SLOUGH MULTIFUEL EXTENSION PROJECT

[PINS Ref: EN010129]

Environmental Statement
Volume 1 – Environmental Statement

Chapter 12 – Other Issues

Document Reference: [6.2.12]

APFP Regulations 5(2)(a)

Revision Number: 1.0

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

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TABLES

APPENDIX
(Refer to ES Volume 3, [Application Document Reference 6.4])

12.0 OTHER ISSUES

12.1 Introduction

12.1.1 This Other Issues chapter of the Environmental Statement (ES) **[Application Document Reference 6.2]** includes a brief assessment of topics that have not been scoped out of the EIA but are not expected to have likely significant effects and can therefore be reported concisely, without the need for separate detailed chapters. The generic EIA methodology set out in **ES Chapter 6: EIA Methodology [Application Document Reference 6.2.6 – ES Chapter 6]** does not apply to this chapter, because of the intended brevity of the chapter.

12.1.2 This chapter provides a summary of the following:

- Flood Risk, Drainage and Surface Water (Section 12.2 of this ES **Chapter 12: Other Issues [Application Document Reference 6.2.12 – ES Chapter 12];** and
- Major Accidents and Disasters (Section 12.3 of this ES **Chapter 12: Other Issues [Application Document Reference 6.2.12 – ES Chapter 12]).**

12.2 Flood Risk, Drainage and Surface Water

Introduction

12.2.1 This section of this chapter of the ES relates to flood risk, drainage and surface water which have been assessed and included in this ES in the form of a Flood Risk Assessment (FRA) (refer to **Appendix 12A [Application Document Reference 6.4.13 – Preliminary Flood Risk Assessment]** This section of the ES concisely summarises the FRA.

Legislation and Planning Policy

National Policy Statement for Energy EN-1 (Department of Energy and Climate Change, 2011a)

12.2.2 The National Policy Statement for Energy (NPS EN-1) is the framework for decisions on proposals for new energy infrastructure. The aims of the NPS EN-1 for development and flood risk, are to ensure that flood risk from all sources of flooding is taken into account at all stages in the process, to avoid inappropriate development in areas at risk of flooding and to direct development away from areas at highest risk. Where new energy infrastructure is, exceptionally, necessary in such areas, policy aims to make it safe without increasing flood risk elsewhere and where possible, reducing flood risk overall. The Proposed Project is classed as 'Essential Infrastructure' and, therefore, acceptable in high flood risk

areas (Paragraph 5.7.3). The Proposed Project is however, within Flood Zone 1 with a low flood risk from Main Rivers and Ordinary Watercourses throughout the lifetime of the Proposed Project.

12.2.3 The policy states *"all applications for energy projects of 1 hectare or greater in Flood Zone 1 and all proposals for projects located in Flood Zones 2 and 3 should be accompanied by a flood risk assessment (FRA). This should identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account"* (Paragraph 5.7.4). The FRA is presented in **Appendix 12A [Application Document Reference 6.4.13 – Preliminary Flood Risk Assessment]** of this ES).

National Planning Policy Framework

12.2.4 The NPPF is supported by the Planning Policy Guidance (PPG), of particular relevance is the PPG on Flood risk and coastal change (PPG). They must be taken into account in the preparation of local and neighbourhood plans and are a material consideration in planning and DCO decisions. It constitutes guidance for local planning authorities (LPAs) and decision-takers, both in drawing up plans and as a material consideration in determining applications.

12.2.5 Local Plans should apply a sequential, risk-based approach to the location of developments. This is done to seek to mitigate flood risk to people and property and manage any residual risk, taking account of the impacts of climate change, by:

- Applying the Sequential Test;
- Applying the Exception Test, if necessary;
- Safeguarding land from development that is required for current and future flood management;
- Using opportunities offered by new development to reduce the causes and impacts of flooding; and
- Seeking opportunities to facilitate the relocation of existing development, including housing, to more sustainable locations if climate change is expected to increase flood risk.

12.2.6 The NPPF states that when determining planning applications, Local Planning Authorities (LPA) should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific FRA.

Other Relevant Policy and Guidance

12.2.7 The following other policy was considered for the FRA:

- Slough Borough Council Core Strategy;
- Thames River Basin District Flood Risk Management Strategy;
- Thames Catchment Flood Management Plan (CFMP);
- Slough Borough Council Local Flood Risk Management Strategy (LFRMS); and
- Slough Borough Council Strategic Flood Risk Assessment (SFRA)

Flooding from Fluvial and Tidal Sources

Tidal

12.2.8 The Site is not located in close proximity to the sea or any tidally influenced watercourse. Based on this information the risk of flooding from this source is not considered further as part of this chapter. This is applicable to both the Proposed Project and Consented Development as they are within the same Site.

Fluvial

12.2.9 The Site is not located near an Environment Agency (EA) 'main river'. The nearest 'main rivers' are Chalvey Brook, approximately 950m west of the Site, and Salt Hill Stream approximately 1.1km to the east of the Site.

12.2.10 The Site is not located in proximity to an any 'ordinary watercourse'. The nearest 'ordinary watercourse' is Haymill Valley Stream approximately 1.15km west of the Site.

12.2.11 Further details on the hydrology, hydrogeology, and groundwater conditions, are presented in Section 4 of **Appendix 12A [Application Document Reference 6.4.13 – Preliminary Flood Risk Assessment]** and are applicable to both the Proposed Project and Consented Development.

Existing Drainage Infrastructure

12.2.12 Initial drainage investigations undertaken in 2020 as part of the Consented Development pre-construction phase indicate that the surface and roof water systems serving the Site in its former use (before works commenced on the Consented Development) drained via conventional methods utilising gullies, channels, and rainwater pipes, conveying surface water to the existing sewers. The existing Site drainage system discharges either to local public surface water sewers and culvert infrastructure (within surrounding public highways) or directly to groundwater via a series of soakaways which are present across the Site. The

drainage system for the Consented Development will not change as a result of the Proposed Project.

Climate

12.2.13 The EA published updated climate change guidance '*Flood Risk Assessments: Climate Change Allowances'* in July 2021, indicating that climate change is likely to increase the following:

- Peak river flows;
- Peak rainfall intensity;
- Sea level rise;
- Wave height; and
- Offshore wind speed.

12.2.14 The FRA has considered all potential sources of flooding to the Site, including tidal, fluvial, groundwater, land drainage, overland flow, artificial sources, and sewer drainage arrangements. Climate change has also been considered, which is expected to increase the peak rainfall intensity by up to 40% and increase peak river flows by up to 35% over the lifetime of the Proposed Project and the Consented Development, as they are both within the same Site.

12.2.15 The Environment Agency Flood Map for Planning (FMfP) shows the Site is located in Flood Zone 1 and as such is at low risk of flooding. The risk of flooding from fluvial sources, both Main River and Ordinary Watercourses, is considered to be low over the lifetime of the Proposed Project. The Environment Agency Risk of Flooding from Surface Water (RoFSW) maps indicate the Site is generally at medium risk of flooding from surface water. The construction of the Consented Development will result in a minimal increase, while the Proposed Project consisting of above ground pipes, will not create any change but it will not be developed without the Consented Development.

12.2.16 The NPS EN-1and PPG consider energy related development to be classed as 'essential infrastructure'; therefore the Proposed Project is considered appropriate in the planning context for development in Flood Zone 1 and the Sequential Test is considered to be passed. The risk of flooding from artificial sources and drainage infrastructure is considered to be low and given the limited data with regards groundwater levels at the Site, the assessment of flooding from groundwater sources is considered to be a low risk. Sea level rise, wave height and offshore wind speed have not been included as part of this chapter of the ES or the FRA (**Appendix 12A [Application Document Reference 6.4.13 – Preliminary Flood Risk Assessment])** as the Site is not located near a tidally influenced watercourse and so, is not considered to be at risk of flooding from tidal sources. This represents no change from the Consented Development.

Fluvial Flooding

12.2.17 Under the climate change scenario, water levels within the Chalvey Brook and Salt Hill Stream will increase and as a consequence, there is potential for flood extents along the watercourses to increase. Given the distance of these watercourses from the Site and comparing the current flood zone extents, an increase in peak flood flows is unlikely to impact either the Consented Development or the Proposed Project. This represents no change from the Consented Development.

Surface Water Runoff Generation and Overland Flow

12.2.18 As the rainfall intensities and storm events are likely to increase under the climate change scenario, the risk of flooding from surface water, which is currently considered to be medium, is expected to increase at the Site unless mitigation measures are taken. A drainage strategy is in place for the Consented Development which states that best practice will be followed in drainage design and climate change is considered. The consented drainage infrastructure associated with the Consented Development is considered as adequate to cope with the climate change predictions and no further mitigation measures are required in relation to the Proposed Project.

Flooding from Drainage Infrastructure

12.2.19 With the projected increases in rainfall intensity, a greater amount of surface water runoff will be generated on Site. In order to account for this increase, in accordance with current best practice, the drainage system for the Consented Development is designed to ensure that out of sewer flooding does not occur in any part of the Site as a result of the Consented Development and Proposed Project during a 1 in 30-year storm event or in a 1 in 100 storm event.

12.2.20 Based on the findings to date, it is considered that the flood risk from all sources, to and from the Site can be mitigated to a level which is low and acceptable. There is no additional mitigation required for the Proposed Project in comparison with the intended mitigation for the Consented Development.

Stakeholder Engagement

12.2.21 Consultation undertaken to date in relation to Flood Risk Assessment is outlined in Table 12.1.

Table 12.1. Main Matters Raised during Consultation related to the Flood Risk Assessment (FRA)

Consultee	*Main matter raised*	*How has the concern been addressed*	*Location of response in this ES chapter*
Planning Inspectorate	The Applicant proposes to prepare an FRA in line with NPPF due to the size (over 1ha) and location of the Proposed Project.	FRA prepared and is provided as **Appendix 12A [Application Document Reference 6.4.13 – Preliminary Flood Risk Assessment]** in this ES.	FRA provided in **Appendix 12A [Application Document Reference 6.4.13 – Preliminary Flood Risk Assessment]** and summarised in Section 12.2 of this ES chapter.

Impact of the Proposed Project

12.2.22 The Proposed Project consists of external pipes which are located 18m above ground in a Consented Development pipe rack. As these pipes are external and raised from the ground, rainfall will be able to fall to the ground. There will be no additional water consumption or water discharge to that of the Consented Development as a result of the Proposed Project, it expected that as a result of the Proposed Project there will actually be a reduction in relation to the cooling load, therefore resulting in a **Negligible** effect which is **Not Significant**.

12.3 Major Accidents and Disasters

Introduction

12.3.1 This section of this chapter of the ES presents an assessment of the likely significant adverse effects on the environment arising from potential risks associated with major accidents and disasters from the Proposed Project. The revised EIA Directive 2014/52/EU states the need to assess:

> *"the expected significant adverse effects of the project on the environment deriving from the vulnerability of the project to risks of major accidents and/or natural disasters which are relevant to the project concerned".*

Legislation and Planning Policy

12.3.2 As well as revised EIA Directive 2014/52/EU the following relevant legislation has been complied with and the following guidance has informed this Major Accidents & Disasters (MA&D) assessment:

- EU Commission (2017) Guidance on the Preparation of the Environmental Impact Assessment Report;
- Control of Major Accident Hazards Regulations 2015; and
- IEMA (2020) Major Accidents and Disasters in EIA: A Primer.

Methodology

12.3.3 The assessment of major accident and disasters is a legislative requirement. In the absence of defined guidance, a method proposed for risk identification has been used to identify, classify, and evaluate risk and assessment guidance based on professional judgment.

12.3.4 A proportionate approach has been used in this assessment, based on the relative likelihood of each of the identified scenarios, with a greater focus on situations which are more likely to occur or those with greater consequences.

12.3.5 Some risk assessment is inherent within the assessment proposed within each technical assessment chapter of this ES **[Application Document Reference 6.2]** however, this assessment also captures relevant risks which, though exceptional, are also plausible.

12.3.6 The identification of risks associated with the Proposed Project has been amended from national disaster planning, taking into account:

- Vulnerability of the project to risks of major accidents and/ or disasters; and
- Any consequential changes in the predicted effects of that project on environmental topics.

12.3.7 For the purposes of this assessment a Major Event is defined as:

> *"an acute or chronic accident or disaster, of human or natural origin, which occurs either as a consequence of, or which interacts with, the construction or operation of the proposed Scheme, and which has substantial consequences for people or the environment".*

12.3.8 In general, major events, as they relate to the Proposed Project, will fall into three categories:

- Events that could not realistically occur, due to the type of development or its location;
- Events that could realistically occur, but for which the Proposed Project, and associated receptors, are no more vulnerable than any other development; and

- Events that could occur, and to which the Proposed Project is particularly vulnerable, or which the Proposed Project has a capacity to exacerbate.

12.3.9 The methodology adopted for this assessment has involved the following:

- For each identified major accident and disaster scenario, potential impact on the surrounding environment is considered, with regard to the proximity and sensitivity of the receptors. The infrastructure, systems and procedures in place to prevent or mitigate the consequences of each scenario are also listed.
- A proportionate approach has been used in this assessment, based on the relative likelihood of each of the identified scenarios, with a greater focus on situations which are more likely to occur or those with greater consequences.

12.3.10 A number of receptors have been considered in this assessment, due to their proximity to the Proposed Project, or due to their importance/support to the surrounding area. Receptors include:

- Residential properties;
- Commercial properties;
- Transport connections;
- Ecological receptors; and
- Underground infrastructure services including electricity, water, communications, and gas.

12.3.11 Where there is potential for interaction between a major accident and disaster, receptor, and the Proposed Project, these have been highlighted and a qualitative evaluation is provided. Details of appropriate prevention measures and mitigation for significant effects on the environment from such events are either provided in the following sections or within the referenced topic chapters.

12.3.12 Given the nature of the Proposed Project (and the Consented Development), which involves hot works and combustion of material, there is an inherent risk of both fire and explosion with the facility. The Proposed Project will be constructed to meet the current regulations and standards, which is the same approach adopted for the Consented Development which has been constructed to meet fire safety standards, such as Building Regulations 2010 and ISO/TC 92, to prevent fire at the facility. Hazard prevention and emergency planning have been embedded into the design of the Consented Development (and therefore the Proposed Project) and include the installation of fire water tanks and Emergency Response Plans.

12.3.13 Effects of potential engineering and industrial accidents would primarily be a risk to on-site workers, but as the closest residential receptors to the Site are located

approximately 180m north of the Site on Bodmin Avenue, they are also considered. Construction workers on Site will be protected through existing legislation which is considered to be sufficient to minimise any risk from major events to a reasonable level. Legislation in force to ensure the protection of workers in the workplace includes:

- Health and Safety at Work etc. Act 1974 (HSWA);
- The Management of Health and Safety at Work Regulations 1999;
- The Workplace (Health, Safety and Welfare) Regulations 1992;
- The Control of Substances Hazardous to Heath Regulations 2002; and
- Construction (Design and Management) (CDM) 2015 Regulations.

Stakeholder Engagement

12.3.14 A Scoping Opinion (refer to **Appendix 1B [Application Document Reference 6.4.2 – PINS Scoping Opinion])** has been received from the Planning Inspectorate, on behalf of the Secretary of State, providing an opinion on matters to be included within this ES. The Scoping Opinion confirmed that the ES should consider the potential for significant effects from major accidents and disasters during construction, operation and decommissioning. Consultation comments from the Consented Development were used as no consultation responses were returned in respect of the Proposed Project.

Table 12.2. Main Matters Raised during Consultation related to Major Accidents and Disasters (MADs)

Consultee	*Main matter raised*	*How has the concern been addressed*	*Location of response in this ES chapter*
Planning Inspectorate	The ES should consider the potential for significant effects from major accidents and disasters during construction, operation and decommissioning	An assessment of the likely significant adverse effects on the environment arising from potential risks associated with major accidents and	This section (Section 12.3 of this ES chapter).

Consultee	*Main matter raised*	*How has the concern been addressed*	*Location of response in this ES chapter*
		disasters from the Proposed Project has been undertaken.	

Future Baseline Conditions

12.3.15 There is a low risk of a major incident onsite, such as a major fire, or it spreading to surrounding areas. A major incident is considered to be 'an event or situation with a range of serious consequences which requires special arrangement to be implemented by one or more emergency responder agency'. Dedicated firewater tanks will be kept on Site with sufficient capacity to deal with onsite incidents. The detailed design process for the Consented Development specified the size of these tanks. Specialist equipment including fire water cannons in the waste bunker area and thermal imaging cameras reduce the risk of fires starting and spreading. The operational workers will be trained in how to use the equipment and on how to extinguish fires should they occur. The Environmental Permit requires a Fire Prevention Plan be submitted to the Environment Agency for approval in advance of commencing commissioning.

Embedded Design Mitigation

12.3.16 Measures to prevent major incidents include:

- Compliance with all relevant health, safety, and environmental legislation;
- Design, build and operation of the Proposed Project in accordance with good industry practice;
- Regular maintenance and inspections to reduce the risk of equipment failures;
- A site-specific Health and Safety Plan produced by the contractor covering the works, commissioning and operation of the Proposed Project is being prepared to ensure compliance with relevant health and safety legislation;
- In accordance with the Environmental Permit, a Site Emergency Plan will be developed (by the contractor) to cover the Consented Development, which will also be directly relevant and appropriate to the Proposed Project, which will include a fire strategy and appropriate training procedures;
- Procedures will be in place to clearly detail the responsibilities, actions and communication channels for operational staff and personnel on how to deal with emergencies should they occur. Staff will also receive the level of training required for their role and position. This will include dealing with events such

as fires, spillages, flooding etc. Such measures will be included in the site operating and management system and regulated by the Environment Agency through the Environmental Permit.

Impacts of the Proposed Project

12.3.17 In the absence of the Proposed Project, the threat of major accidents occurring is still a realistic scenario associated with the Consented Development. However, these impacts would still be very unlikely. As a result of the Proposed Project, the risk and threat of any major accidents occurring, including fire risk from the temperature of combustion gas (i.e., the temperature of the combustion gas would not increase over those of the Consented Development). There is therefore **No Change** to major accidents associated with the Proposed Project. Coupled with the low risk of occurrence, this is considered to be **Not Significant**.

12.3.18 The potential vulnerability from natural disasters including climate change effects, such as rising temperatures, storms and flooding is not changed by the addition of the Proposed Project does not change the vulnerability of the Consented Development. The vulnerability to natural disaster would not change from that of the consented Development as a result of the Proposed Project, and therefore represents **No Change**, which is **Not Significant**.

12.4 References

Communities and Local Government, (2021); Planning Practice Guidance.

Communities and Local Government, (2021); National Planning Policy Framework.

Environment Agency (2014). Flood Risk and Coastal Guidance.

Slough Borough Council (2006) Core Strategy.

Environment Agency (2016) Thames River Basin District Flood Risk Management Strategy. Summary Document

Environment Agency (2009) Thames Catchment Flood Management Plan

HM Government (2008) The Planning Act 2008.

HM Government (2020) National Risk Register (Online)

Major incidents (2020) NFCC CPO (Online)