

Hinkley Point C | Development Consent Order Application

Report

Doc Ref 3.15
October 2011

Environmental Protection Act Statement



Save today. Save tomorrow.



Any plans, drawings and materials submitted by EDF Energy as part of the Application to the Infrastructure Planning Commission are protected by copyright. You may only use this material (including taking copies of it) in order to (1) inspect those plans, drawings and materials at a more convenient time or place; or (2) to facilitate the exercise of a right to participate in the pre-examination or examination stages of the Application which is available under the Planning Act 2008 and related regulations. Further copies must not be taken without the prior permission of EDF Energy.

edfenergy.com

EDF Energy Ltd 40 Grosvenor Place London SW1X 7EN. Registered in England & Wales. Company registration number 2366852.

© Copyright EDF Energy All rights reserved 2011.

The official emblems of the London 2012 Games are © 2007 The London Organising Committee of the Olympic Games and Paralympic Games Ltd. All rights reserved.

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

CONTENTS

1.	INTRODUCTION	3
2.	BACKGROUND: SECTION 79(1) ENVIRONMENTAL PROTECTION ACT 1990	5
3.	ASSESSMENT OF ENGAGEMENT WITH MATTERS UNDER SECTION 79(1)	7
3.2	Noise.....	7
3.3	Air Quality	8
3.4	Light.....	9
4.	CONCLUSION	11

[This page is intentionally left blank]

1. INTRODUCTION

- 1.1.1 This Statement of Engagement relating to Statutory Nuisances forms part of an application by NNB Generation Company Limited (EDF Energy) to the Infrastructure Planning Commission (IPC) under the Planning Act 2008 for powers to construct and operate a nuclear power station at Hinkley Point in West Somerset (HPC) and associated development in the vicinity, necessary to facilitate the construction and use of the power station. The elements of the scheme are set out in more detail in the **Environmental Statement** (ES), and are together referred to as the HPC Project.
- 1.1.2 EDF Energy is required to submit to the IPC a Statement of Engagement relating to statutory nuisances prepared in accordance with the requirements of Regulation 5(2)(f) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (“APFP Regulations”).
- 1.1.3 The purpose of the Statement of Engagement is to set out *“whether the proposal [the HPC Project] 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 [EDF Energy] proposes to mitigate or limit them”* (APFP Regulation 5(2)(f)).
- 1.1.4 This Statement should be read alongside the other application documents, in particular the ES. This Statement of Engagement makes reference to sections of the ES which contain detailed information on assessment and mitigation of impacts.
- 1.1.5 The matters under section 79(1) which are potentially engaged by the HPC Project are, broadly, nuisance caused by noise, air pollution and light pollution.

[This page is intentionally left blank]

2. BACKGROUND: SECTION 79(1) ENVIRONMENTAL PROTECTION ACT 1990

2.1.1 This section sets out the relevant provisions of the Environmental Protection Act 1990 in respect of statutory nuisance.

2.1.2 Section 79(1) provides:

(1) *[...] the following matters constitute "statutory nuisance" for the purposes of this part [of the 1990 Act] 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; and*
- (h) *any other matter declared by any enactment to be a statutory nuisance.*

2.1.3 The rest of section 79 contains some definitions and exceptions. Of relevance is section 79(6A) which provides that:

(6A) Subsection (1)(ga) above does not apply to noise made:

(a) by traffic, [...]

2.1.4 The relevant definitions in section 79(7) include

- “**chimney**” includes structures and openings of any kind from or through which smoke may be emitted;
- “**dust**” does not include dust emitted from a chimney as an ingredient of smoke;
- “**fumes**” means any airborne solid matter smaller than dust;
- “**gas**” includes vapour and moisture precipitated from vapour;
- “**industrial, trade or business premises**” means premises used for any industrial, trade or business purposes or premises not so used on which matter is burnt in connection with any industrial, trade or business process, and premises are used for industrial purposes where they are used for the purposes of any treatment or process as well as where they are used for the purposes of manufacturing;
- “**noise**” includes vibration;
- “**prejudicial to health**” means injurious, or likely to cause injury, to health; and
- “**smoke**” includes soot, ash, grit and gritty particles emitted in smoke.

3. ASSESSMENT OF ENGAGEMENT WITH MATTERS UNDER SECTION 79(1)

3.1.1 This section is arranged by the types of impacts which could engage matters under section 79(1). The first impact to be considered is noise which could fall under sub-section (g) if emitted from premises or sub-section (ga) if emitted in a street. The second is air quality which could engage sub-section (b) smoke, sub-section (c) fumes or gases, sub-section (d) dust or other effluvia. The final category is lighting which could engage sub-section (fb) light from premises.

3.2 Noise

a) Construction

3.2.1 Noise and vibration may be generated from a range of activities that will be carried out for the construction of HPC and the associated development sites. A range of plant and equipment will be used across the sites depending upon particular construction needs. Such plant and equipment will range from standard earthmoving plant to specialist equipment such as heavy lifting cranes and piling rigs. The intensity and duration of use of such plant and equipment will vary during the construction phases across the sites. Construction noise and vibration has been assessed in the Environmental Statement. For the HPC Development Site the assessment is presented in **Chapter 11 of Volume 2**. Assessments have also been undertaken for each of the associated development sites (see **Chapter 9 of Volumes 3 to 10**). The assessments identify where significant impacts may occur during the construction phase and where necessary, measures are proposed to mitigate such impacts. Proposals for noise monitoring and management are outlined within the Environmental Statement chapters and aspects of practical implementation are outlined in the **Noise and Vibration Management Plans** (one for the HPC Development Site and one for the associated development sites) annexed to the **Environmental Statement**.

3.2.2 No noise or vibration nuisance is anticipated from the construction of HPC or the associated development sites.

b) Operation

3.2.3 No significant sources of vibration are anticipated from the operation of HPC or the associated development sites. Noise emissions from the operation of HPC will occur from fixed sources including the main stack and turbine halls. Noise modelling has been undertaken to predict noise levels at the nearest residential properties (taking into account meteorological conditions). This has shown that noise levels at the properties should not exceed an acceptable noise criterion as agreed with the local authorities (**Chapter 11, Volume 2** of the ES).

3.2.4 There are not anticipated to be any significant noise impacts arising from the operation of the associated development sites (**Chapter 9 of Volumes 3 to 10** of the ES).

3.2.5 No noise or vibration nuisance is anticipated from the operation of HPC or the associated development sites.

3.3 Air Quality

a) Construction

3.3.1 The principal pollutant that may be generated during the construction of HPC and the associated development sites is dust which will be generated from earthmoving and general fabrication activities. As with any construction site control measures will be in place to minimise dust emissions at source and to prevent the significant spread of dust beyond the boundaries of the sites. No smoke, fumes or gases are anticipated to be emitted from the sites in significant concentrations during the construction phase. No burning of waste or bonfires will be permitted on any of the sites during construction.

3.3.2 Assessment of construction dust is provided within **Chapter 12 of Volume 2** of the ES for HPC development site and **Chapter 10 of Volumes 3 to 10** for the associated development sites. The assessments have taken into account the size of the sites and the nature of the construction activities. Where necessary the assessments indicate mitigation measures that would be employed to manage dust impacts. An **Air Quality Management Plan** (one for HPC and one for the associated development sites) outlines the mitigation and control measures and sets out proposals for dust monitoring and is annexed to the **Environmental Statement**.

3.3.3 No nuisance related to dust is anticipated to occur during the construction works.

b) Operation

3.3.4 For the HPC site, predictive modelling has been undertaken to determine concentrations of gases and particulates that may occur at locations adjacent to the site (principally residential properties). Emissions will be of a short-term temporary nature. Modelling results indicate that pollutant concentrations will not exceed the relevant Air Quality Objective or other applicable criteria which are intended to be protective of human health. No significant dust or smoke is anticipated to be released from the HPC site during operation. No specific mitigation is required in relation to atmospheric emissions during the operational phase.

3.3.5 No significant atmospheric emissions are anticipated from the associated development sites during operation and no mitigation is required in this context.

3.3.6 On the basis of the assessments presented in the ES (**Volume 2, Chapter 12** of the ES for HPC development site and **Chapter 10 of Volumes 3 to 10**), no nuisance related to air quality is anticipated during the operational phases of HPC or the associated developments.

3.4 Light

a) Construction

- 3.4.1 Lighting will be required during the construction of HPC and the associated development sites. For HPC a lighting strategy has been developed and this requires that detailed lighting design takes into account the requirement to minimise light pollution through designing to correct light levels, locating luminaries away from sensitive receptors, using shields and baffles to limit light spill, reducing height of lighting columns, use of full cut-off luminaries to prevent upward light and direct task lighting downwards. These measures will minimise light spillage from the southern area of the development site. This is the area of the site which is closest to existing residential properties. For the associated development sites working hours will not extend to later than 19:00 in the evening and thus the task lighting requirements for a safe working environment will not extend throughout the night time in these areas.
- 3.4.2 Assessment of the impact of construction lighting for the HPC site is presented in **Volume 2, Chapter 22** of the ES (Landscape and Visual Impact). Detailed assessment of construction lighting is not required for the associated development sites because of the limited working hours.
- 3.4.3 Given appropriate design measures lighting during the construction phase of HPC and the associated development sites is not anticipated to cause nuisance.

b) Operation

- 3.4.4 As with the construction phase a lighting strategy has been developed for the operational phase of HPC. For the associated development sites perimeter lighting levels have been set to minimise light spill into adjacent areas.
- 3.4.5 Assessment of operational lighting is provided in the Landscape and Visual Impact chapters of the ES (**Volume 2, Chapter 22** for the HPC site and **Chapter 15** of **Volumes 3 to 10** for the associated development sites).
- 3.4.6 Taking into account the application of the mitigation measures set out in the lighting strategies, it is not anticipated that lighting during the operation of HPC or the associated development sites would give rise to nuisance.

[This page is intentionally left blank]

4. CONCLUSION

- 4.1.1 This Statement reports the findings of the Environmental Statement in respect of potential statutory nuisance resulting from the construction and use of the HPC Project. Taking into account the mitigation and control measures proposed in the Environmental Statement including those outlined in the relevant **Environmental Management and Monitoring Plans** annexed to the **Environmental Statement**, it is not anticipated that statutory nuisance in respect of noise, air quality or lighting will result from the construction and use of the HPC Project.