



The Millbrook Power (Gas Fired Power Station) Order

5.5 Statement of Engagement of Section 79(1) of the Environmental Protection Act 1990

Planning Act 2008
The Infrastructure Planning
(Applications: Prescribed Forms and Procedure) Regulations 2009

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1 Introduction

1.1 Background

- 1.1.1 This Statement has been prepared by Peter Brett Associates LLP (PBA) on behalf of Millbrook Power Limited (MPL). It considers whether the Project would engage one or more of the statutory nuisances set out in Section 79(1) of the Environmental Protection Act 1990 (as amended) (the EPA 1990).
- 1.1.2 The requirement for such a statement is set out in the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the APFP Regulations 2009) at regulation 5(2)(f), which states: “the application must be accompanied by...a statement whether the proposal engages one or more of the matters set out in Section 79(1) (statutory nuisances and inspections therefor) of the Environmental Protection Act 1990, and if so how the applicant proposes to mitigate or limit them”.
- 1.1.3 This statement has also been prepared with reference to the National Infrastructure Planning Service document – ‘Defence to Proceedings in Respect of Nuisance (2013)’.

1.2 Project Description

- 1.2.1 MPL is promoting a new gas fired peaking power generation plant and associated infrastructure (hereafter referred to as the Project) on land at and in the vicinity of the former clay extraction pit at Rookery South, near Stewartby, Bedfordshire.
- 1.2.2 The Project would comprise:
- a new Power Generation Plant in the form of an Open Cycle Gas Turbine (OCGT) peaking power generating station, fuelled by natural gas with a rated electrical output of up to 299 MW. This is the output of the generating station as a whole, measured at the terminals of the generating equipment. The Power Generation Plant comprises:
 - generating equipment including one Gas Turbine Generator with one exhaust gas flue stack and Balance of Plant (together referred to as the ‘Generating Equipment’), which are located within the ‘Generating Equipment Site’;
 - a new purpose built access road from Green Lane to the Generating Equipment Site (the ‘Access Road’ or the ‘Short Access Road’);
 - a temporary construction compound required during construction only (the ‘Laydown Area’);
 - a new underground gas pipeline connection, approximately 1.8 km in length (the ‘Pipeline’) to bring natural gas to the Generating Equipment

from the National Transmission System (the 'Gas Connection'). The Gas Connection also incorporates an Above Ground Installation (AGI) at the point of connection to the National Transmission System; and

- a new electrical connection to export power from the Generating Equipment to the National Grid Electricity Transmission System (NETS) (the 'Electrical Connection'), comprising an underground double circuit Tee-in. This would require one new tower (which will replace an existing tower and be located in the existing Grendon – Sundon transmission route corridor, thereby resulting in no net additional towers). This option would require two SECs, one located on each side of the existing transmission line, and both circuits would then be connected via underground cables approximately 500 m in length to a new substation (the 'Substation').
- The Generating Equipment, Access Road and Laydown Area are together known as the 'Power Generation Plant' and are located within the 'Power Generation Plant Site'. The Power Generation Plant Site is approximately 12.5 ha in area.

1.2.3 The Power Generation Plant, Gas Connection, and Electrical Connection, together with all access requirements are referred to as the 'Project'. The land upon which the Project would be developed, or which would be required in order to facilitate the development of the Project, is referred to as the 'Project Site'. The Project Site is approximately 48 ha in area. The Project is described in more detail in Chapter 3 of the Environmental Statement (ES) (Document Reference: 6.1).

1.2.4 The Project constitutes a Nationally Significant Infrastructure Project (NSIP) by virtue of section 14 (1)(a) and section 15 of the Planning Act 2008 (PA 2008) which includes within the definition of an NSIP as any onshore generating station in England or Wales of 50 MWe capacity or more. Under section 31 PA 2008 a development consent order (DCO) is required to develop a NSIP. Under section 37 PA 2008 this can only be granted if an application is made to the Secretary of State (SoS) (the DCO Application).

1.2.5 This Statement is part of a suite of documents which accompany the DCO Application and should be read in conjunction with those other documents to gain a fuller understanding of the Project.

1.2.6 A glossary of defined terms is provided in Document Reference 1.4.

2 Description of Matters Considered by Section 79 of the EPA (1990)

2.1 Introduction

2.1.1 As stated in Section 1 above, regulation 5(2)(f) of the AFFP Regulations requires any DCO application to be accompanied by a statement indicating whether the proposal engages one or more of the statutory nuisances set out in Section 79 of the EPA 1990, and if so what measures are proposed to mitigate or limit them.

2.2 EPA 1990

2.2.1 The following text, extracted from Section 79(1) of the EPA 1990 sets out the matters that constitute statutory nuisances in England and Wales.

“(1)...the following matters constitute “statutory nuisances” for the purposes of this Part, that is to say—

- (a) any premises in such a state as to be prejudicial to health or a nuisance;
- (b) smoke emitted from premises so as to be prejudicial to health or a nuisance;
- (c) fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;
- (d) any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance;
- (e) any accumulation or deposit which is prejudicial to health or a nuisance;
- (f) any animal kept in such a place or manner as to be prejudicial to health or a nuisance;
- (fa) any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance;
- (fb) artificial light emitted from premises so as to be prejudicial to health or a nuisance;
- (g) noise emitted from premises so as to be prejudicial to health or a nuisance;
- (ga) noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street;
- (h) any other matter declared by any enactment to be a statutory nuisance;”

2.2.2 For the purposes of Section 79(1) of the EPA 1990, “noise” includes vibration.

2.2.3 The nature of the Project is such that the statutory nuisances described by the sub-sections set out below will not be engaged and are therefore not discussed further in this Statement:

- 79(1)(b) – as no smoke will be emitted from the Project;
- 79(1)(c) – as section 79(1)(c) applies only to private dwellings;
- 79(1)(f) – as no animals will be kept at the Project Site; and

- 79(1)(fa) – as the Project will not give rise to processes which could cause infestation by insects.

2.2.4 Sub-sections 79(1)(a) and 79(1)(e), relating to general conditions at the Project Site, and 79(1)(d) relating to air emissions and effluvia, 79(1)(fb), relating to lighting, and 79(1)(g) and 79(1)(ga), relating to noise and vibration, are potentially relevant to the Project and therefore are discussed further in Section 3 of this Statement.

3 Assessment of Matters set out in Section 79 (1) of the EPA (1990)

3.1 Introduction

3.1.1 The following section sets out potential impacts of the Project which may constitute a source of statutory nuisance, as defined by Section 79 (1) of the EPA 1990. To the extent that any potential impacts are considered to potentially engage any of the issues set out in Section 79(1) of the EPA 1990, proposed mitigation measures to limit such impacts are also described. This section has been prepared with reference to the ES (Document Reference: 6.1) and outline Construction Environmental Management Plan (CEMP) (Document Reference 6.2, Appendix 3.2) which have been prepared to accompany the DCO Application.

3.2 Section 79(1)(a) and Section 79(1)(e) – Condition of the Site

Construction and decommissioning

3.2.1 Construction of the Project will comprise site preparation works (e.g. excavation of trenches for the gas pipeline and the electrical cable, as well as excavation for foundations for the Generating Equipment. Briefly, this could result in:

- Disturbance of existing contamination and creation of pollution pathways; and
- Creation of pollution incidents from, for example, spillages.

3.2.2 During construction, the condition of the Project Site will be managed by implementation of a CEMP, an outline of which can be found in Document Reference 6.2, Appendix 3.2. Prior to decommissioning a decommissioning plan will be established. The CEMP and decommissioning plan will cover matters such as the management of construction materials and wastes, protection of surface water, groundwater, land quality and human health, by establishing a series of best practice working methods and embedded mitigation measures. Compliance with the CEMP and decommissioning plan is secured by way of a requirement to the DCO (Requirements 10 and 18 – Document Reference 3.1).

3.2.3 These mitigation measures include:

- Compliance with the mitigation measures set out in the following documents:
 - Protection of Workers and the general public during the development of contaminated land (HSE 1991); and
 - A guide to safe working on contaminated sites R132 (CIRIA 1996).

- Construction workers will wear appropriate personal protective equipment (PPE) for the nature of works being undertaken.
- Any soils excavated which are considered to be potentially contaminated (e.g. visual or olfactory evidence) will be reported to site management and left alone until their appropriate treatment. Suitable training will be provided to site personnel to ensure the correct identification of potentially contaminated soils by olfactory means; and
- Measures should be taken to avoid/minimise the potential for fuel and chemical spills. A spill response procedure will also apply on-site.

3.2.4 Further ground investigations will be undertaken prior to construction of the Project which will further define the nature of ground conditions at the Project Site. In particular, a Phase 2 site investigation will be carried out to confirm the findings of the Phase 1 site investigation in terms of ground conditions. This will be secured as a requirement to the DCO (Requirement 8 – Document Reference 3.1). A detailed foundation design assessment will also be carried out taking into account the two groundwater bodies beneath the Project Site. However, based on evidence to date (together with the embedded mitigation e.g. designing the Project to take into account the findings of further ground investigations), there are not anticipated to be any significant issues with contamination at the Project Site.

3.2.5 It is therefore considered that with the embedded mitigation measures summarised above, construction and decommissioning activities of the Project would not give rise to impacts which would be likely to constitute a statutory nuisance under section 79(1)(a) or (e).

Operation

3.2.6 During operation of the Project, there is the potential for incidences, e.g. spillages of fuels, that could impact the condition of the Power Generation Plant Site.

3.2.7 During operation of the Project, an Operational Environmental Management Plan (OEMP) will be put in place by the operator to ensure that the site remains in a good condition. The OEMP will be certified to OHSAS 18001, ISO 9001 and ISO 14001 or other appropriate international standards. The OEMP will encompass best practice methods for all operational procedures at the Project Site, including, but not limited to; spill reporting procedures and clean up methods; site speed limits; correct storage of fuel; and vehicle re-fuelling procedures.

3.2.8 It is therefore considered that with embedded mitigation measures (as summarised in paragraph 3.2.7 above) operation of the Project would not give rise to impacts which would be likely to constitute a statutory nuisance under section 79(1)(a) or (e) of the EPA 1990.

3.3 Section 79(1)(d) – Air Quality

Construction and decommissioning

3.3.1 There is the potential for emissions of dust arising from construction and decommissioning activities carried out at the Project Site. A qualitative assessment of the impact of dust on the surrounding environment has been undertaken as part of the Environmental Impact Assessment (EIA) and is reported in Section 6 of the ES (Document Reference 6.1).

3.3.2 Following the Institute of Air Quality Management (IAQM) 2014 guidance on dust assessment, the screening distances to be used to assess the impacts of dust emissions for human and ecological receptors are:

- Human – within 350 m of the boundary of the site, or 50 m of the routes used by construction vehicles on the public highway, within 500 m of the site entrance; and
- Ecological – 50 m of the boundary of the site or 50 m of the routes used by construction vehicles on the public highway, within 500 m of the site entrance.

Outside of these areas, it is reasonable to conclude that construction and decommissioning impacts of the Project will be negligible.

3.3.3 Nevertheless, there are residential and business premises within these distances from the Project and therefore there is the potential for statutory nuisance under Section 79(1)(d) of the EPA to occur.

3.3.4 The application of embedded mitigation measures will ensure that the impacts of dust during the construction and decommissioning of the Project are slight adverse at worst and therefore will not give rise to statutory nuisance pursuant to Section 79(1)(d) of the EPA 1990.

3.3.5 These embedded mitigation measures are as follows:

Site Management

- Records of dust and air quality complaints to be kept, including likely causes and mitigation measures to reduce impacts if appropriate;
- On-site and off-site visual inspections to be undertaken and recorded; and
- Keep site perimeter, fences etc clean.

Site Planning

- Consideration of weather conditions and dust generating potential of material to be excavated prior to commencement of works;
- Plan site layout to maximise distance from plant/stockpiles etc to sensitive receptors; and
- Dusty materials should be removed from Project Site as soon as possible.

Construction Traffic

- Loads entering and leaving the Project Site with dust generating potential should be covered and wheel washing facilities made available if appropriate;
- No idling of vehicles;
- Vehicles to comply with site speed limits (for example, typically 15mph on hard surfaces, 10mph on unconsolidated surfaces);
- Water assisted sweeping of local roads to be undertaken in the event that material is tracked out of the Project Site; and
- Install hard surfacing as soon as practicable on the Project Site and ensure that they are maintained in good condition.

Site Activities

- Exposed soils should be revegetated as soon as practicable. Near residential properties or sensitive ecosystems (<50m), use hessian/mulches etc where not possible to revegetate or cover with topsoil;
- Minimise dust generating activities, particularly near residential receptors/sensitive ecosystems during prolonged dry, dusty weather unless damping / other suppressants are used;
- Ensure an adequate water supply to the Project Site and use water as dust suppressant where applicable;
- Ensure any site machinery is well maintained and in full working order; and
- Ensure equipment available for cleaning spills etc available at all times.

3.3.6 These mitigation measures will be set out in the CEMP and decommissioning plan and secured by way of a requirement to the DCO (Requirements 10 and 18 – Document Reference 3.1). It is therefore considered that with embedded mitigation measures (as summarised at paragraph 3.3.5 above) construction and decommissioning activities of the Project would not give rise to impacts which would be likely to constitute a statutory nuisance under section 79(1)(d) of the EPA 1990.

Operation

3.3.7 During operation, the Power Generation Plant will release NO_x during the combustion of natural gas. No other pollutants of concern will be released in quantities which have the potential for causing statutory nuisance. Atmospheric dispersion modelling has been undertaken as part of the EIA and the results are presented in Section 6 of the ES (Document Reference 6.1). The results of the dispersion modelling conclude that NO_x concentrations will be well below the relevant national air quality objectives at all receptors within the study area (10 km radius from the location of the stack). Therefore, the significance of effect of air quality emissions will be negligible. No mitigation is

therefore proposed, other than the use of Best Available Techniques (BAT) for control of emissions which will be designed into the Power Generation Plant and required pursuant to the Environmental Permit.

- 3.3.8 The Electrical Connection will not release any emissions to air during operation.
- 3.3.9 The Gas Connection will not release any emissions to air during normal operation. If required, in emergency situations, gas may be vented from either the AGI or Power Generation Plant Site if there is an abnormal build up of pressure. However, the gas venting would be controlled and would release to atmosphere, not in an enclosed space. Therefore, the venting of gas would not give rise to impacts which would be likely to constitute a statutory nuisance.
- 3.3.10 It is therefore considered that with embedded mitigation measures operation of the Project would not give rise to impacts which would be likely to constitute a statutory nuisance under section 79(1)(d) of the EPA 1990.

3.4 Section 79(1)(fb) – Artificial Lighting

- 3.4.1 The Project Site will require artificial lighting during construction and decommissioning and the Power Generation Plant, Electrical Connection Compound and AGI will require artificial lighting during operation to provide a safe working site during hours of darkness. An outline lighting strategy has been proposed to support the DCO Application (Document Reference 6.2, Appendix 11.3). The LVIA determined that the impact of lighting during the construction, operation and decommissioning stages of the Project will be negligible. Embedded mitigation measures will include the use of controlled directional lighting in order to limit light spillage and the use of motion sensitive lights in order to avoid unnecessary lighting. Compliance with the lighting strategy is secured by way of a requirement to the DCO (Document Reference 3.1 - Requirement 14).
- 3.4.2 It is therefore considered that with the application of embedded mitigation measures construction and decommissioning activities and the operation of the Project would not give rise to impacts which would be likely to constitute a statutory nuisance under section 79(1)(fb) of the EPA 1990.

3.5 Section 79(1)(g) and Section 79(1)(ga) - Noise and Vibration

Construction and decommissioning

- 3.5.1 A Construction noise assessment has been undertaken using guidance set out in BS 5228 'Noise and vibration control on construction and open sites' and a construction vibration assessment has been prepared using BS 7385 (1993) 'Evaluation and Measurement for Vibration in Buildings'. Both assessments are set out in detail in Chapter 7 of the ES (Document Reference 6.1).

- 3.5.2 The assessments were undertaken to determine the impacts of construction noise and vibration from the Project Site on a series of nearest sensitive receptors (NSRs). These NSRs were agreed with Central Bedfordshire Council (CBC) as being the closest representative properties to the Project Site and were used as locations to undertake baseline noise surveys.
- 3.5.3 The assessments have been based upon the construction plant (the items of such construction plant being as per the assumptions made in the ES) being used simultaneously. It is noted that in reality this scenario is extremely unlikely to occur and hence predicted noise and vibration levels are considered worst case.
- 3.5.4 The predicted construction noise level does not exceed the daytime limit of 65 dB(A) at any of the receptors. Therefore, based on this conservative, worst case assessment, the overall impact of construction noise during typical working hours is predicted to be slight or neutral (depending on the location of the NSR) which is not significant.
- 3.5.5 Furthermore, with the distances involved between the Project Site and NSR's (minimum distance of 90m from construction of the Electrical Connection) it is anticipated that the level of induced vibration will be imperceptible at the nearest sensitive receptor.
- 3.5.6 The worst case construction assessment summarised above can also be used as a proxy for the impacts of noise/vibration at the decommissioning stage of the Project.
- 3.5.7 It is therefore considered that with embedded mitigation measures, for example adherence to a CEMP which will include measures to limit construction noise such as:
- Construction works shall not take place outside the hours of 07:00-19:00 Monday to Friday and 07:00 – 13:00 on a Saturday, with no working on Sundays or Bank Holidays unless otherwise agreed with BBC/ CBC;
 - Construction plant will be operated and maintained appropriately, having regard to the manufacturer's written recommendations or using other appropriate operation and maintenance programmes which reduce noise and vibration emissions; and
 - The positioning of construction plant and activities to minimise noise at sensitive receptors such as residential properties;
- 3.5.8 Construction and decommissioning activities of the Project would not give rise to impacts which would be likely to constitute a statutory nuisance under section 79(1)(g) or section 79(1)(ga) of the EPA 1990. Compliance with the CEMP, construction hours and decommissioning plan is secured by way of a requirement to the DCO (Document Reference 3.1 - Requirements 10, 13 and 18).

3.5.9 Any noise generated by construction traffic movements has been assessed as part of detailed noise modelling, presented in Chapter 7 of the ES, Document Reference 6.1, has shown that effects will be neutral in all cases.

Operation

3.5.10 Noise modelling has been undertaken to estimate the contribution to noise levels at each NSR location, and has been created using representative sound power levels for key items of the Generating Equipment. The model estimates the contribution to noise levels at each NSR location.

3.5.11 An operational noise assessment has been undertaken using guidance set out in BS 4142 (2014) – ‘Method for rating industrial noise affecting mixed residential and industrial areas’

3.5.12 The modelling results show that the external noise level at the closest NSR is 38dB. This is below the daytime and night time background noise levels. As such, the impact of operational noise from the Project on external noise levels at NSRs is not considered give rise to impacts which would be likely to constitute a statutory nuisance under section 79(1)(g) or section 79(1)(ga) of the EPA 1990.

4 Conclusions

4.1 Summary

- 4.1.1 This Statement has been prepared to fulfil regulation 5(2)(f) of the AFFP Regulations, which require any DCO application to be accompanied by a statement considering whether the proposal would engage one or more of the statutory nuisances set out in Section 79(1) of the EPA 1990.
- 4.1.2 Detailed assessments have been undertaken to assess: the condition of the site, potential air quality impacts, noise levels, and artificial lighting generated by the Project during construction, operation and decommissioning.
- 4.1.3 In all cases, the application of embedded mitigation measures will prevent impacts which are considered to have the potential to result in statutory nuisance under section 79(1) of the EPA 1990.
- 4.1.4 Construction of the Project will be managed by a CEMP (secured by Requirement 10 of the DCO) and operation of the Project will be managed by both an Environmental Permit and an OEMP.

4.2 Statutory Defence

- 4.2.1 Whilst the conclusions of this Statement indicate that no statutory nuisance is likely to occur, the Applicant has included within the draft DCO for the Project (Document Reference 3.1) a provision taken from the standard model provisions for DCOs which would provide a defence against cases of nuisance, such that this could be relied upon where, for example, the nuisance cannot reasonably be avoided.