



Awel y Môr Offshore Wind Farm

Outline Artificial Light and Emissions Plan (Clean)

Deadline 2

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www.awelymor.cymru

RWE Renewables UK Swindon Limited

Windmill Hill Business Park
Whitehill Way
Swindon
Wiltshire SN5 6PB
T +44 (0)8456 720 090
www.rwe.com

Registered office:
RWE Renewables UK Swindon Limited
Windmill Hill Business Park
Whitehill Way
Swindon

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Abbreviations and acronyms

TERM	DEFINITION
ALEP	Artificial Light Emissions Plan
AyM	Awel y Môr Offshore Wind Farm
CMS	Construction Method Statement
CoCP	Code of Construction Practice
DCC	Denbighshire County Council
DCO	Development Consent Order
ECC	Export Cable Corridor
ES	Environmental Statement
NRW	Natural Resources Wales
OnSS	Onshore Substation
OWF	Offshore Wind Farm
WTGs	Wind turbine generators

1 Introduction

1.1 Purpose of this Outline ALEP

- 1 This Outline Artificial Light Emissions Plan (ALEP) is provided as Appendix 10 to the Outline Code of Construction Practice (CoCP) (application ref 8.13) as part of the Environmental Statement (ES).
- 2 This is an outline document that, by reference to the assessments reported in the ES, sets out the key elements that will be secured in the detailed ALEP which Awel y Môr Offshore Wind Farm Limited (The Applicant) will be required to submit to Denbighshire County Council (DCC) for approval as a requirement of the DCO.
- 3 This Outline ALEP sets out techniques aimed at minimising the emission of artificial light which will be implemented by the Applicant and its contractors during the construction of the onshore works, and should be read in conjunction with the Outline CoCP and all of its supporting appendices.

1.2 Scope of this Outline ALEP

- 4 For the avoidance of doubt, this Outline ALEP relates to the onshore elements of the Awel y Môr offshore wind farm (AyM) only (i.e. landward of Mean Low Water). This document does not relate to offshore works seaward of Mean Low Water that are principally marine activities.

2 Lighting

2.1 Lighting Requirements and Mitigation Measures

- 5 The following paragraphs describe the light requirements of the onshore works, and the mitigation measures that will be applied during those construction works.
- 6 External lighting of the construction site will be designed and positioned to:
 - ▲ Provide the necessary levels for safe working
 - ▲ Minimise light spillage or pollution
 - ▲ Minimise disturbance to adjoining residents and occupiers
- 7 No fixed lighting will be required along the onshore Export Cable Corridor (ECC) during construction.
- 8 At temporary construction compounds and on the onshore Cable Corridor, temporary lighting may be required in the winter months.
- 9 During the approximate months from September to March, it is likely that lighting will be required during site hours when natural daylight is not sufficient to enable safe working.
- 10 Construction works at the onshore substation (OnSS) will typically not require night time working. However, in winter, some illuminations may be required in the early morning and evening. Illuminations may also be needed for occasional activities which require continuous working during night time. This may occur where continuous working is necessary for matters such as concrete pours and HDD works (or other trenchless crossing techniques). Low level security lighting may also be required at night throughout the construction period.

- 11 Lighting is likely to be required for 24 hour working, particularly at the drilling compound and temporary construction compounds associated with the use of trenchless techniques at landfall and the River Clwyd and the A55 crossings. As far as is reasonable, appropriate task lighting will be used for specific works to direct light towards the working areas during the night time. Such task lighting would be positioned at low level on posts around the trenchless techniques site and directed to most frequently used areas of work to provide the necessary levels for safe working and avoid causing glare or annoyance to road users. Lighting would be designed to balance the requirements for safe access and specific tasks against minimising light pollution and impact on amenity.
- 12 However, some flood lighting will be required for accesses and walking routes.
- 13 Site lighting shall be positioned and directed to minimise nuisance to footpath users, residents, to minimise distractions to passing drivers on adjoining public highways and to minimise skyglow, so far as is reasonably practicable.
- 14 Lighting will be placed as far from linear features (potentially suitable for foraging and community bats) as is conducive with security and engineering requirements. Those lights closest to features will take into account the following:
 - ▲ Light intensity will be as low as is permissible;
 - ▲ Light spills towards any retained linear features will be reduced to a minimum (using cowls as necessary);
 - ▲ Lighting spillage will avoid or minimise impacts on ecological resources, including nocturnal species; and
 - ▲ Construction lighting will be low intensity and appropriately located/directed in order to minimise lighting disturbance for bats and birds.
- 15 Temporary construction buildings, equipment and lighting shall be sited so as to minimise visual intrusion and light spillage, in so far as is consistent with the safe and efficient operation of each worksite.

- 16 So far as is practicable, all power to temporary lighting shall be taken from mains supplies rather than from portable generators. Where portable generators are used, industry best practice will be followed to minimise noise and pollution from generators.
- 17 Details of the location, height, design and luminance of all floodlighting to be used during the construction of the project, together with measures to limit obtrusive glare to nearby residential properties, will be set out in the final ALEP for any section of the works.

3 Pre-Commencement

- 18 The draft DCO (as amended at Deadline 1 during Examination), includes the following definition of 'pre-commencement' activities:

onshore works comprising surveying or investigatory works including archaeological investigations, environmental surveys, investigations for the purpose of assessing ground conditions; preparatory works to existing infrastructure and diversion and laying of utilities and services; creation of any temporary means of access; site clearance including vegetation clearance; erection of screening and fencing, site security works, creation of temporary hard standing, or the temporary display of site notices or advertisements

- 19 The relevant aspects of this outline ALEP that will be adhered to in carrying out 'pre-commencement' activities (where relevant to those activities), are as follows:

- ▲ Section 2.1 – Lighting Requirements and Mitigation Measures



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