

Chapter 1

Introduction

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1. Introduction

1.1 Overview

- 1.1.1 This document is the second Preliminary Environmental Information Report ('PEIR') for the proposed Abergelli Power Project (hereafter referred to as 'the Project') described below. This PEIR has been prepared by AECOM on behalf of the Applicant, Abergelli Power Limited (APL).
- 1.1.2 The Project is situated on open agricultural land located approximately 2 km north of junction 46 of the M4 within the administrative boundary of the City and County of Swansea Council (CCS). Figure 1.1 shows the location of the Project approximately 1 km southeast of Felindre and 1.4 km north of Llangyfelach. The land upon which the Project will be developed, or which is required for construction of the Project, is referred to as the 'Project Site' (see Figure 1.1). The approximate centre of the Project Site lies at grid reference 265284, 201431. The Project Site covers an area of up to approximately 30 ha.

1.2 The Project

- 1.2.1 The Project is a gas-fired 'peaking' plant which is designed to operate when there is a surge in demand for electricity associated with a particular stress event (e.g. where there is a sudden demand in power required by consumers or a sudden drop in power being generated by plants which are constantly operational such as a sudden outage).
- 1.2.2 The Project is comprised of the below, and explained in greater detail in Section 3.4.

Table 1-1: Project Components

Project Component	Description	Consenting Route
<p>Power Generation Plant</p>	<p>An Open Cycle Gas Turbine (OCGT) peaking power generating station, fuelled by natural gas and capable of providing a rated electrical output of up to 299 Megawatts (MW). The Power Generation Plant comprises:</p> <ul style="list-style-type: none"> • Generating equipment including one Gas Turbine Generator with one exhaust gas flue stack and Balance of Plant (BOP) (together referred to as the 'Generating Equipment') which are located within the 'Generating Equipment Site' (see Section 3.4); • An Access Road (see Figure 3.2) 	<p><i>Development Consent Order (DCO) through The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009</i></p>

Project Component	Description	Consenting Route
	<p>to the Project Site from the B4489 which lies to the west, formed by upgrading an existing access road between the B4489 junction and the Swansea North Substation (the Substation) and constructing a new section of access road from the Substation to the Generating Equipment Site (see Section 3.4); and</p> <ul style="list-style-type: none"> • A temporary construction compound for the storage of materials, plant and equipment as well as containing site accommodation and welfare facilities, temporary car parking (see Section 3.4) and temporary fencing (Section 3.4). A small area within the Laydown Area will be retained permanently (the Maintenance Compound). • Ecological Mitigation Area – area for potential reptile translocation and ecological enhancement. Location and area to be confirmed post-consultation once discussions with Natural Resources Wales (NRW) and CCS have been undertaken. Area likely to be commensurate with the extent of mitigation required and within the Order Limits of the Project (see Section 3.4). • Permanent parking and drainage to include: a site foul, oily water and surface water drainage system (see Section 3.4). 	
<p>Gas Connection</p>	<p>The Gas Connection will be in the form of a new above ground installation (AGI) and underground gas pipeline connection (the Pipeline). This is to bring natural gas</p>	<p><i>The Gas Connection will be consented through the Town and County Planning Act (TCPA) and is not part of the DCO Application. Though this Project element is not</i></p>

Project Component	Description	Consenting Route
	to the Generating Equipment from the National Gas Transmission System. The Pipeline will follow an approximate north-south route corridor, between the National Gas Transmission System south of Rhyd-y-pandy Road and the Generating Equipment Site (see Section 3.5).	<i>part of the DCO Application, APL is likely to seek powers of compulsory acquisition over the land required for the Gas Connection.</i>
Electrical Connection	This is an underground electrical cable to export power from the Generating Equipment to the National Grid Electricity Transmission System (NETS) (see Section 3.6).	<i>The Electrical Connection will be consented through Permitted Development and is not part of the DCO Application. Though this Project element is not part of the DCO Application, APL is likely to seek powers of compulsory acquisition over the land required for the Electrical Connection.</i>

1.2.3 The proposed DCO Application will seek consent for all works required for construction, use, operation and maintenance of the Power Generation Plant (including the Access Road and the Laydown Area, which are integral to the NSIP). The Gas Connection and Electrical Connection are considered to be Associated Development within the meaning of the Planning Act 2008. As the Project is a generating station in Wales below 350 MW, development consent cannot be granted for Associated Development in the DCO¹. However, the Gas Connection and the Electrical Connection are considered and assessed in this PEIR to provide full information on the effects of the Project as a whole.

1.3 Abergelli Power Ltd

1.3.1 The Applicant is APL, an energy development company established for the Project and recently acquired by Drax Group PLC (Drax).

1.3.2 Drax is responsible for generating 7% of the UK's electricity, predominantly via Drax power station in Selby. Drax is one of the UK's largest energy producers and is committed to helping to reduce carbon emissions, displacing more coal off the system and providing additional system support to plug the gaps created by intermittent renewables and boost security of supply.

1.3.3 Drax acquired APL from Watt Power Limited (Watt Power) in 2016. Stag Energy Development Company Ltd (Stag Energy) previously provided management services to Watt Power in relation to APL. Stag Energy continues to provide resources to APL through a management services agreement. Stag Energy was

¹ The Secretary of State concluded in the Hirwaun Generating Station Order 2015 that a gas connection and an electrical connection were not integral to or part of the actual generating station. As such the DCO will not seek development consent for the Gas Connection or the Electrical Connection, but is likely to seek powers of compulsory acquisition over land required for the Gas Connection and the Electrical Connection (which is the approach taken by the Secretary of State in making the Hirwaun order).

founded in 2002 and the company draws on a depth of experience within a team that has created and delivered over 10,000 MW of power generation and related infrastructure projects across the globe, of which 2,500 MW has been delivered in the UK.

- 1.3.4 Drax currently has three other power generation projects which have either already been granted consent under or are being brought forward through the PA 2008 process. They are: Progress Power Ltd at Eye Airfield in Suffolk (www.progresspower.co.uk): Hirwaun Power Ltd at Hirwaun in South Wales (www.hirwaunpower.co.uk): and Millbrook Power Ltd in the 'Marston Vale' in Bedfordshire (www.millbrookpower.co.uk). The first two listed projects were granted Development Consent in July 2015.
- 1.3.5 APL is committed to the development of assets to support the UK Government's drive to a low carbon economy. APL recognises the need to balance commercial issues with the environmental benefits and concerns relating to energy projects and believes this balance can be responsibly delivered. The Project would be designed and developed to high quality, safety and environmental standards.
- 1.3.6 Further information on the companies referred to above is provided at www.abergellipower.co.uk or www.drax.com.

1.4 Purpose of this Preliminary Environmental Information Report

- 1.4.1 The Power Generation Plant constitutes a Nationally Significant Infrastructure Project (NSIP) pursuant to the Planning Act 2008 (as amended) (PA 2008) and therefore requires development consent under the PA 2008.
- 1.4.2 This PEIR assesses the Project as a whole which includes the Power Generation Plant (to be consented under the DCO), the Gas Connection (to be applied for under a separate Town & Country Planning Act (TCPA) application), and the Electrical Connection (to be constructed under Permitted Development). This PEIR documents the preliminary findings in relation to the environmental impacts of the Project and is published to inform the statutory consultation on the Project.
- 1.4.3 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (the 'EIA Regulations') require an EIA to be carried out in respect of any development listed in Schedule 1 to the EIA Regulations ('Schedule 1 development'). The Project is a Schedule 1 development as it is a thermal generating station with a heat output² of 300 MW or more as listed in Schedule 1, paragraph 2(1) of the EIA Regulations.
- 1.4.4 The Project falls under the EIA Regulations and not the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations 2017). This is because a scoping opinion was requested from the Secretary of State under the EIA Regulations before the commencement of the EIA Regulations 2017. This means that, in accordance with the transitional arrangements at Regulation 37 of

² Thermal output is commonly defined as the amount of 'useable heat' which is produced as part of the process of the combustion of fuel. Only a part of this useable heat can be converted to electrical energy, which is why this is a larger value than electrical output.

the EIA Regulations 2017, the EIA Regulations 2009 will continue to apply to the Project.

- 1.4.5 Under Regulation 10(b) of the EIA Regulations, the Applicant is required to set out in its Statement of Community Consultation how it intends to publicise and consult on preliminary environmental information relating to the Project. Regulation 2 of the EIA Regulations then defines preliminary environmental information as being the information referred to in Part 1 of Schedule 4 to the EIA Regulations that has been compiled by the Applicant and which is reasonably required to assess the environmental effects of the development and any associated development.
- 1.4.6 Accordingly, this PEIR has been prepared to present the environmental information collected to date and an assessment, on a preliminary basis, of the likely significant environmental effects of the Project.
- 1.4.7 This document is the second “PEIR” which has been prepared for the Project. The first PEIR was published and consulted upon in 2014 (the “2014 PEIR”) together with supporting information and a Non-Technical Summary (“2014 PEIR NTS”). This information accompanied APL’s initial phase of statutory consultation (“Phase 1 Statutory Consultation”) with both the local community and prescribed consultees.
- 1.4.8 The feedback received relating to the 2014 PEIR has further helped to inform and refine the EIA process (including this PEIR) as well as the design and development of the Project.
- 1.4.9 Because the DCO Application for the Project was put on hold in 2015, APL is undertaking a further round of statutory consultation (‘Phase 2 statutory consultation’) and has prepared this PEIR to accompany this further statutory consultation. This PEIR reflects (and provides information regarding) updates on Project parameters and design evolution, as well as the refined EIA processes.
- 1.4.10 This PEIR presents a comprehensive description of the nature, scale, location and preliminary information on the likely significant environmental effects of the Project in order to inform the statutory consultation. The approach to assessment undertaken in this PEIR is described further in **Chapter 4: Approach to Environmental Impact Assessment**.

1.5 Application for Development Consent

- 1.5.1 An onshore electricity generating station is considered to be a NSIP under the PA 2008 if it is in England or Wales and its generating capacity (rated electrical output) is more than 50 MW. As the Project is in Wales and will have a rated electrical output over 50 MW, it is classified as a NSIP under Section 14(1) (a) and Section 15(2) of the PA 2008.
- 1.5.2 Under Section 31 of the PA 2008, a Development Consent Order (DCO) is required for development that is or forms part of a NSIP and therefore it is necessary that an application for a DCO is submitted to the Secretary of State (SoS).

- 1.5.3 A DCO for a NSIP may be granted only if an application is made under Section 37 of the PA 2008 to the SoS. Section 37 of the PA 2008 (and associated legislation) also governs the content of an application for a DCO, including requirements for certain accompanying documents.
- 1.5.4 These requirements are specified, in particular, in the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2014 (as amended) (the “APFP Regulations”). The APFP Regulations require that an application for a DCO, where applicable, must be accompanied by an ES and any associated scoping or screening opinions or directions. A screening opinion was not sought for the Project, however a Scoping Opinion, dated 1st August 2014, (Appendix 4.2) has been sought from the SoS. A notice of the intention to submit an application for Development Consent (Regulation 6 Notification), including an Environmental Statement, was submitted to PINS on 8th October 2014.
- 1.5.5 Further information on the companies referred to above is provided at www.abergellipower.co.uk or www.drax.com.

1.6 Structure of the PEIR

- 1.6.1 This PEIR has been prepared to provide information about the Project, the regulatory framework under which it has been prepared and the results of the preliminary environmental assessment work. It is comprised of four parts: 3 Volumes, as described below, and a separate Non-Technical Summary (NTS) which provides a summary of the findings in the PEIR in non-technical language.
- 1.6.2 Volume 1 is the main written text and reports the findings of the PEIR in full. There are 16 chapters in Volume 1 of this PEIR, which are set out as follows:
- **Chapter 1: Introduction** – provides an overview of the Project, a description of APL, the purpose of this PEIR and its structure, and an introduction to the consenting regime;
 - **Chapter 2: Regulatory and Policy Background** – provides a summary of the policy and guidance which governs the EIA process;
 - **Chapter 3: Project and Site Description** – a description of the Project Site and surroundings, as well as the constituent parts of the Project, indicative schedule of construction activities and embedded mitigation;
 - **Chapter 4: Approach to Environmental Impact Assessment** – a description of the methodology used in undertaking the EIA on the Project;
 - **Chapter 5: Alternatives Considered** – a description of the site selection process as well as the access, technology and connection (gas and electrical) options considered by APL;
 - Technical chapters - each chapter includes description of the baseline conditions identified relevant to each topic, the methodology used in the assessment, an assessment of the likely significant environmental effects and cumulative effects, a description of any additional mitigation proposed and identification of any likely significant residual effects
 - **Chapter 6: Air Quality;**
 - **Chapter 7: Noise & Vibration;**

- **Chapter 8: Ecology;**
- **Chapter 9: Water Quality and Resources;**
- **Chapter 10: Geology, Ground Conditions and Hydrogeology;**
- **Chapter 11: Landscape and Visual Effects;**
- **Chapter 12: Traffic, Transport and Access;**
- **Chapter 13: Historic Environment;** and
- **Chapter 14: Socio-Economics;**
- **Chapter 15: Other Effects** – a brief description of other potential significant effects which fall outside of the specialist topic chapters or are considered within a number of different topic chapters (Electromagnetic Fields (EMF), public health, waste, major incidents, health and safety, climate change and aviation);
- **Chapter 16: Summary of Residual Effects** – a summary of the residual effects identified in each of the specialist topic chapters. A mitigation register is also appended (Appendix 3.1, Appendix A) to identify how the mitigation will be delivered and who will be responsible for its delivery.
- **Chapter 17: Cumulative Impacts;** and

1.6.3 Volume 2 of the PEIR includes all of the Figures and Photomontages. Volume 3 of the PEIR includes all of the Appendices referred to in each of the chapters.

1.7 Other Documents Available

1.7.1 The following documents will be published alongside this PEIR for Phase 2 statutory consultation:

- No Significant Effects Report;
- PEIR Non-Technical Summary (NTS); and
- Outline Construction Environmental Management Plan (CEMP) (Appendix 3.1).

1.8 Consultation

1.8.1 Copies of the PEIR and this PEIR NTS are available on the project website <http://www.abergellipower.co.uk>

1.8.2 The Documents can be obtained by writing to Abergelli Power Limited, 49 York Place, Edinburgh, EH1 3JD. A reasonable copying charge may apply up to a maximum of £250 for the full suite of Documents and £10 for an electronic copy on CD. Copies of individual Documents are also available on request.

1.8.3 Documents can be viewed at Swansea Central Library, Clydach Library, Gorseinon Library, Morriston Library, and Pongtarddulais Library. The technical appendices to the PEIR will only be available electronically at the libraries.

Table 1-2: Document Deposit Locations

	Swansea Central Library	Clydach Library	Gorseinon Library	Morrison Library	Pontarddulais Library
Monday	Closed	9.30-17.30	9.00-18.00	9.00-18.00	9.00- 13.00 and 14.00 - 17.00
Tuesday	8.30-20.00	9.30-17.30	9.00-18.00	9.00-18.00	9.00- 13.00 and 14.00 - 17.00
Wednesday	8.30-20.00	9.30-17.30	9.00-18.00	9.00-18.00	9.00- 13.00 and 14.00 - 17.00
Thursday	8.30-20.00	9.30-17.30	9.00-18.00	9.00-18.00	9.00- 13.00 and 14.00 - 17.00
Friday	8.30-20.00	9.30-18.30	9.00-19.00	9.00-18.00	9.00- 13.00 and 14.00 - 18.00
Saturday	10.00- 16.00	9.30-16.30	9.00-17.00	9.00-17.00	9.00- 13.00
Sunday	10.00-16.00	CLOSED	CLOSED	CLOSED	CLOSED