph 3).

5.63 NPPG Land Stability deals with planning and land stability matters and, amongst other things, confirms in paragraph 1 that the planning system has an important role in considering land stability by '…minimising the risk and effects of land instability on property, infrastructure and the public;…and to bring unstable land, wherever possible, back into productive use.'

5.64 NPPG Light pollution provides guidance in relation planning and light pollution which confirms, amongst other things, in paragraph 1 that in relation to lighting schemes '…getting the design right and setting appropriate conditions at the planning stage is important…'.

5.65 NPPG Natural Environment provides guidance in relation to planning and the natural environment, including landscape, biodiversity, ecosystems and green infrastructure, along with brownfield land, soils and agriculture.

5.66 NPPG Noise notes in paragraph 9 that the management of noise associated with minerals extraction is considered in NPPG Minerals.

5.67 NPPG Travel plans, transport assessments and statements in decision-taking provides guidance in relation to transport matters including the assessment of impacts of development.

5.68 NPPG Use of Planning Conditions provides guidance on the use of planning conditions, including the application of the tests in the NPPF which confirms in paragraph 3 that such conditions should only be imposed when they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects.

5.69 NPPG Water supply, wastewater and water quality refers to the Water Framework Directive and the need to protect and enhance surface and groundwater resources and provides guidance on planning matters in this respect.

**Other Material Considerations**

Emerging Barnsley Local Plan Publication Draft August 2016

5.70 The emerging Local Plan has been published for consultation in August 2016. BMBC intend to submit this document to the Secretary of State for public examination in November 2016. Once formally adopted, the new Local Plan will replace the remaining Unitary Development Plan policies and the Core Strategy. Taking into account the late stage in the adoption process, it is considered that limited weight should be afforded to the emerging policies pertinent to the Scheme at this present time.

5.71 The emerging Local Plan Proposals Map shows the site to be within the Urban Fabric of Royston with no specific site allocation. Emerging SP policies and site allocations which are relevant to the Scheme are listed below:

- Policy SD 1 Presumption in favour of Sustainable Development;
- Policy GD1 General Development;
- Policy GD2 Temporary Buildings and Uses;
- Policy T1 Accessibility Priorities;
- Policy T3 New Development and Sustainable Travel;
- Policy T4 New Development and Highway Improvement;
- Policy T5 Reducing the Impact of Road Travel;
- Policy D1 Design;
- Policy BIO1 Biodiversity and Geodiversity;
- Policy LC1 Landscape Character;
- Policy CC3 Flood Risk;
- Policy CC4 Sustainable Drainage Systems (SuDS);
- Policy CL1 Contaminated Land and Unstable Land;
- Policy Poll1 Pollution Control and Protection.

5.72 Many of the emerging Local Plan policies address similar matters to those already covered in relation to the existing development plan and hence it is not proposed to reiterate such considerations here.

# 6.0 Ecology

**Introduction**

6.1 This chapter deals with the ecological impact of the Scheme and draws upon the findings of the Phase 1 Habitat Survey report, as prepared by Applied Ecological Services Ltd, which is enclosed at Appendix 1.

**Assessment of Impact**

6.2 The Phase 1 Habitat Survey report confirms that there are no sites of International Nature Conservation Interest within 10 kilometres of the study area, nor any Nationally designated sites within 2 kilometres of the study area. There is one Local Nature Reserve and one Local Wildlife Site within 2 kilometres of the study area and further details are provided within the Phase 1 Habitat Survey report. No statutory or non-statutory designate sites are located within the Site boundary.

6.3 The Site supports a limited range of habitat types and low potential for protected / notable species to occur.

6.4 There were no opportunities for roosting bats, however bat surveys undertaken during 2015 recorded the presence of foraging Noctule and common pipistrelle.

6.5 Lighting would be kept to a minimum on Site. Any lighting required during periods of darkness during the construction operations would be directed into the Site in order to seek to avoid light spill on retained habitat.

6.6 During the operational phase, any security and maintenance lighting during periods of darkness for the peaking plant compound would similarly be directed into the Site in order to seek to avoid light spill on retained habitat.

6.7 No signs characteristic of badger were found during site survey with no opportunities for sett creation within the Site. However due to their presence within the wider area and highly mobile nature of the species it is recommended that precautionary measures be undertaken prior to commencements of works to ensure that badgers are not harmed (thus maintaining legal compliance).

6.8 The Site and an area of 30 metres around the Site would be reassessed for the possible presence of badger setts immediately prior to commencement of construction.

6.9 Appropriate working and material storage methods would be implemented throughout the construction period to ensure adjacent habitats are not adversely affected by the Scheme.

6.10 In relation to adjacent habitats, best practises would be implemented during the 12 week construction phase of the peaking plant Scheme in order to minimise any fugitive dust emissions.

6.11 In addition, once operational the emissions from the peaking plant would be required to meet relevant air emissions standards and as such no unacceptable adverse effects are anticipated in relation to ecological habitats in the locality of the Site.

**Conclusion**

6.12 Taking into account the details contained within the Phase 1 Habitat Survey report, along with the proposed mitigation measures for the peaking plant Scheme, it is considered that there would be no unacceptable adverse ecological impact as a result of the proposed development. In this respect, it is concluded that the Scheme accords with planning policies, or parts thereof, that deal with ecological matters.

# 7.0 Landscape and Visual Appraisal

## Introduction

7.1 This chapter assesses the landscape and visual impacts of the Scheme.

## Assessment of Impact

7.2 Monckton Works operated for more than 130 years prior to ceasing production at the end of 2014. Many of the surface buildings, with associated infrastructure including chimneys remain in place on Site in 2016.

7.3 The Site covers some 0.3 hectares of land within the southern part of the Monckton Works, north east of Royston. The Site includes some 0.2 hectares of land for the proposed gas peaking facility compound on a parcel of land within the southern part of the Monckton Works and would replace the disused biological effluent treatment plant. The remaining 0.1 hectare of the Site includes an existing internal hard surfaced road to the southern site access for the Monckton Works to the B6428 Lund Hill Lane.

7.4 The ground level of the peaking plant compound is at approximately 62 metres AOD. The internal access track rises to between 67 and 68 metres AOD at the southern Monckton Works Site access to the B6428 Lund Hill Lane.

7.5 The topography of the land to the north of the peaking plant compound rises to approximately 74 metres AOD then falls to around 70 metres AOD in the central part of the Monckton Works. Land levels fall to the south east, south and south west of the peaking plant compound, with the B6428 at approximately 51.3 metres AOD adjacent to the railway bridge to the south west of the Monckton Works.

7.6 Established tree and shrub cover is located beyond the Site boundary on land around the proposed peaking plant compound and the majority of the internal access road to the southern Site access to the B6428 Lund Hill Lane.

7.7 The B6428 Lund Hill Lane generally runs along the east and south sides of the Monckton Works. Rabbit Ings Country Park and an industrial estate are located east and north east of the Site beyond the B6428. The nearest residential property is located to the south west of the Site, beyond the intervening tree and shrub cover on the Monckton Works site and to the south of the B6428.

7.8 A railway line generally runs north to south to the west of the Monckton Works. Royston is located to the west of the Site, beyond the railway line, along with intervening some tree cover and fields.

7.9 The Site is not located within an area which is nationally or locally designated for its landscape value.

7.10 There are no designated heritage assets included listed buildings or conservation areas within 1 kilometre of the Site.

7.11 The Site for the peaking plant compound is largely screened from publicly accessible viewpoints beyond the Monckton Works.

7.12 Land to the north, east and south of Monckton Works includes some open areas of open countryside, including the Rabbit Ings Country Park. The existing landscape character and views in the locality of the Site are often adversely affected by the wider Monckton Works, along with the industrial estate to the east, roads, railway line and Royston. Overall sensitivity to change of surrounding landscape character areas is low or low to medium.

7.13 The Scheme provides for the generation of up to 10MW of electricity, during periods of peak demand on the National Grid, over a temporary 20 year period on the Site, within the south part of the Monckton Works.

7.14 Some 5 x 2 MW generator sets would be installed within the proposed gas peaking compound. The generator sets would be housed within metal containers, each with an emissions flue, which extends to some 7.1 metres in height above the compound ground level. Within the compound there would be LV and HV apparatus housed within metal containers, with associated underground cable connection to the 11/400v TX transformer. The above ground infrastructure within the compound would be positioned onto concrete pad foundations that would be laid on Site. The containers for the peaking plant, along with the LV and HV equipment, would be coloured olive green. The compound would be securely fenced with Palisade fencing and access gates to the north east side at the intersection with the internal access road.

7.15 The Monckton Works has historically been used for activities associated with the coke and chemical activities for many decades. The Monckton Works still retains infrastructure associated with such activities although there is an ongoing programme of demolition of some built structures on site. The Scheme would involve the demolition of the existing biological effluent treatment plant and associated infrastructure. In this respect, it is considered that the

Scheme would not be out of character with activities that have been carried out on the Monckton Works nor the activities on the industrial estate to the north east.

7.16 The Site has been identified as being of low sensitivity to change. Physical change at the Site would result in a Negligible adverse impact during the temporary construction and operational period of the Scheme and Neutral impact following decommissioning.

7.17 On the basis that the proposed peaking plant compound is largely screened from residential receptors, users of public rights of way and roads, recreation and community facilities and visitors to heritage features, the visual impact during construction and operation would comprise at worst case Negligible adverse impact, followed by a Neutral impact once the Site has been decommissioned.

**Conclusion**

7.18 In conclusion, the Scheme during its construction and operation would have a similar landscape and visual impact to those arising from the existing Site and a **Neutral impact** following decommissioning. Taking the above matters into account, it is concluded that the Scheme accords with planning policies, or parts thereof, that deal with landscape and visual impact matters.

# 8.0 Hydrology and Hydrogeology

8.1 This chapter assesses the hydrological and hydrogeological impact of the Scheme. The flood risk assessment matters referred to below are set out using the order shown on the checklist in the NPPG document 'Flood Risk & Coastal Change', with identical section headings and numbering where possible.

**Hydrology and Flood Risk Assessment**

Development Description and Location

1a. Type of Development and Location

8.2 The Scheme provides for the installation and operation 10MW gas peaking plant on a parcel of land within the southern part of the Monckton Works. The ground level of the peaking plant compound is at approximately 62 metres AOD, and the internal access track rises to between 67 and 68 metres AOD at the southern Monckton Works Site access to the B6428 Lund Hill Lane. The topography of the land to the north of the peaking plant compound rises to approximately 74 metres AOD then falls to around 70 metres AOD in the central part of the Monckton Works. Land levels fall to the south east, south and south west of the peaking plant compound, with the B6428 at approximately 51.3 metres AOD adjacent to the railway bridge to the south west of the Monckton Works. The Site occupies an area administered by BMBC.

8.3 The Site lies in the catchment of the River Dearne. The nearest watercourse to the Site is Lineside Dyke which runs along the western boundary the Monckton Works in part within a railway cutting.

1b. Vulnerability

8.4 The peaking plant part of the Site includes a disused biological effluent treatment plant for the Monckton Works. The remainder of the Site included the south access point for the Monckton Works. The Scheme would involve gas peaking plant for the generation of electricity during periods of peak demand. Table 2 of the NPPF classifies electricity generating power stations as 'Essential Infrastructure' in terms of their flood risk.

1c. Local Development Documents

8.5 With respect to the Scheme, the development plan comprises the following documents:

(i) saved policies of the Barnsley UDP (2000); and

(ii) Barnsley Local Development Framework CS 2011 - 2026 (2011).

8.6 Flood risk in the area of interest is dealt with in following documents: the Don Catchment Flood Management Plan (Environment Agency, 2010); and the BMBC Strategic Flood Risk Assessment.

1d. Sequential/Exception Test

8.7 With regard to the Sequential Test, the Site is shown to lie in Flood Zone 1 on the Environment Agency's Flood Map and cannot therefore be moved to an area of lower flood risk. An exception test is not required for sites that are classified as 'Essential Infrastructure' and located in Flood Zone 1 (Table 3 of the NPPG).

1e. Risk of Flooding to Occupants and / or Users

8.8 The proposed equipment to be installed on Site includes containers for the generators and associated infrastructure which would be occupied periodically during period of routine maintenance.

2. Definition of Flood Hazard

2a. Sources of Flooding

8.9 The Site is not at risk of flooding from rivers or, 'blue-line', watercourses. There are no records of any fluvial flooding on the Site. The OS topographic maps indicate that surface water does flow onto the Site from some adjacent areas notably involving the embankment to the north, within the Monckton Works, but not from land beyond this area. As such is it considered that there is negligible risk of pluvial flooding from external sources outwith the Monckton Works.

8.10 The biological effluent treatment plant treated on the peaking plant part of the Site is disused following Monckton Work ceasing operations at the end of 2014.

8.11 Areas of standing water are not known or expected to form on the Site during prolonged wet weather. Flooding has not affected land adjacent to the Site nor is it likely to do so.

8.12 The groundwater in the solid geology lies at depth below the surface of the Site. The risk of groundwater flooding is therefore very low.

8.13 There are no reservoirs that might represent a potential source of flooding and the Site does not lie in a flood warning area.

2b. How Flooding Could Occur

8.14 It is considered that during periods of prolonged inclement weather there is a low risk that the Scheme might become partly flooded as a consequence of surface runoff within the Site. However, this could depend on the rainfall intensity and the rate of infiltration into the exposed hard core on the Site. Any potential hazard in this respect is fully accepted by the operator.

2c. Existing Surface Drainage

8.15 Existing surface drainage from the Site percolates into the underlying strata on non-hard surfaced areas of the peaking plant compound and land within the Monckton Works to the south.

3. Probability

3a. Flood zones

8.16 The Environment Agency's Flood Map shows that the Site is located in Flood Zone 1 (i.e. in an area that has less than 0.1% AEP of fluvial flooding).

3b. Strategic Flood Risk Assessment

8.17 The Strategic Flood Risk Assessments confirm that the Site lies in Flood Zone 1.

3c. Probability of Flooding

8.18 The principal risk of flooding is governed by the rate at which surface water can infiltrate the hard core on parts of the peaking plant part of the Site along with vegetated land within the southern part of Monckton Works. To date, there are no known accumulations of surface water which have affected operations on the Site and it is not thought that this situation would change during the proposed Scheme.

3d. Runoff

8.19 The Scheme provides for the removal of the disused effluent treatment plant and its replacement with the proposed peaking plant and associated infrastructure. In this respect, the Scheme would not result in any increased flows off-site, with an allowance for climate change.

8.20 We are not aware of reports of any downstream flooding arising from runoff from the Site and this situation is unlikely to change as a result of the Scheme.

4. Climate Change

8.21 The risk of surface water flooding would rise if the rainfall intensities increase as a consequence of climate change. This is unlikely to affect the operation of the Site. Surface water would continue to percolate into the underlying strata on non-hard surfaced areas within the Site along with vegetated areas to the south within Monckton Works. Predicted increases in river flows would not affect the Site because of its location.

5. Detailed Development Proposals

8.22 An account of the proposed Scheme is provided in Chapter 3 of this document.

8.23 None of the areas most sensitive to flooding at the Site, such as the peaking plant generators and associated infrastructure, is considered to be at risk of flooding because their location.

8.24 Any lubricating oil storage would be within the peaking plant container in accordance with the current and any future regulatory requirements.

6. Flood Risk Management

8.25 The Site is not in a flood risk area. No protective measures are required as there are no likely sources of external flooding. The risk of flooding is limited to surface runoff within the Site itself.

7. Off-site Impacts

7a. Impact of Flood Prevention Measures

8.26 The Site is not located in a floodplain so there will be no loss of flood storage capacity or conveyance. The Scheme would not increase the hard surfaced area within the Site and surface water would continue to percolate into the underlying strata in the same manner at the currently exists on-site.

7b. Runoff

8.27 It is not thought that there would be a material change in the rate of runoff from the Site during its operation.

8.28 The developer is aware of the Environment Agency's intention to prevent increased runoff from developments, even in Flood Zone 1. The Scheme would not result in an increased rate of run-off from that existing at present on Site. As such, the risk of downstream flooding will not be increased.

8. Residual Risks

8a. Residual Flood Related Risks

8.29 The Site lies in Flood Zone 1 and is elevated above and at some distance from the principal watercourses. The surface topography determines that there are no external sources of pluvial flooding on Site from beyond Monckton Works. However, there would continue to be some minor risk of surface water flooding during periods of prolonged rainfall. This would not affect adjacent properties or members of the public.

8b. Management of Residual Risks

8.30 Residual risks of flooding would be managed by the operator for the duration of the Scheme with its temporary 20 year operational period.

**Hydrogeology**

8.31 The Site, which forms part of the Monckton Works, overlies a Secondary A Aquifer at depth. The Site does not lie within a groundwater source protection zone and no groundwater abstraction licences are present within 1 kilometre of its perimeter. None of the earthworks required during the construction of Scheme would lead to drawdown in the underlying aquifer.

8.32 The Scheme would not have an adverse impact on groundwater resources.

**Conclusion**

8.33 MEL propose to develop the peaking plant Scheme on the southern part of Monckton Works.

8.34 The Scheme would not result in an increased rate of run-off from that existing at present on Site. As such, the risk of downstream flooding will not be increased.

8.35 Surface water flow rates from the Site have not given rise to any downstream flooding and the risk would not change as a result of the Scheme.

8.36 The Scheme would not have an adverse impact on groundwater resources.

8.37 MEL would implement a strict code of environmental management during the Scheme and would establish emergency procedures to deal with any accidental lubricating oil spillage.

8.38 Taking the above matters into account, it is concluded that the Scheme accords with planning policies, or parts thereof, that deal with hydrological and hydrogeological matters.

# 9.0 Noise

### Introduction

9.1 This chapter deals with the noise impact of the Scheme and draws upon the findings of the noise assessment, as prepared by Wardell Armstrong, which is enclosed at Appendix 2.

### Assessment Results

9.2 Wardell Armstrong has carried out a noise assessment for a proposed 10MW Gas Peaking Plant, at the Monckton Works, Royston, South Yorkshire.

9.3 The proposed Site for the gas peaking plant, is located within the southern part of the Monckton Works, at an existing disused biological effluent treatment plant. The plant will be demolished and the gas peaking facility will be situated in its place.

9.4 Some 5 x 2 MW generator sets would be installed at the Site, and the generators would be housed within acoustically attenuated metal containers, each with adjoining air inlet and extractor attenuators, radiators and emissions flue.

9.5 The operational activities associated with the Site, specifically noise from the gas peaking generators, has the potential to create noise which might affect existing sensitive receptors in the vicinity of the development. Therefore, an industrial noise assessment has been carried out in accordance with BS4142.

9.6 A background noise survey has been undertaken at a single monitoring location considered representative of the existing sensitive receptor in the vicinity of the existing site, specifically ESR1 (i.e. existing sensitive receptor at Station House, Lund Hill Lane (B6428)).

9.7 In accordance with BS4142, the specific noise level of the generators, as received at the existing sensitive receptor, has been compared with the corresponding measured background noise levels during the daytime.

### BS4142 Summary

9.8 When considering the site context, the results of the BS4142 assessment indicate that noise from the generators at the Site, is likely to cause a low impact at the existing sensitive receptor during each daytime, without the requirement for mitigation measures.

**NPSE Summary**

9.9 When assessed in accordance with NPSE, the impact operations at the Site during all the periods assessed, is likely to be No Observed Effect Level, as the noise may be audible on occasions, but it is unlikely to cause any change in behaviour or attitude.

**Conclusion**

9.10 Taking the above matters into account, it is concluded that the Scheme would not result in an unacceptable adverse noise impact on the nearest residential property at Station House and the proposed development accords with planning policies, or parts thereof, that deal with noise impact matters.

# 10.0 Transport

## Introduction

10.1 The purpose of this chapter is to identify the highways and transport-related environmental impacts associated with the Scheme.

## Assessment of Impact

National Planning Policy and Guidance

10.2 The National Planning Policy Framework (NPPF, March 2012) in paragraphs 29 to 41 of the NPPF set out the Government's development planning policies with respect to transport. NPPF states in paragraph 32 that plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- safe and suitable access to the site can be achieved for all people; and
- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

10.3 The key policy test in the NPPF, therefore, is that transport impacts are not 'severe'.

10.4 The NPPG states that: 'local planning authorities must make a judgement as to whether a development proposal would generate significant amounts of movement on a case by case basis (i.e. significance may be a lower threshold where road capacity is already stretched or a higher threshold for a development in an area of high public transport accessibility).'

10.5 In this case, as detailed in Chapter 3, the Scheme would not generate significant amounts of traffic movements.

Local Highway Network

10.6 The Scheme would utilise the existing southern site access for the Monckton Works which provides access direct onto the B6428. At the point of access, the B6428 is governed by a 30 miles per hour speed limit.

10.7 The B6428 itself is a two-way single carriageway road. To the south west of the Site is the town of Royston, and to the north east is Ryhill.

Historic Operations

10.8 The Monckton Works ceased production unexpectedly in 2014. The Monckton Works used two site access points onto the B6428. Until this time, the Monckton Works employed approximately 130 staff, with materials imported to and exported from the Site by road.

**Assessment of Effects**

10.9 During the construction period of the Scheme, it is anticipated that there would be a total of 28 HGV movements (14 in and 14 out) during the 12 week construction period. Assuming a 5.5 workings days per week (Monday to Friday 0700 to 1900 hours and Saturday 0700 to 1300 hours) this equates to an average of less than 1 HGV movement in and out of the Site per operational day. In terms of worst case it is assumed that there would be no more than 8 HGV movements (4 in and 4 out) on any working day.

10.10 In terms of staff working on Site during the construction period it is anticipated that there would be no more than 10 car and/or service van movements (5 in and 5 out) per working day. It is envisaged that staff movements to and from the Site during the construction period would occur outside peak travel periods on the local highway network.

10.11 Once operational, the monitoring and servicing requirements would involve 1 engineer with 1 service vehicle visiting the Site once per week for the duration of the 20 year operational period of the Scheme.

10.12 In order to mitigate the impact of traffic movements associated with the Scheme, HGV movements would be restricted to 0700 to 1900 hours Monday to Friday and 0700 to 1300 hours on Saturday. Measures would also be implemented on-site in order to avoid the deposition of mud or other deleterious material on the public highway.

10.13 Taking into account the limited number of traffic movements that would be associated with the Scheme, along with the proposed mitigation measures, it is considered that there is unlikely to be a material environmental or road congestion impact as a result of the proposed development.

**Conclusions**

10.14 The Scheme provides for the construction and then operation of a peaking plant Scheme over a temporary 20 year period. This would include a relatively small level of traffic movements during the 12 week construction period and the periodic servicing during the operational period. It is considered that there is unlikely to be a material environmental or road congestion impact as a result of the proposed development. As such there should be no highway-related reason to refuse the Scheme.

10.15 Taking the above matters into account, it is concluded that the Scheme accords with planning policies, or parts thereof, that deal with transport matters.

# 11.0 Air Quality

**Introduction**

11.1 The chapter deals with the air quality impact of the Scheme and draws upon the findings of the air quality assessment, as prepared by Wardell Armstrong, which is enclosed at Appendix 3.

**Assessment Results**

11.2 Dispersion modelling using AERMOD has been undertaken and the Process Contributions (PC) and Predicted Environmental Concentrations (PEC) of NO2 and CO have been compared against the current Air Quality Objectives for the receptor locations identified. The results indicate that, for the receptor locations assessed, the short and long term predicted concentrations for NO2 and CO lie within the respective Air Quality Objectives.

11.3 The results of the assessment indicate that, for the receptor locations assessed, the short and long term predicted concentrations for NO2 and CO lie within the respective air quality objectives and critical levels. This is shown even when a worst case scenario is adopted whereby 24 hours of operation throughout the year has been considered (8760hrs), whereas the actual operation of the gas generators is anticipated to be only 800 hours in a year (less than 10% of the time considered for purposes of modelling).

**Conclusion**

11.4 Taking the above matters into account, it is concluded that the Scheme would not result in an unacceptable adverse air quality impact on the receptor locations considered and the Scheme accords with relevant policies, or parts thereof, that deal with air quality matters.

# 12.0 Contamination and Coal Mining Legacies

12.1 The chapter considers contamination and coal mining legacies in relation to the Scheme.

**Contamination**

12.2 The Site involves some 0.3 hectares of land within Monckton Works.

12.3 This include the hard surfaced Site access with internal road to the peaking plant compound entrance involving some 0.1 hectare. The Site access and internal road would be retained as part of the Scheme and as such there would be no disturbance of an underlying strata. As such it is considered that there would be a no unacceptable contamination risk in relation to this part of the Site.

12.4 The Scheme also provides for the demolition of the disused effluent treatment plant and its replacement with the proposed peaking plant with associated facilities within some 0.2 hectares of the Site. In this respect, the Scheme would seek to retain existing hard surfaced areas within the peaking plant compound where possible and minimise the need to provide new concrete pad foundations.

12.5 In areas where the Scheme would disturb the surface of the ground by excavation operations, this would not exceed 0.6 metres in depth within the proposed peaking plant compound. In this respect, it is proposed to submit a scheme with a method statement for such excavation operations along with any requisite mitigation measures and hence reduce the risk of any potential disturbance of contaminated material to an acceptable level. It is considered that this matter could appropriately be addressed by way of planning condition.

**Coal Mining Legacies**

12.6 The Site, along with the Monckton Works, is located in an area with a history of coal mine working as referred to in a Coal Authority report dated 23 November 2010. The matters raised in the Coal Authority report are summarised below.

Underground Coal Mining

12.7 The Monckton Works, which includes the Site, is in the likely zone of influence from workings in 11 seams of coal at 90 metres to 520 metres depth, last worked in 1982. Any ground movement form these coal workings should now have stopped.

12.8 There are no current mining activities affecting the Site and it does not lie within the influence zone of any presently know or planned future workings.

Surface and Shallow Underground Workings

12.9 The Site, along with the wider Monckton Works, is located in an area where the Coal Authority believes there is coal at or close to the surface and this coal may have been worked in the past. Historical plans indicate that coal workings were present in the south of the Monckton Works. The potential presence of coal workings at or close to the surface would be considered prior to any works within the Site.

12.10 Due to the presence of the Royston coal seam which outcrops across the southern section of the Site, there is potential for unrecorded shallow workings to be present.

Mine Entries

12.11 There are three mine entries on or within influencing distance of the Monckton Works. These three shafts (references 437412-001, 437412-002 and 437412-003) were filled to the surface and capped by British Coal.

Mine Shafts

12.12 The presence of unrecorded mine entries or shafts at or near the Site cannot be entirely be discounted. During the development a watching brief would be maintained for any feature which may represent an unrecorded mine entry. Should any such feature be identified, it would be reported, investigated and acted upon as necessary.

Coal Mine Gas

12.13 The Coal Authority has no record of mine gas emissions requiring action by them within the Monckton Works. In addition, the Monckton Works is not identified as a mine gas site on the Coal Authority online interactive mapping service.

12.14 The Royston coal seam, which outcrops across the southern section of the Monckton Works, is not on the Coal Authority's list of coal seams which have been known to suffer from occurrences of spontaneous combustion and are consequently regarded as at 'high risk' of succumbing to spontaneous combustion when being entered, worked or disturbed. The Scheme would involve limited disturbance to existing in-situ strata at shallow depth. However, as noted above a watching brief would be maintained during the Scheme and any mine entry would be reported, investigated and acted upon as necessary.

**Conclusion**

12.15 In relation to contamination the Scheme would disturb the surface of the ground in the peaking compound part of the Site by excavation operations at shallow depth. It is proposed to submit a scheme with a method statement for such excavation operations along with any requisite mitigation measures and hence reduce the risk of any potential disturbance of contaminated material to an acceptable level. It is considered that this matter could appropriately be addressed by way of planning condition

12.16 With regard to Coal Mining Legacies, the presence of unrecorded mine entries or shafts at or near the Site cannot be entirely be discounted. During the development a watching brief would be maintained for any feature which may represent an unrecorded mine entry. Should any such feature be identified, it would be reported, investigated and acted upon as necessary.

12.17 Taking the above matters into account it is concluded that the Scheme would not result in an unacceptable adverse impact in relation to contamination or coal mining legacy matters. As such, it is considered that the Scheme accords with policies, or parts thereof, that deal with such matters.

# 13.0 Socio-economic Matters

**Introduction**

13.1 This chapter refers to the socio-economic matters in relation to the Scheme.

**Assessment of Impact**

13.2 The Scheme would bring with it an investment in the energy sector within Barnsley Metropolitan Borough. The resultant financial contributions would benefit Barnsley and further afield both directly and indirectly through employment, spending and other redistribution of raised funds.

13.3 The employment opportunities include the direct employment of up to 12 personnel during the 12 week construction phase of the Scheme, then periodic monitoring and servicing work for a worker once per week during the 20 year period of the Scheme.

13.4 The Scheme would involve direct and indirect spend in the economy, primarily associated with the construction phase of the Scheme including the supply of goods and services.

13.5 The Scheme would financially benefit BMBC which will accrue business rates from the business operations well. These represent a positive (albeit modest) effect on the local economy for the 20 year operational period of the Scheme.

13.6 The Scheme would provide back-up energy generation during period of peak demand on the National Grid network in the locality of the Site, ensuring a constant supply of electricity and avoidance of shortages. This would contribute to the security and sustainability of energy supply in the vicinity of the Site.

13.7 Any potential adverse socio-economic effects associated with the construction work (such as noise and traffic) and then subsequent operation of the Scheme (including air emissions) would not result in an unacceptable adverse impact.

**Conclusion**

13.8 The Scheme would bring with it an investment in the energy sector within Barnsley Metropolitan Borough. The resultant financial contributions would benefit Barnsley and further afield both directly and indirectly through employment, spending and other redistribution of raised funds.

13.9 The Scheme would contribute to the security and sustainability of energy supply in the vicinity of the Site notably during periods of peak demand or stress on the National Grid network.

13.10 Any potential adverse socio-economic effects associated with the construction work and operation of the Scheme would not result in an unacceptable adverse impact.

13.11 Taking the above matters into account, it is concluded that the Scheme accords with planning policies, or parts thereof, that deal with socio-economic matters.

# 14.0 Summary and Conclusion

14.1 This document comprises a Supporting Statement and has been prepared by WYG on behalf of our client, MEL, a Hargreaves plc company in support of a planning application for the proposed Monckton Gas Peaking Scheme for the generation of up to 10MW of electricity, during periods of peak demand or stress on the National Grid, over a temporary 20 year operational period on part of the Monckton Coke and Chemical Works, near Royston, Barnsley, South Yorkshire.

14.2 The planning application site covers some 0.3 hectares of land ('Site'), which includes some 0.2 hectares of land for the proposed gas peaking facility compound on a parcel of land within the southern part of the Monckton Coke and Chemical Works ('Monckton Works') and would replace the disused biological effluent treatment plant. The remaining 0.1 hectare of the Site includes an existing internal hard surfaced road to the southern site access for the Monckton Works to the B6428 Lund Hill Lane.

14.3 Some 5 x 2 MW generator sets would be installed within the proposed gas peaking compound. The generator sets would be housed within acoustically attenuated metal containers, each with adjoining air inlet and extractor attenuators, radiators and emissions flue. Within the compound there would be low voltage ('LV') and high voltage ('HV') apparatus housed within metal containers, with associated underground cable connection to the 11/400v TX transformer. The above ground infrastructure within the compound would be positioned onto concrete pad foundations that would be laid on Site. The containers for the peaking plant, along with the LV and HV equipment, would be coloured olive green. The compound would be securely fenced with Palisade fencing and access gates to the north east side at the intersection with the internal access road.

14.4 The Scheme would provide a flexible modular energy supply which could rapidly deliver between 2 to 10 MW of power in response to the demands of the National Grid. The generator sets would use a mains gas supply, which would be connected to the gas peaking plant, in order to generate electricity during periods of peak demand or stress on the National Grid. It is anticipated that the generators would run around 800 hours per year as standby electricity generation when the local area is in shortage/stress, with peak times anticipated to be between 1600 to 1930 hours Monday to Friday during the months of November to March inclusive. In this respect, it is worth noting that without such contingencies electricity shortages could be experienced resulting in blackouts. As such, National Grid are supporting the development of small local distributed electricity generation to cover times of such potential shortage.

14.5 This Supporting Statement assesses the impact of the Scheme in relation to ecology, landscape and visual impact, hydrology and hydrogeology, noise, transport, air quality, contamination and coal mining legacies and socio-economic matters respectively. In this respect, it is concluded that the Scheme would be acceptable in terms of environmental, along with socio-economic matters, subject to planning conditions.

14.6 The Supporting Statement also addresses the need for and benefits of the Scheme in the context of energy policy and socio-economic matters. In relation to national energy policy it is worth noting that in May 2015 the Government updated its policy on Maintaining Energy Security. Central to UK energy security is the Government's policy in respect of Electricity Market Reform ('EMR'). EMR is designed to deliver the Government's core objectives of:

- Security of Supply;
- Climate Change, and
- Affordability.

14.7 The EMR included two mechanisms for incentivising investment in the nation's energy infrastructure. One of the mechanisms involves Capacity Agreements (within a capacity Market), which provides payments for reliable capacity to be available when needed, helping to ensure security of supply.

14.8 Capacity Agreements enhance energy security by ensuring that sufficient reliable capacity is in place to meet the demand required from the national grid. In return for capacity payments facilities such as the Scheme, must be able to deliver the necessary energy when requested, or face financial penalties.

14.9 The cost of this Capacity Market is kept to a minimum by an auction process which sets the level of capacity payments for specified periods and technologies.

14.10 The Scheme would serve the Capacity Market and would provide the type of significant capital investment that the Government envisaged would come forward through the mechanisms promoted through EMR.

14.11 The national policy message on energy security is strong and unambiguous. There is a clear need to ensure security of supply through the development of a diverse energy generation system to support the increased deployment of renewable energy and increased peak demands.

14.12 The Scheme would bring with it an investment in the energy sector within Barnsley Metropolitan Borough. The resultant financial contributions would benefit Barnsley and further

afield both directly and indirectly through employment, spending and other redistribution of raised funds.

14.13 The Scheme would contribute to the security and sustainability of energy supply in the vicinity of the Site notably during periods of peak demand or stress on the National Grid network.

14.14 In this respect, it is concluded that significant weight should be attached to the benefits that would flow from the Scheme and outweigh the adverse impacts.

14.15 The conformity of the Scheme in relation to a number of the policies in the development plan and other material considerations, including the NPPF, has been addressed where relevant in Chapters 6 to 13 inclusive.

14.16 The Site, along with the Monckton Works, is located in an employment policy area as shown on the Barnsley UDP proposals map. It is considered that the Scheme would retain an employment use on the Site for its 20 year temporary operational period and accords with Policy ED7 Existing Employment Areas along with Policy RO4 Employment Policy Areas, which specifically refers to the Monckton Works.

14.17 It is concluded that the Scheme comprises sustainable development. The adverse impacts of the Scheme are considered to be environmentally acceptable and in any event outweighed by the benefits of the development. It is concluded that the Scheme accords with the development plan and relevant national policy and guidance. As such, it is requested that BMBC grant planning permission for the Scheme.