

Millbrook Power Project

Preliminary Environmental Information Report (2017) - Appendices

Volume C

Legislation and Policy Context

On behalf of **Millbrook Power Ltd**



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Legislation and Policy Context

Appendix 2 provides the overarching environmental policy and guidance relating to the Project.

The numbering of each section corresponds with the numbering for the technical chapters i.e. Section 2.6 below corresponds with Chapter 6 Air Quality, Section 2.7 corresponds with Chapter 7 Noise and Vibration etc.

2.6 Air Quality

The Air Quality Strategy

- 2.6.1 The Air Quality Strategy (2007) establishes the policy framework for ambient air quality management and assessment in the UK. The primary objective is to ensure that everyone can enjoy a level of ambient air quality which poses no significant risk to health or quality of life. The Strategy sets out the National Air Quality Objectives (NAQOs) and Government policy on achieving these objectives.
- 2.6.2 The relevant NAQOs for Local Air Quality Management (LAQM) are prescribed in the Air Quality (England) Regulations 2000 and the Air Quality (Amendment) (England) Regulations 2002. The objectives for the protection of human health are summarised, as appropriate to the Project, in Table 2-6.1.

Table 2.6.1: Air Quality Objectives for the protection of human health

Pollutant	Averaging Period	Objective ($\mu\text{g}/\text{m}^3$)	Number of permitted exceedences
Nitrogen Dioxide (NO_2)	1 hour	200	18
	Annual	40	-
Carbon Monoxide	8-hour rolling	10,000	-

- 2.6.3 Where an objective is unlikely to be met, the local authority must designate an Air Quality Management Area (AQMA) and draw up an Air Quality Action Plan (AQAP) setting out the measures it intends to introduce in pursuit of the objectives within its AQMA.
- 2.6.4 The Local Air Quality Management Technical Guidance 2009 (LAQM.TG(09); Defra, 2009) issued by the Department for Environment, Food and Rural

Affairs (Defra) for Local Authorities provides advice as to where the NAQOs apply. These include outdoor locations where members of the public are likely to be regularly present for the averaging period of the objective (which vary from 15 minutes to a year). Thus, for example, annual mean objectives apply at the façades of residential properties, whilst the 24-hour objective (for PM₁₀) would also apply within the garden. They do not apply to occupational, indoor or in-vehicle exposure.

EU Limit Values

- 2.6.5 The Air Quality Standards Regulations 2010 implements the European Union's Directive on ambient air quality and cleaner air for Europe (2008/50/EC), and includes limit values for NO₂. These limit values are numerically the same as the NAQO values but differ in terms of compliance dates, locations where they apply and the legal responsibility for ensuring that they are complied with. The compliance date for the NO₂ EU Limit Value was 1 January 2010, five years later than the date for the NAQO.
- 2.6.6 Directive 2008/50/EC consolidated the previous framework directive on ambient air quality assessment and management and its first three daughter directives. The limit values remained unchanged, but it now allows Member States a time extension for compliance, subject to European Commission (EC) approval. Despite many areas of the UK not being compliant with the annual average NO₂ limit value, the UK has decided not to seek an extension to the compliance date for this pollutant. This was on the basis that it could not be guaranteed that the UK would be compliant by the latest date allowable under the Directive (1 January 2015).
- 2.6.7 The Directive limit values are applicable at all locations except:
- Where members of the public do not have access and there is no fixed habitation;
 - On factory premises or at industrial installations to which all relevant provisions concerning health and safety at work apply; and
 - On the carriageway of roads; and on the central reservations of roads except where there is normally pedestrian access.
- 2.6.8 The National Emissions Ceilings Directive (2001/81/EC) sets limits on total annual emissions of important air pollutants for all Member States to help reduce transboundary air pollution.

Industrial Emissions Directive (IED)

- 2.6.9 Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) (IED) recast seven directives related to industrial emissions, in particular Directive 2008/1/EC of 15 January 2008 concerning integrated pollution prevention and control (the Integrated Pollution Prevention and Control (IPPC) Directive) and Directive 2001/80/EC of 23 October 2001 on

the limitation of emissions of certain pollutants into the air from large combustion plants (the Large Combustion Plant Directive (LCPD)), into a single legislative instrument to improve the permitting, compliance and enforcement regimes adopted by Member States.

- 2.6.10 The IPPC Directive laid down measures to prevent or, where that is not practicable, to reduce emissions in the air, water and land introducing ELVs and BAT. The LCPD prescribed ELVs for NO_x, SO₂ and PM₁₀.
- 2.6.11 The EID makes provisions for the continuation of the requirements and principles of the IPPC Directive and the LCPD and introduces new, more stringent, ELVs with full compliance required by 1 January 2016.
- 2.6.12 The LCPD and IPPC Directives are implemented in England and Wales by the Environmental Permitting (England and Wales) Regulations 2010 (the EP Regulations).

Environmental Permitting (England and Wales) Regulations 2010

- 2.6.13 The Environment Agency will control and regulate the Generating Equipment with respect to the emissions to air from the stacks via an Environmental Permit that will be required for the Generating Equipment. The Environmental Permit will include specific ELVs to apply to the Generating Equipment for the relevant pollutants considered within the IED. Such limits will be based on the associated emissions levels (AEL) of recognised BAT as per current EA guidance notes and the existing EU IPPC 'Reference Document on Best Available Techniques for Large Combustion Plant' (2006) and the draft update of this document, 'Best Available Techniques Reference Documents for the Large Combustion Plants' (2013) (together, "BREF Notes").

The Habitats Directive

- 2.6.14 The European Habitats Directive (92/43/EEC) sets out the legal framework requiring EU member states to protect habitat sites supporting vulnerable and protected species, as listed within the Directive. This Directive is transposed into UK law by the Conservation of Habitats and Species Regulations 2010 (as amended) and requires protection of ecological sites including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).
- 2.6.15 Across the UK, site-specific critical levels (which relate to airborne pollutant concentrations at ground level) and critical loads (which relate to deposition of materials to soils) have been set for a variety of protected habitats and species in order to allow the quantitative assessment of the condition of ecologically sensitive sites and thus the protection of such sites by the relevant competent authorities.

The Ambient Air Quality Directive

- 2.6.16 The Ambient Air Quality Directive sets ambient air quality guidelines for NO_x for the protection of ecosystems. This imposes a long-term (annual average)

limit for NO_x of 30 µg/m³ (critical level). In terms of the limit for the protection of ecosystems, it is important to define the areas in which the limit is to be achieved. Directive 2008/50/EC states that sampling points to determine concentrations should be:

- 20 km from an agglomeration (which is defined as an area with a population of more than 250,000); or
- At least 5 km from other built-up areas, industrial installations or motorways or major roads with traffic counts of more than 50,000 vehicles per day;
- Representative of air quality in a surrounding area of at least 1,000 km².

2.6.17 This is mirrored in the Air Quality Standards Regulations 2010.

The Countryside and Rights of Way Act 2000

2.6.18 Improved provisions for the protection and management of SSSIs (in England and Wales) were introduced by the Countryside and Rights of Way (CROW) Act 2000. If a development is “likely to damage” a SSSI, the CROW act requires that a relevant conservation body (i.e. Natural England) is consulted. The CROW act also provides protection to local nature conservation sites, which can be particularly important in providing ‘stepping stones’ or ‘buffers’ to SSSIs and European sites. In addition, the Environment Act (1995) and the Natural Environment and Rural Communities Act (2006) both require the conservation of biodiversity.

National Policy Statements

2.6.19 NPS EN-1 explains the generic air emissions impacts with regard to energy infrastructure. Specific considerations for fossil fuel generating stations are provided in the NPS for Fossil Fuel Generating Infrastructure (EN-2). The NPSs for Gas and Oil Pipelines (EN-4) and Electricity Networks Infrastructure (EN-5) provide specific considerations potentially relevant to the Gas Connection and Electrical Connection respectively.

Other National and Local Policy

2.6.20 Whilst the PA 2008 is clear as to the primacy of the relevant NPS, other national and local planning policy may be considered important and relevant by the SoS in the determination of an energy NSIP.

2.6.21 The NPPF states (paragraph 7) that the planning system should perform a number of roles in delivering sustainable development including 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.”

- 2.6.22 The Bedford Borough Council Core and Rural Issues Plan (2021)¹ aims to promote and guide sustainability practices at the borough.
- 2.6.23 The Policy CP26 Climate Change and Pollution states that:
- “The Council will require development to:*
- *Minimise the emissions of pollutants into the wider environment; and*
 - *Have regard to cumulative impacts of development proposals on air quality, in particular to relation to air quality management areas.”*
- 2.6.24 The Bedford Borough Council Air Quality Action Plan 2007² (amended as of July 2008) sets out the actions that the Council is taking and intending to take to improve the air quality in the borough. This Action plan builds upon previous policies namely the Corporate Plan, the Community Plan and the Local Development Framework. The measures include improvement to the road network and traffic management; reduce road congestion, especially in areas near declared AQMAs and reducing emissions from non-transport related sources, among others.
- 2.6.25 The Development Strategy for Central Bedfordshire 2014³ builds upon The Local Plan adopted in 2004. It establishes the policy framework for new developments in the District.
- 2.6.26 The “Policy 44 Protection from the Environmental Pollution” stipulates that:
- “Development proposals which are likely to cause, pollution or are likely to be exposed to potential unacceptable levels of pollution or land instability sources of pollution will not be permitted unless it can be demonstrated that measures can be implemented to minimise impacts to a satisfactory level which protects health, environmental quality and amenity”*
- 2.6.26 The air quality assessment has been undertaken with regard to the following guidance documents:
- Local Air Quality Management Technical Guidance LAQM TG(09) (Defra, 2009), including supplementary guidance published by Defra through its website;
 - DMRB Volume 11 Section 3 Part 1, Air Quality (HA207/07);

¹ Available at: http://www.bedford.gov.uk/environment_and_planning.aspx

² Available at: <http://www.hertsbedsair.net/>

³ Available at:

http://www.centralbedfordshire.gov.uk/Images/DS%20PUBLICATION%20FINAL_260614_FOR%20WEB_tcm6-55496.pdf

- Environment Agency Horizontal Guidance H1 Environmental Risk Assessment, Annex F (Emissions to Air);
- Institute for Air Quality Management (IAQM) Guidance on the assessment of construction impacts, 2011.

2.7 Noise and Vibration

Noise Policy Statement for England (NPSE) (March 2010)

2.7.1 The Department for Environment Food and Rural Affairs published the Noise Policy Statement for England (NPSE) in March 2010.

2.7.2 There are three aims in the NPSE

1. Avoid significant adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.

The first aim of the NPSE requires that significant adverse effects on health and quality of life should be avoided whilst taking into account the guiding principles of sustainable development.

2. Mitigate and minimise adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.

The second aim of the NPSE requires that all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life whilst also taking into account the guiding principles of sustainable development. This does not mean that such adverse effects cannot occur.

3. Where possible, contribute to the improvement of health and quality of life through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.

This aim states “through the pro-active management of noise while also taking into account the guiding principles of sustainable development, recognising that there will be opportunities for such measures to be taken and that they will deliver potential benefits to society. The protection of quiet places and quiet times as well as the enhancement of the acoustic environment will assist with delivering this aim.”

2.7.3 The explanatory note of NPSE provides further explanation as follows:

“There are two established concepts from toxicology that are currently being applied to noise impacts, for example, by the World Health Organisation. They are:

NOEL – No Observed Effect Level

This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.

LOAEL – Lowest Observed Adverse Effect Level

This is the level above which adverse effects on health and quality of life can be detected.

Extending these concepts for the purpose of this NPSE leads to the concept of a significant observed adverse effect level.

SOAEL – Significant Observed Adverse Effect Level

This is the level above which significant adverse effects on health and quality of life occur.”

- 2.7.4 The NPSE does not define the SOAEL numerically, stating at Paragraph 2.22:

“It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It is acknowledged that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise. However, not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available.”

NPS EN-1 ‘Overarching National Policy Statement for Energy’ (July 2011)

- 2.7.5 The Overarching National Policy Statement for Energy (NPS EN-1) issued by the Department for Energy and Climate Change sets out national policy with respect to energy infrastructure.
- 2.7.6 Section 5.11 of NPS EN-1 sets out the requirements for assessing and mitigating noise and vibration from nationally significant infrastructure projects (NSIPs) in the energy sector. It also sets out the approach the Secretary of State (SoS) should adopt when considering noise assessments.
- 2.7.7 It advises that operational noise from a proposed development and the proximity to noise sensitive receptor; quiet areas or sites designated for ecological reasons are likely to determine the impact of noise.
- 2.7.8 Where noise impacts are likely, a noise assessment should be undertaken in line with details listed in the NPS.

- 2.7.9 Noise and vibration should be assessed using relevant British Standards (e.g. BS 4142, BS 6472, BS 8233 and BS 5228) and other guidance, including the other NPS’.
- 2.7.10 NPS EN-1 advises the IPC that the project should:
- 2.7.11 “Demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.”
- 2.7.12 The proposal should meet the following aims before the IPC grants consent:
- *“Avoid significant impacts on health and quality of life from noise,*
 - *Mitigate and minimise other adverse impacts on health and quality of life from noise,*
 - *Where possible, contribute to improvements to health and quality of life through the effective management and control of noise.”*

The National Planning Policy Framework (NPPF) (March 2012)

- 2.7.13 The Department for Communities and Local Government published the National Planning Policy Framework (NPPF) on 27 March 2012 and upon its publication, the majority of planning policy statements and guidance notes were withdrawn.
- 2.7.14 The NPPF states that it does not contain specific policies for NSIP’s, however it does state that *“These are determined in accordance with the decision-making framework set out in the Planning Act 2008 and relevant national policy statements for major infrastructure, as well as any other matters that are considered both important and relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy, and are material considerations in decisions on planning applications.”*
- 2.7.15 Therefore, for matters that the Government consider important, decisions on NSIPs may include reference to the NPPF. In addition, the NPPF requires that local planning authorities should work with other authorities and providers to take account of the need for strategic infrastructure, including nationally significant infrastructure within their areas.
- 2.7.16 The NPPF contains four aims, which are set out at Paragraph 123 in Section 11 of the document, titled ‘Conserving and enhancing the natural environment’:

“Planning policies and 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.”*

2.7.17 There are two footnotes to the above guidance. The first footnote refers to the Explanatory Note of the Noise Policy Statement for England, which defines both “significant adverse impacts on health and quality of life” and “adverse impacts on health and quality of life” as described in the first two bullet points.

2.7.18 The second footnote indicates that the third bullet point is “subject to the provisions of the Environmental Protection Act 1990 and other relevant law”.

Planning Practice Guidance

2.7.19 The National Planning Policy Guidance (PPG) was published on 6 March 2014. It states that the guidance relating to noise provides answers to a number of questions and reiterates the guidance within the NPSE. It states that “noise needs to be considered when new developments may create additional noise and when new developments would be sensitive to the prevailing acoustic environment”.

2.7.20 The PPG provides advice regarding how to determine the impact of noise, including whether or not a significant adverse effect or adverse effect “is occurring or likely to occur” and whether or not a “good standard of amenity can be achieved”.

2.7.21 It provides more descriptive detail for the definitions of NOEL, LOAEL and SOAEL than the NPSE, but refrains from using numerical values. A summary of the advice given is reproduced as **Table 7.1**.

Table 7.1: Noise Exposure Hierarchy

Perception	Examples of Outcomes	Increasing Effect Level	Action
Not noticeable	No effect	No observed effect	No specific measures required

Perception	Examples of Outcomes	Increasing Effect Level	Action
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No observed adverse effect	No specific measures required
		Lowest observed adverse effect level	
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; closing windows for some of the time because of the noise. Potential for non-awakening sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life.	Observed adverse effect	Mitigate and reduce to a minimum
		Significant observed adverse effect level	
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. having to keep windows closed most of the time, avoiding certain activities during periods of intrusion. Potential for sleep disturbance resulting in difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant observed adverse effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable adverse effect	Prevent

2.7.22 The PPG also provides guidance regarding what factors influence whether noise could be a concern, including:

- Source and absolute level of the noise
- Time of day
- Number and pattern of noise events (for non-continuous sound)
- Frequency content of the noise
- General character (“i.e. whether or not the noise contains particular tonal characteristics or other particular features”), and
- Local topology and topography.

2.7.23 Additionally, “when relevant”:

- The cumulative impact of multiple sources along with the extent to which the noise source is intermittent and of limited duration
- The provision of alternative ventilation if proposed mitigation relies on closed windows most of the time
- Noise Action Plans and Important Areas (as defined in the Environmental Noise Directive) should be taken into account
- The acoustic environment of external amenity space (if it is an intrinsic part of the design) should be considered, so they can be enjoyed as intended
- Increased potential of impact from fast food restaurants, night clubs and public houses, not only noise generated from within the premises but also the noise that may be made by customers within the vicinity.

2.7.24 The guidance provides advice on how the adverse effects of noise can be mitigated. It advises that this will depend on “the type of development being considered and the character of the proposed location”. Four broad classifications of mitigation are defined. These include:

- Engineering methods: Reducing the noise generated at source and/or containing the noise generated;
- Layout: Optimising the distance between the source and noise-sensitive receptors and/or incorporating good design to minimise noise transmission through the use of screening (by natural or purpose built barriers, or other buildings);

- Use of planning conditions/obligations: Restricting activities allowed onsite at certain times and/or specifying permissible noise levels for different time periods (e.g. daytime, evening and night-time), and;
- Mitigating: the impact on areas likely to be affected by noise including through noise insulation when the impact is on a building.

2.7.25 Furthermore, it advises that the impact of the noise may be “*partially off-set if the residents of those dwellings have access to:*”

- *A relatively quiet façade (containing windows to habitable rooms) as part of their dwelling and/or;*
- *A relatively quiet external amenity space for their sole use, (e.g. a garden or balcony). Although the existence of a garden or balcony is generally desirable, the intended benefits will be reduced with increasing noise exposure and could be such that significant adverse effects occur and/or;*
- *A relatively quiet, protected, nearby external amenity space for sole use by a limited group of residents as part of the amenity of their dwellings, and/or;*
- *A relative quiet, protected, external publically accessible amenity space (e.g. a public park or a local green space designated because of its tranquillity) that is nearby (e.g. within a 5 minutes walking distance)”.*

BS 4142:2014 Methods for rating and assessing industrial and commercial sound (October 2014)

2.7.26 British Standard 4142: 2014 “Methods for rating and assessing industrial and commercial sound” (BS4142) describes methods for rating and assessing sound of an industrial and/or commercial nature. The methods described in the standard use outdoor sound levels to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident.

2.7.27 The standard is used to determine the rating levels for sources of sound of an industrial and/or commercial nature and the ambient, background and residual sound levels at outdoor locations. These levels can be used for the purposes of assessing sound from proposed source(s) of sound of an industrial and/or commercial nature. However, the determination of noise amounting to a nuisance is beyond the scope of the standard.

2.7.28 The standard should not be used to assess sound from the passage of vehicles on public roads and railway systems; recreational activities; music and other entertainment; shooting grounds; construction and demolition; domestic animals; people; public address systems for speech and other sources falling within the scopes of other standards or guidance. The

standard cannot be applied to the derivation of indoor sound levels arising from sound levels outside, or the assessment of indoor sound levels.

- 2.7.29 The procedure contained in BS4142 assesses the significance of sound which depends upon the margin by which the rating level of the specific sound sources exceeds the background sound level and the context in which the sound occurs/will occur.
- 2.7.30 An initial estimate of the impact of the specific sound is obtained by subtracting the measured background sound level from the rating level and considering the following:
- *Typically, the greater this difference, the greater the magnitude of the impact.*
 - *A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.*
 - *A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context.*
 - *The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.*
- 2.7.31 Where the initial estimate of the impact needs to be modified due to the context, the following factors should be considered:
- *The absolute level of sound.*
 - *The character and level of the residual sound compared to the character and level of the specific sound.*
 - *The sensitivity of the receptor and whether dwellings or other premises used for residential purposes will already incorporate design measures that secure good internal and/or outdoor acoustic conditions such as:*
 - *Façade insulation treatment;*
 - *Ventilation and/or cooling that will reduce the need to have windows open so as to provide rapid or purge ventilation; and*
 - *Acoustic screening.*

BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites Part 1 Noise, (February 2014)

- 2.7.32 BS 5228-1 does not provide limits for construction noise. The standard provides a 'best practice guide' for noise control and includes sound power level (L_w) data for individual plant as well as a calculation method for the prediction of noise from construction activities.

BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites Part 2 Vibration, (June 2014)

- 2.7.33 BS 5228-2 provides advice on the human response to construction vibration. BS 5228-2 suggests that, for construction activities, it is considered more appropriate to provide guidance in terms of the peak particle velocity (PPV) as measured outside of the building. This parameter is likely to be more routinely measured based upon the more usual concerns over potential building damage.

2.8 Ecology

Legislation

- Conservation of Habitats and Species Regulations 2010 (as amended)
- 2.8.1 In the UK, Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('the Habitats Directive'), was originally transposed into law by means of the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended). The Regulations came into force on 30 October 1994, and have been amended several times. Subsequently the Conservation of Habitats and Species Regulations 2010 was created which consolidates all the various amendments made to the 1994 Regulations in respect of England and Wales and is commonly known as the 'The Habitats Regulations'. The Habitats Regulations contain five Parts and four Schedules, and provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites.
- Wildlife and Countryside Act 1981 (as amended)
- 2.8.2 The Wildlife and Countryside Act 1981 (as amended) (WCA) is the principal mechanism for the legislative protection of wildlife in Great Britain. However, it does not extend to Northern Ireland, the Channel Islands or the Isle of Man. This legislation is the means by which the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and (partially) the European Union Directives on the Conservation of Wild Birds (79/409/EEC) and Habitats Directive are implemented in the UK.
- The Natural Environment and Rural Communities Act 2006
- 2.8.3 The Natural Environment and Rural Communities Act (NERC Act) provides that any public body or statutory undertaker in England and Wales must have regard to the purpose of conservation of biological diversity in the exercise of their functions. The intention is to help ensure that biodiversity becomes an integral consideration in the development of policies and plans.

National Policy Context

- National Policy Statement for Energy EN-1
- 2.8.4 Section 4.3 of NPS EN-1 refers to the Conservation of Habitats and Species Regulations 2010 and the requirement to consider whether a project is likely to have a significant effect on a European site either alone or in combination with other plans or projects. Section 4.18 sets out more general considerations in relation to Biodiversity and Geological Conservation. These largely mirror the existing objectives set out in Planning Policy Statement 9 and seek to avoid significant harm to biodiversity interests, including through mitigation, consideration of reasonable alternatives and, where harm cannot be avoided, through appropriate compensation measures. Guidance is also

provided in relation to mitigation, in particular in order to minimise the impacts of construction activities and promote measures that will enhance biodiversity during operational phases of development.

- National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)

2.8.5 This NPS, taken together with the NPS EN-1, provides the primary basis for decisions by the IPC on applications it receives for gas supply infrastructure and gas and oil pipelines. This NPS is concerned with impacts and other matters which are specific to gas supply infrastructure and oil and gas pipelines or where, although the impact is generic and covered in EN-1, there are further specific considerations arising from the technologies covered here.

- National Policy Statement for Electricity Networks Infrastructure (EN-5)

2.8.6 This NPS, taken together with the NPS EN-1, provides the primary basis for decisions by the IPC on applications it receives for electricity networks infrastructure. This NPS is concerned with impacts and other matters which are specific to electricity networks infrastructure or where, although the impact or issue is generic and covered in EN-1, there are further specific considerations arising from this technology.

Consideration of Regulation 5(2) (l) of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009

2.8.7 Regulation 5(2) (l) of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (hereafter referred to as the ‘APFP Regulations 2009’) requires an assessment to be made of “any effects” on Natural Features.

The Protection of Badgers Act 1992

2.8.8 The Protection of Badgers Act 1992 makes it an offence to wilfully take, kill, injure or ill-treat a badger, or possess a dead badger or any part of a badger. Under the Act their setts are also protected against obstruction, destruction, or damage in any part.

2.8.9 Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett. The Act defines a badger sett as ‘any structure or place, which displays signs indicating the current use by a badger’ and Natural England takes this definition to include seasonally used setts.

2.8.10 Work that may disturb badgers or their setts is illegal without a development licence from the relevant statutory body (in this case Natural England).

The Hedgerow Regulations 1997

- 2.8.11 The Hedgerows Regulations (1997) make provision for the protection of important hedgerows in England and Wales. The regulations affect hedgerows which are 20m or more in length, or connected at both ends to another hedgerow of any length.
- 2.8.12 They relate to hedgerows which are on, or adjoining land used for the following purposes: agriculture or forestry; the breeding or keeping of horses, ponies or donkeys; common land; village greens; Sites of Special Scientific Interest (SSSIs) (which include all terrestrial Special Areas of Conservations (SACs), National Nature reserves (NNRs), and Special Protection Areas (SPAs)) and Local Nature Reserves (LNRs). They do not include hedges that are attached to, or marking the boundaries of a private house.
- 2.8.13 It is an offence to intentionally or recklessly remove or cause or permit another person to remove a hedgerow or intentionally or recklessly remove, or cause or permit another person to remove, a hedgerow which is the subject of a hedgerow retention notice

Local Planning Policy Context

- Bedford Borough, Central Bedfordshire and Luton Borough Councils: Minerals and Waste Local Plan Strategic Sites and Policies (adopted January 2014)
- 2.8.14 Section 6.0 of the Bedfordshire and Luton Minerals and Waste Local Plan First Review 2005 relates to General and Environmental Policies.
- 2.8.15 Policy GE10 Protection/enhancement of trees and woodland: proposals should seek to retain and, where appropriate, increase overall tree and hedgerow cover. The MPA / WPA will only grant planning permission for development that would result in harm to trees and woodland which are of amenity and/or wildlife value where such harm is reduced as far as practicable and is outweighed by other planning benefits of the proposal.
- 2.8.16 GE11 Protection of Sites of Nature Conservation Importance: the MPA / WPA will refuse planning permission for minerals or waste proposals that would result in harm to designated or proposed Sites of Special Scientific Interest (SSSI) or National Nature Reserves (NNR), unless the reasons for the development clearly outweigh the nature conservation value of the site and the national policy to safeguard such sites. Where such development is permitted, measures will be required to mitigate or compensate for the effects of the development.
- 2.8.17 GE12 Protection of locally designated nature conservation sites, regionally important geological/geomorphological sites (RIGS) and undesignated sites of significant conservation interest: The MPA / WPA will only grant planning permission for proposals which would adversely affect any (i) locally designated nature conservation site; (ii) regionally important geological / geomorphological site (RIGS) or (iii) other site which is undesignated but

nonetheless of significant conservation interest; where any adverse effect is reduced as far as practicable and is outweighed by other planning benefits of the proposal.

- 2.8.18 GE13 Species and Habitat Protection and Enhancement: The MPA / WPA will refuse planning permission for proposals that would adversely affect rare or threatened species or their habitats, except where (i) any adverse effect(s) would be overcome by appropriate on or off site mitigation measures; or (ii) adverse effect(s) are reduced as far as practicable and are clearly outweighed by other planning benefits of the proposal and appropriate mitigation and/or compensation measures are taken.
- 2.8.19 Chapter 8 of Central Bedfordshire Council's (CBC) Core Strategy (Natural and Built Environment) Policy CS18: Biological and Geological Conservation, confirms CBC's commitment to:
- 1) support the designation, management, and protection of biodiversity and geology including national designations (SSSIs), locally important County Wildlife Sites (CWS) and Regionally Important Geological and Geomorphological Sites; as well as those local priority habitats and species identified in the Local Biodiversity Action Plan;
 - 2) support the maintenance and enhancement of habitats, identify opportunities to create buffer zones and restore and repair fragmented and isolated habitats to form biodiversity networks; and
 - 3) not permit development that would fragment or prejudice the biodiversity network.
- 2.8.20 Chapter 14 (Local Character and Countryside (Development Management)) Policy DM15: Biodiversity, confirms CBC will ensure that:
- 1) where planning applications are considered to have an impact on wildlife, whether habitats or species, or where applications are close to nationally or locally designated sites or important species, advice will be sought from relevant national and local organisations and applications considered to be harmful to wildlife will be refused;
 - 2) where any development is permitted within, adjacent to or in close proximity to designated sites or known locations of protected species, the developer will be expected to take steps to secure the protection of such animals and plants. In cases where new development is unavoidable and may harm wildlife interests, mitigation is required;
 - 3) for developments where there is a need to protect or enhance biodiversity, developers will be required to carry out such work and/or make contributions to secure longer term benefits for wildlife; and
 - 4) the use of native and locally appropriate species in planting schemes, including locally sourced plants and seeds and plants of local provenance, will be required where appropriate.
- Bedford Borough Council Core Strategy and Rural Issues Plan

- 2.8.21 Policy CP2 (Sustainable Development Principles) of Bedford Borough Council's (BBC's) Core Strategy and Rural Issues Plan Development Plan, promotes development and use of land in a way that will ensure that:
- 1) resources and infrastructure are used efficiently with the priority on the re-use of brownfield land;
 - 2) biodiversity is protected and scarce resources are conserved;
 - 3) the character and quality of local landscapes are preserved and where appropriate enhanced; and
 - 4) opportunities for leisure, recreation and tourism are readily available.
- 2.8.22 Policy CP25 (Biodiversity) confirms BBC's commitment to protection of priority habitats and species and the requirement for mitigation and/or compensation where development is likely to cause harm:
- 1) the biodiversity and geodiversity of the borough and in particular priority habitats, species and geodiversity features, will be protected and where appropriate enhanced; and
 - 2) where harm to biodiversity and/or geodiversity is likely to be a result of development, appropriate mitigation and/or compensation will be required. Any replacement assets should be of a comparable or enhanced value.
- 2.8.23 BBC are currently preparing their 'Local Plan 2035' which will guide development beyond the period covered by the existing Core Strategy and Rural Issues Plan. The Consultation Paper on the Local Plan 2035, which was published in April 2017, outlines BBC's strategy for development. The strategy includes a focus on conserving and enhancing the natural environment.
- The Forest of Marston Vale Forest Plan 2000
- 2.8.24 The Forest Plan 2000 published by the Forest of Marston Vale Trust guides management of the Community Forest as a vehicle for environmentally led regeneration within the Marston Vale. The Plan sets development and management objectives for the Community Forest, placing an emphasis on sustainable initiatives, promotion of multi-functional green infrastructure through woodland creation as well as the protection of sites of nature conservation value and creation of new opportunities for nature conservation.

2.9 Water Quality and Resources

National Policy Statements

- 2.9.1 In relation to hydrological considerations of Energy NSIPs, NPS EN-1 requires that:
- 2.9.2 Where the Project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the development on, water quality, water resources and physical characteristics of the water environment;
- An application should be accompanied by a Flood Risk Assessment (FRA) for energy projects of 1ha or greater in Flood Zone 1 and all energy projects in Flood Zone 2 and 3;
 - Pre-application discussions are undertaken with the Environment Agency and other bodies;
 - Any requirements for sequential testing are satisfied;
 - Priority is given to the use of Sustainable Drainage Systems (SuDS).

National Planning Policy Framework

- 2.9.3 The NPPF and the accompanying Planning Practice Guidance sets out the Government's national policy on development and flood risk and seeks to provide clarity on what is required at regional and local levels to ensure that flood risk is taken into account at all stages in the planning process, to avoid inappropriate development in areas at risk of flooding and to direct development away from areas at highest risk. The NPPF outlines a risk based approach to the planning process and requires that the Sequential Test is used to guide the decision making process by steering development to areas with the lowest probability of flooding where feasible.
- 2.9.4 The NPPF requires that the spatial planning process should consider the possible impacts of climate change and contingency allowances are provided to enable impacts to be considered over the lifetime of the development.

Flood and Water Management Act & Sustainable Drainage Systems: Written Statement – HCWS161

- 2.9.5 The Flood and Water Management Act (FWMA) received Royal Assent on 8th April 2010 and takes forward some of the proposals set out in three previous strategy documents published by the UK Government: Future Water, Making Space for Water and the UK Government's response to the Sir Michael Pitt Review of the summer 2007 floods. In doing so it gives the Environment Agency a strategic overview of flood risk and gives local authorities responsibility for preparing and putting in place strategies for

managing flood risk from groundwater, surface water and ordinary watercourses in their areas.

- 2.9.6 The Flood and Water Management Act (Schedule 3) proposed the establishment of SuDS Approval Bodies (the “SAB”) at County or Unitary local authority levels. The role of the SAB was envisaged as implementing the recommendations of the Pitt Review (2008) in promoting the use of SuDS within future development.
- 2.9.7 Following a period of consultation, the proposed role of the SAB has been amended, with the promotion of SuDS being incorporated into the planning process. This has been achieved by designating Lead Local Flood Authorities as statutory consultees with regards to ‘local’ sources of flood risk and surface water management. Ministerial Written Statement HCWS161 details this change in policy, which came into effect in April 2015.
- 2.9.8 The FWMA also amends Section 106 of the Water Industry Act (WIA) in respect of the right of connection to a public sewer. In the future, the automatic right of connection will be revoked and all new connections must be made via a Section 104 Agreement for foul sewers and following the consent of the SAB for surface water connections. As the role of the SAB has been removed following HCWS161, this amendment to Section 106 of the WIA is now subsumed into the planning process under the purview of the Lead Local Flood Authority.

The Flood Risk Regulations

- 2.9.9 The Flood Risk Regulations transpose the EC Floods Directive (Directive 2007/60/EC) into domestic law. The regulations require that preliminary flood risk assessments are prepared by the Environment Agency and Unitary/County Authorities (Lead Local Flood Authorities) and that areas at significant potential risk of flooding are identified. For these "significant risk" areas, hazard maps must be produced and flood risk management plans developed to reduce flood risk.

The Water Resources Act

- 2.9.10 The Water Resources Act 1991 (WRA) came into effect in 1991 and replaced the corresponding sections of the Water Act 1989.
- 2.9.11 The WRA sets out the responsibilities of the Environment Agency in relation to water pollution, resource management, flood defence, fisheries and, in some areas, navigation. The WRA regulates discharges to controlled waters, namely rivers, estuaries, coastal waters, lakes and groundwater. Discharge to controlled waters is only permitted with the consent of the Environment Agency. Similarly, a licence is required to abstract from controlled waters.

Water Environment (Water Framework Directive) (England and Wales) Regulations (DEFRA, 2017)

- 2.9.12 These regulations transpose the EU Water Framework Directive (WFD) into national law. The Directive is a wide-ranging piece of European legislation that establishes a new legal framework for the protection, improvement and sustainable use of surface waters, coastal waters and groundwater across Europe in order to:
- Promote sustainable water use;
 - Contribute to the mitigation of floods and droughts;
 - Prevent deterioration and enhance status of aquatic ecosystems, including groundwater;
 - Reduce pollution.
- 2.9.13 Water management has historically been co-ordinated according to administrative or political boundaries. The WFD promotes a new approach based upon management by river basin - the natural geographical and hydrological unit. River basin management plans include clear objectives in respect of water quality and pollution control and a detailed account of how objectives are to be met within a prescribed timeframe.

Land Drainage Act 1991

- 2.9.14 The Act consolidates various enactments relating to Internal Drainage Boards and the functions of these Boards and local authorities in relation to land drainage. Amongst other matters, the Act sets out provisions and powers in respect of the control of flow of watercourses and watercourse restoration/improvement work.

The Environmental Permitting (England and Wales) Regulations 2016

- 2.9.15 The Regulations as amended provide the regulatory framework under which discharges to controlled water and other emissions to the environment are controlled.

Non-statutory Technical Standards for Sustainable Drainage Systems

- 2.9.16 This document contains non-statutory technical standards for the design, maintenance and operation of sustainable drainage systems serving housing, non-residential or mixed use developments and was published by Defra in March 2015.

Flood Risk Assessments: Climate Change Allowances

- 2.9.17 This guidance was published by the Environment Agency in February 2016 and should be used as the basis for preparing Flood Risk Assessments. The

guidance sets out the climate change allowances for peak river flow, peak rainfall intensity, sea level rise, off-shore wind speeds and extreme wave height.

- 2.9.18 Allowances in respect of peak river flow vary according to River Basin District, flood zone and proposed land-use (and therefore the lifetime of the development). The Millbrook Power site lies within the Anglian River Basin District.

The Building Regulations

- 2.9.19 The Building Regulations Requirement H3 stipulates that rainwater from roofs and paved areas is carried away from the surface to discharge to one of the following, listed in order of priority:

- 1) an adequate soakaway or some other adequate infiltration system, or where that is not reasonably practicable;
- 2) a watercourse, or where that is not practicable;
- 3) a sewer.

The Surface Waters Plan - Plan for Strategic Management of Surface Waters and their Local Environment in the Forest of Marston Vale (Bedfordshire and River Ivel Internal Drainage Board and the Forest of Marston Vale, June 2002)

- 2.9.20 This document was prepared to promote a series of policies that will encourage an integrated and sustainable approach to the management of surface waters in the context of major development in the area, including:

- An integrated approach to flood risk management, surface water drainage and the water environment;
- Promote government guidance such as PPS25 (since superseded by the NPPF), providing a framework for the site specific Flood Risk Assessments to be produced in support of planning applications;
- Implementation of strategic solutions to surface water drainage and flood risk that are sustainable and offer opportunities for environmental and recreational gains.

- 2.9.21 It should be noted that Rookery Pit lies outside of the Bedfordshire and River Ivel Internal Drainage Board's area of jurisdiction. However, Mill Brook, which flows along the western side of the Pit, outfalls to Stewartby Lake located just to the west, which is a water body maintained by the Bedfordshire and River Ivel Internal Drainage Board.

2.10 Ground Conditions

Legislation - Soils

- 2.10.1 The protection and conservation of the soil and groundwater environment is covered within a variety of legislative and policy frameworks.
- 2.10.2 UK legislation on contaminated land is principally contained in Part 2A of the Environmental Protection Act, 1990, as amended by the Environment Act 1995. The Statutory Guidance that accompanies the Act has recently been revised and was issued by DEFRA in April 2012 (Department of Environment, Food and Rural Affairs Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance).
- 2.10.3 Contaminated Land for the purpose of Part 2A is defined as: "...any land which appears to the local authority in whose area it is situated to be in such condition, by reason of substances in, on or under land that: (i) Significant harm is being caused or there is significant possibility of such harm being caused; or (ii) Pollution of controlled waters is being, or is likely to be, caused."
- 2.10.4 The principle of risk assessment underlies the determination of whether these definitions apply in the identification of contaminated land. Risk assessment is carried out via 'source-pathway-receptor' principles to evaluate the potential for pollutant linkages and to identify unacceptable risk. The application of risk assessment techniques to the management of contaminated land is set out in the technical framework presented in the Environment Agency Model Procedures for the Management of Contaminated Land (CLR11).
- 2.10.5 Following the review of the contaminated land regime including public consultation, revised Statutory Guidance was issued and the Contaminated Land (England) (Amendment) Regulations 2012 (SI 2012/263) and the Contaminated Land Statutory Guidance for England 2012 came into force on 6th April 2012. This revised Statutory Guidance while still taking a precautionary approach allows regulators to make quicker decisions about whether or not land is contaminated under Part 2A preventing costly remediation Power Generation Plant being undertaken unnecessarily. It also offers better protection against potential health impacts by concentrating on the sites where action is actually needed.

Legislation - Groundwater

- 2.10.6 The 1980 Groundwater Directive 80/68/EEC and the 2006 Groundwater Daughter Directive 2006/118/EC of the Water Framework Directive 2000/60/EC (WFD) are the main European legislation in place to protect groundwater. The Water Framework Directive (WFD) (2000) aims to protect and enhance the quality of surface freshwater, groundwaters and dependent eco systems, estuaries and coastal waters.

- 2.10.7 Controlled waters are also protected by Part 2A of the Environmental Protection Act 1990.
- 2.10.8 The Environment Agency has a remit to prevent or reduce the risk of water pollution, wherever possible, and to ensure that it gets cleaned up if pollution occurs that might lead to effects on ecosystems or people. A regulatory regime supporting this policy has been introduced by the Water Resources Act 1991 (as modified by the Environment Act 1995), and the Environmental Permitting Regulations 2010.

National Planning Policy Framework

- 2.10.9 The NPPF sets out to prevent 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. It also requires that unacceptable risks from pollution and land instability, planning policies and decisions should ensure that new development is appropriate for its location.
- 2.10.10 For planning purposes, the NPPF requires that the assessment of risks arising from contamination and remediation requirements should be considered on the basis of the current environmental setting, the current land use, and the circumstances of its proposed new use.
- 2.10.11 National Planning Practice Guidance (NPPG) was introduced on the 6th March 2014 by the DCLG in relation to “Land affected by contamination” and “Water supply, wastewater and water quality”. The guidance sets out both the statutory regime and phased approach that should be adopted in the determination and assessment of risk.
- 2.10.12 National Planning Practice Guidance was also introduced on the 6th March 2014 by the DCLG in relation to “Land Stability”. The guidance sets out both the statutory regime and phased approach that should be adopted in the determination and assessment of risk.

Local Policy

- 2.10.13 Reference has also been made to regional and local planning policies, including the following:
- Bedfordshire Minerals and Waste Local Plan policies GE1 and GE20 require applications to provide details regarding impact on water resources and its quality.
 - Central Bedfordshire’s Local Development Framework Draft Design Guide – Requires developers to carry out contaminated land surveys in order to demonstrate how any existing contamination can be mitigated (if present).

- Central Bedfordshire Council (CBC) Core Strategy policy CS13: Climate Change considers measures to take account of climate change, such as; contributions to waste minimisation; and, provisions to limit any adverse effects on water quality. Policy CS18: Biodiversity and Geological Conservation, supports the designation, management, and protection of geology.
- CBC Core Strategy policy DM3: High Quality Development, requires all proposals for new development to comply with the current guidance on waste management, water and airborne pollution.
- BBC Core Strategy policy CP21: Designing in Quality, requires new development to mitigate against the effects of any pollution including from water and land contamination.
- BBC Core Strategy policy CP26: Climate Change and Pollution, requires that any potentially polluting developments and the location of sensitive developments in proximity to existing sources of pollution are material planning considerations. This position is supported in the Borough's Climate Change and Pollution SPD.

Guidance

- 2.10.14 There are numerous technical guidance documents on the assessment and management of contamination including Contaminated Land Report CLR 11 (EA, 2004).
- 2.10.15 A summary of the guidance relating to the protection of groundwater resources is presented in the publication by the Environment Agency (EA) entitled 'Groundwater Protection: Principles and Practice (GP3)' (EA, 2012).

2.11 LVIA

National Policy Statement for Energy (NPS EN-1)

- 2.11.1 National policy seeks to protect and enhance environmental quality specifically for new energy infrastructure through NPS EN-1. It recognises that nationally significant infrastructure projects will have effects on the landscape and that the scale of such projects means they may be visible within many miles of the site of the proposed infrastructure.
- 2.11.2 Section 5.9 of NPS EN-1 requires that “The applicant’s assessment should include the effects during construction of the project and the effects of the completed development and its operation on landscape components and landscape character. The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include light pollution effects, including on local amenity, and nature conservation”.
- 2.11.3 With regard to landscape impacts, NPS EN-1 states that “Landscape effects depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change. All of these factors need to be considered in judging the impact of a project on landscape. Virtually all nationally significant infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.”
- 2.11.4 With reference to visual impact NPS EN-1 states that “All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. The [Secretary of State] will have to judge whether the visual effects on sensitive receptors...outweigh the benefits of the project...The [Secretary of State] should ensure applicants have taken into account the landscape and visual impacts of visible plumes from chimney stacks and/or the cooling assembly”.

NPS EN-2: Fossil Fuel Electricity Generating Infrastructure

- 2.11.5 Section 2.6 of NPS EN-2 relates to landscape and visual effects. It is stated that:
- *“It is not possible to eliminate the visual impacts associated with a fossil fuel generating station. Mitigation is therefore to reduce the visual intrusion of the buildings in the landscape and minimise impact on visual amenity as far as reasonably practicable;*
 - *Applicants should design fossil fuel generating systems with the aim of providing the best fit with the existing local landscape so as to*

reduce visual impacts. This may include design of buildings to minimise negative aspects of their appearance through decisions in areas such as size, external finish and colour of the plant as far as compliance with engineering and environmental requirements permit. The precise architectural treatment will need to be site-specific;

- *Reduction of visual impacts may often involve enclosing the buildings at low level as seen from surrounding external viewpoints. This makes the scale of the plant less apparent, and helps conceal the lower level, smaller scale features of the plant. Earth bunds and mounds, tree planting, or both may be used for softening the visual intrusion and may also help to attenuate noise from site activities. Where the existing landscape is more industrial, design may involve other forms of visual impact mitigation.”*

2.11.6 However, it should be noted that the creation of earth bunds is contrary to the landscape management guidelines within the Central Bedfordshire Landscape Character Assessment (LUC 2015), which states that such features are inappropriate in the context of this flat, open landscape.

NPS EN-4: Gas Supply Infrastructure and Gas and Oil Pipelines

2.11.7 NPS EN-4 addresses landscape and visual effects within section 2.21. It is stated that:

- *“These comprise the effect upon specific landscape elements within and adjacent to the pipeline route, such as grassland, field boundaries (hedgebanks, drystone walls, fences), trees, woodlands, and watercourses. There will also be temporary visual impacts caused by the need to access the working corridor and to remove flora and soil. The working width of the pipeline will vary depending on the surrounding terrain. Temporary impacts could include large excavations where deep pits are needed for boring beneath rivers, roads and sensitive features; and*
- *Mitigation measures to protect the landscape and ecology could include reducing the working width required for the installation of the pipeline in order to reduce the impact on the landscape where it will not be possible to fully reinstate the route.”*

NPS EN-5: Electricity Networks Infrastructure

2.11.8 NPS EN-5 states in section 2.8 Landscape and Visual:

- *“Guidelines for the routing of new overhead lines, the Holford Rules, were originally set out in 1959 by Lord Holford, and are intended as a common sense approach to the routing of new overhead lines. These guidelines were reviewed and updated by the industry in the 1990s*

and should be followed by developers when designing their proposals”; and

- *“In addition to following the principles set out in the Holford Rules and considering undergrounding, the main opportunities for mitigating potential adverse landscape and visual impacts of electricity networks infrastructure are:*
 - *consideration of **network reinforcement** options (where alternatives exist) which may allow improvements to an existing line rather than the building of an entirely new line; and*
 - *selection of the **most suitable type and design of support structure** (i.e. different lattice tower types, use of wooden poles etc.) in order to minimise the overall visual impact on the landscape.”*

The European Landscape Convention (ELC)

2.11.9 The ELC became binding in 2007 and is the first international convention to focus specifically on landscape issues to protect, manage and plan landscapes in Europe. The ELC defines landscape as “an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.” The ELC has not resulted in any new UK legislation.

The Countryside and Rights of Way Act (CRoW) 2000

2.11.10 The CRoW Act provides a statutory framework for statutorily protected landscapes. It introduced an additional right of access requiring the identification of Open Access Land.

National Planning Policy Framework (NPPF)

2.11.11 Twelve core planning principles are set out in paragraph 17 of the NPPF, and those of relevance to LVIA include the principles that planning should:

- *“always seek to secure high quality design and good standards of amenity for all existing and future occupants of land and buildings;*
- *take account of the different roles and character of different areas, promoting the vitality of our main urban 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. Allocations of land for development should prefer land of lesser environmental value, where consistent with other policies in this Framework;*

- *encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value; and*
- *conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations.”*

Regional and Local Policy

2.11.12 The Central Bedfordshire Core Strategy and Development Management Policy, adopted November 2009 (Central Bedfordshire Council, 2009), is the key policy document, providing the framework against which to assess planning applications in the area. It provides objectives, spatial strategy and development management policies for the period 2001–2026. Those relevant to landscape and visual issues are:

- Policy CS14: High Quality Development;
- Policy CS15: Heritage;
- Policy CS16: Landscape and Woodland; and
- Development Management Policy DM14: Landscape and Woodland.

2.11.13 Within the Central Bedfordshire Development Strategy (revised pre-submission draft, May 2014) the policy relevant to landscape and visual issues is:

- Policy 58: Landscape.

2.11.14 The Forest of Marston Vale: Forest Plan (The Forest of Marston Vale, 2000). The Forest of Marston Vale is one of 12 Community Forests within England. The Forest Plan is a non-statutory document which sets out proposals for developing the forest over a 30-year period. It includes a landscape assessment, and identifies four landscape zones, with specific proposals. The Project Site lies within two of the landscape zones.

2.11.15 Within the Bedford Borough Core Strategy and Rural Issues Plan (adopted April 2008), the policy relevant to landscape and visual issues is:

- Policy CP25: Landscape Protection and Enhancement

2.12 Traffic and Transport

National Planning Policy Framework (March 2012)

- 2.12.1 When the National Planning Policy Framework (NPPF) was published on 27th March 2012, it replaced all Planning Policy Guidance (PPG) and Planning Policy Statements (PPS).
- 2.12.2 The NPPF promotes sustainable development and states that there is to be a *"presumption in favour of sustainable development"* when making plans and decisions.
- 2.12.3 A Transport Statement or Transport Assessment and Travel Plan should be provided for all developments that generate significant amounts of movement (Paragraphs 32 and 36 of the NPPF) and decisions should ensure that they *"are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised"* (Paragraph 34), and take account of whether:
- the opportunities for sustainable transport modes have been taken up...;
 - 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.
- 2.12.4 To facilitate the use of sustainable modes of transport, Paragraph 35 states that, where feasible, developments should be located and designed to:
- accommodate the efficient delivery of goods and supplies;
 - give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
 - create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians...;
 - incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
 - consider the needs of people with disabilities by all modes of transport.
- 2.12.5 In terms of managing the off-site impacts of the traffic generated from the development, paragraph 32 also states:
- "Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe".*

Planning Practice Guidance – (Travel Plans, Transport Assessments and Statements in Decision Taking – Updated 06/03/2014)

2.12.6 This guidance, in part, supersedes earlier guidance published by the Department for Transport in 2009 ('Good Practice Guidelines: Delivering Travel Plans through the Planning Process') and has been prepared in consultation with Department for Communities and Local Government (DCLG), bringing together current practice from examples from around the country.

The guidelines cover, in particular:

- when a Transport Assessment is required;
- how the need for, and scope of a Transport Assessment should be established; and
- what information should be included in Transport Assessments.

2.12.7 The planning practice guidance provides advice on what information should be included in Transport Assessments and states that:

"Paragraph 32 of the National Planning Policy Framework sets out that all developments that generate significant amounts of transport movement should be supported by a Transport Statement or Transport Assessment."

2.12.8 It also states that:

"Key issues to consider at the start of preparing a Transport Assessment or Statement may include:

- *the planning context of the development proposal;*
- *appropriate study parameters (i.e. area, scope and duration of study);*
- *assessment of public transport capacity, walking/ cycling capacity and road network capacity;*
- *road trip generation and trip distribution methodologies and/ or assumptions about the development proposal;*
- *measures to promote sustainable travel;*
- *safety implications of development; and*
- *mitigation measures (where applicable) – including scope and implementation strategy."*

Highways Agency Circular 02/2013: The Strategic Road Network and the Delivery of Sustainable Development

2.12.9 Relevant policy is set out in Circular 02/2013 'The Strategic Road Network and the Delivery of Sustainable Development' published in September 2013, which replaced the previous Circular 02/2007 'Planning and the Strategic Road Network' published in March 2007.

2.12.10 At the time this circular was prepared, Highways England was operating under its previous name as the Highways Agency. Circular 02/2013 sets out the role of the then Highways Agency in engaging with communities and developers to deliver sustainable development and economic growth.

2.12.11 Paragraph 9 sets out the broad policy aims of the circular as it relates to development proposals, stating that:

“Development proposals are likely to be acceptable if they can be accommodated within the existing capacity of a section (link or junction) ...or they do not increase demand for use of a section that is already operating at over-capacity levels, taking account of any travel plan, traffic management and/or capacity enhancement measures that may be agreed”.

2.12.12 However, with reference to decision making regarding developments, paragraph 9 goes on to state:

“However, development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe”.

Highways Agency and the Planning Application Process: A Protocol for Dealing with Planning Applications (2014)

2.12.13 In November 2011, the Highways Agency (now Highway's England) published a protocol document outlining how the Highways Agency would deal with planning applications. This was updated in June 2014.

2.12.14 The document tables the information that Highways England require in order to engage in the pre-application scoping process and sets out the key principles as it relates to the mitigation of impacts of developments on the strategic road network. The document states that mitigation of impacts should be based on the following hierarchy:

- 1) Minimise the level of off-site mitigation required through the use of measures such as travel plans and development phasing;
- 2) Implement physical measures on the local road network to minimise impact on the strategic road network;
- 3) Once all reasonable minimisation and off-network mitigation has been implemented, capacity improvements on the strategic road network will be considered.

The document also states that the mitigation proposed *"must be sufficient to offset the detriment to the strategic road network"*.

Highways England – The Strategic Road Network Planning for the Future (September 2015)

2.12.15 Highways England's 'Planning for the Future' document sets out HE's approach when considering planning applications. The document provides guidance on what information should be contained within respective planning proposals in relation to the strategic road network (SRN), and the decision making process.

2.12.16 The five planning values identified by HE within this document are:

- engage early;
- work openly;
- share evidence;
- share knowledge; and
- work collaboratively.

2.12.17 The document places a great emphasis on early engagement with HE, in order to ensure that all parties can work as a collaborative to deliver the various outcomes in the most effective way. By working jointly with HE, relevant parties can ensure effective local economic growth whilst promoting sustainable transport outcomes. The document states:

"Engaging early, such as pre-application, gives all parties maximum time to understand the impacts of proposed development on the SRN, the level of assessment required to understand impacts, and to agree the most appropriate actions required as a result to help ensure the development proposal is sound and deliverable."

Local Transport Plans

2.12.18 The Local Transport Plan (LTP) establishes a strategic approach through which to deal with key transport issues, objectives, and interventions. Two Local Transport Plans are relevant to the Proposed Development: Central Bedfordshire Council and Bedford Borough Council.

2.12.19 Central Bedfordshire Council's LTP3 considers the period between April 2011 and March 2026. In Section 6, the LTP identifies a series of objectives, including:

- Increasing the ease of access to employment by sustainable modes;
- Reducing the impact of commuting trips on local communities; and

- Minimising the negative impacts of freight trips on local communities.

2.12.20 Bedford Borough Council's LTP3 is published as a series of supporting strategy documents, and considers the period between April 2011 and March 2021. It identifies a series of actions and objectives, including:

- Increasing the number of trips undertaken by active travel modes for all purposes; and
- Ensuring that freight delivery routing, controls and infrastructure are considered as an integral part of planning proposals for Bedford Borough.

Emerging Local Plan 2035 - (Consultation Paper, 2017)

2.12.21 The Bedford Borough Council's emerging Local Plan will replace and extend the current planning policy documents which cover the period up to 2021. The new Local Plan will contain policies which will be used to assist decisions on planning applications throughout the Borough.

2.12.22 With regards to employment sites, the Local Plan supports "new form and/or quality of employment sites", rather than duplicate existing undeveloped sites.

2.12.22 The Local Plan states that "*New employment development should be located near to main roads, preferably re-using existing employment sites, and be in locations with good access by public transport, bicycle and foot*".

2.13 Archaeology and Cultural Heritage

Ancient Monuments and Archaeological Areas Act 1979

- 2.13.1 Scheduled Monuments are designated by the Secretary of State for Culture, Media and Sport on the advice of English Heritage as selective examples of nationally important archaeological remains. Under the terms of Part I Section 2 of the Ancient Monuments and Archaeological Areas Act 1979 (the “1979 Act”), it is an offence to demolish, destroy, damage, remove, repair, flood or tip on a Scheduled Monument either above or below ground without first obtaining permission (Scheduled Monument Consent) from the Secretary of State. This Act does not allow for the protection of the setting of Scheduled Monuments.

Planning (Listed Buildings and Conservation Areas) Act 1990

- 2.13.2 When considering whether to grant planning permission for development which affects a listed building or its setting, Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (the “1990 Act”) places a statutory duty on a local planning authority [LPA] or, as the case may be, the Secretary of State to “have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses” (para. 66(1)).
- 2.13.3 Section 72 of the 1990 Act places a general duty on planning authorities in the exercise of planning functions with respect to any buildings or other land in a conservation area, stating that “special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area” (para. 72 (1)). There is no specific reference to the setting of Conservation Areas in the 1990 Act.

Planning and Compulsory Purchase Act 2004

- 2.13.4 Under Section 38 (6) of the Planning and Compulsory Purchase Act 2004 (the “2004 Act”), “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” (para. 36 (6)).
- 2.13.5 Relevant Planning Policy for cultural heritage is presented in the National Policy Statement for Energy [NPS EN-1]. It is also contained within the National Planning Policy Framework [NPPF] and the associated Planning Practice Guidance [PPG]. Policies relevant to the proposed development are also presented in the adopted Development Plans for the host authorities and other Local Development Framework Documents [LDF’s].

Local Policy

- 2.13.6 The BBC Local Plan 2015 Planning for the Future outlines the emerging planning policy for the Borough. The growth strategy and policy outlined in this document do not have any implications new or additional heritage related implications.

Other Guidance

- 2.13.7 For a proposed development in England, the government and professional guidance relating to the process of identifying the significance of heritage assets and their settings and undertaking assessments of direct and indirect effects on heritage assets also includes:
- Scheduled Monuments – Identifying, protecting, conserving and investigating nationally important archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979 (DCMS 2010b);
 - Principles of Selection for Listing Buildings (DCMS 2010a);
 - Conservation Principles – Policies and Guidance for the Sustainable Management of the Historic Environment (English Heritage 2008);
 - Seeing the History in the View – A Method for Assessing Heritage Significance in Views (English Heritage 2011a);
 - Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment (Historic England 2015b);
 - Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (Historic England 2015b); and
 - Standard and Guidance for Historic Environment Desk-based Assessments (Chartered Institute for Archaeologists 2014).

2.14 Socio-economics

National Policy Statements

- 2.14.1 NPS EN-1 acknowledges “*the construction, operation and decommissioning of energy infrastructure may have socio-economic impacts at local and regional levels*”. At paragraph 4.2.2 it states that in addition to an ES prepared in accordance with the European Environmental Impact Assessment Directive “*the IPC will find it helpful if the applicant sets out information on the likely significant social and economic effects of the development, and show how any likely significant negative effects would be avoided or mitigated. This could include employment, equality, community cohesion and well-being.*”
- 2.14.2 Paragraph 5.12.3 states that where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake and include in their application an assessment of relevant socio-economic impacts, which may include: creation of jobs and training opportunities; provision of additional local services and improvements to local infrastructure including provision of educational and visitor facilities; effects on tourism; and the impacts of a changing influx of workers during different phases.
- 2.14.3 Paragraph 5.12.7 further notes that in making a decision on energy NSIPs the SoS may attribute limited weight to assertions of socio-economic impact that are not supported by evidence and may take into account mitigation such as planning obligations and particular options as to phasing the development in relation to impacts.
- 2.14.4 NPS EN-2, Paragraph 1.72 details the benefits of a low carbon economy including the likely “*positive effects on the Economy and Skills, and Health and Well-being as secondary benefits and positive effects in the medium/long term on climate change.*”
- 2.14.5 While only a number of the impacts raised in the NPSs are considered likely to be relevant to the Project, the socio-economic assessment may also consider any relevant positive provisions the developer has made or is proposing to make to mitigate impacts (for example through planning obligations) and any legacy benefits that may arise as well as any options for phasing development in relation to the Socio-Economic Impacts, to enable them to be considered by the SoS for the purposes of decision-making.

Other National and Local Policy

- 2.14.6 While the Planning Act 2008 is clear as to the primacy of the relevant NPS, other national and local planning policies can be considered important and relevant by the SoS in the determination of an energy NSIP.
- 2.14.7 The NPPF has sustainable development at its core, stating that the policies in paragraphs 18-219 taken as a whole constitute the Government’s view of what sustainable development in England means in practice for the planning

system. It recognises that sustainable development has three dimensions: economic, social and environmental, and these dimensions are reflected in the 12 'Core planning principles'. Those of relevance to socio-economic impact assessment are:

- Proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Every effort should be made objectively to identify and then meet the housing, business and other development needs of an area, and respond positively to wider opportunities for growth. Plans should take account of market signals, such as land prices and housing affordability, and set out a clear strategy for allocating sufficient land which is suitable for development in their area, taking account of the needs of the residential and business communities; and
- Take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs.

2.14.8 These underpin the 13 ways of 'delivering sustainable development', the most relevant to this Socio-Economic Impact assessment being listed below:

- Building a strong, competitive economy (1).
- Supporting a prosperous rural economy (3).
- Promoting healthy communities (8).

2.14.9 In relation to (1) it is stated that "*the Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth. Planning should operate to encourage and not act as an impediment to sustainable growth. Therefore, significant weight should be placed on the need to support economic growth through the planning system*" (paragraph 19). Paragraph 21 further states that "*investment in business should not be over-burdened by the combined requirements of planning policy expectations. [Local] Planning policies should recognise and seek to address potential barriers to investment, including a poor environment or any lack of infrastructure, services or housing*".

2.14.10 In relation to (3) paragraph 28 states that "*planning policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development. To promote a strong rural economy, local and neighbourhood plans should support the sustainable growth and expansion of all types of business and enterprise in rural areas...*".

2.14.11 In Promoting Healthy Communities (8), paragraphs 69 and 70 note that (local) planning policies and decisions should develop a shared vision with

communities of the environment and facilities they wish to see, and take an integrated approach to the location of economic uses of land.

- 2.14.12 HM Government's 2012 Gas Generation Strategy, prepared by the Department of Energy & Climate Change (DECC), highlights that gas-fired power stations are relatively cost effective and quick to build. It states that these plants can "*offer employment opportunities throughout the country*".
- 2.14.13 HM Government's UK Low Carbon Transition Plan: National Strategy for Climate and Energy, also prepared by DECC states, "*Coal and gas will remain important to ensure our electricity supply is reliable and secure as we move towards greater dependence on intermittent renewable sources like wind*".
- 2,14.14 The Central Bedfordshire Economic Development Plan (November 2011) outlines CBC's plan to reach its full economic potential. Central Bedfordshire aims to create 27,000 new jobs by 2026. This will be achieved by "*attracting new industries and businesses to the area in addition to new jobs created by population growth*" (p4). It states, "*Central Bedfordshire is to be recognised as a place truly open for business*" (p4).
- 2.14.15 The Central Bedfordshire Economic Development plan "*focuses on creating the right conditions to attract, retain and grow business to provide more employment opportunities and support our residents to access and benefit from such opportunities*" (p5).
- 2.14.16 The Central Bedfordshire Core Strategy and Development Management Policies (Adopted November 2009) provides a long term vision for development in the area up to 2026. The Project Site is located in the North Marston Vale Strategic Area which is allocated for significant housing, employment and regeneration uses. One of the main challenges identified in this document is the provision of jobs and the strategy outlines the aim to provide additional jobs for the increasing population.
- 2.14.17 Bedford Growth Plan (2014) – Stimulating Economic Growth provides a framework for promoting economic development. This document proposes that a new growth plan is required to allow faster delivery of jobs growth. Two aims which are of relevance to this Project are to "bring forward employment sites faster" and "regenerate older industrial estates" (p12). One of the main aims is to attract private sector investment to the area.
- 2.14.18 Shaping Bedford Borough's Economy (2011-2014) sets out the vision for Bedford to be "A Thriving Borough with a stronger local economy delivering higher levels of sustainable growth and employment for the benefit of the Borough's existing and future residents".
- 2.14.19 The strategy seeks a change in direction towards private sector led employment growth. Priority 2 is "*directed to support private sector business growth to offset the decline in the public sector and deliver the required*

overall future growth in employment'. There is a need to attract higher paid jobs to the area.

2.14.20 Bedford's Draft Local Plan (to 2035) is due to be published in June 2017. The Background Papers for the plan focusing on renewable energy (December 2016) suggests that for all development sites, suitability of specific sites for development will need to be determined on an individual site basis, taking account of a range of relevant planning considerations. It notes that all development will need to take account of:

- Context, visual appearance and landscape character;
- Natural features, the natural environment, geology and biodiversity;
- Cultural features, historical and archaeological features, heritage assets;
- Local land use, social and economic impacts;
- Surface and ground water; and
- Traffic and access.

2.14.21 The Bedford Energy Potential Study considered advantages to locating new energy from waste development on, or adjacent to, a site which is already in a waste management use.

2.14.22 Central Bedfordshire's Draft Local Plan is due to be published for consultation in June 2017 though no guidance has been published to date to suggest material changes to existing plan.