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**Subject:** Wylfa Newydd DCO Deadline 3 Submissions (Email 5 of 8) [NOT PROTECTIVELY MARKED]  
**Date:** 17 December 2018 18:28:05  
**Attachments:** [48 Off site Power Station Facilities - Building M3 Bat Survey Results.pdf](#)  
[49 Local Noise Mitigation Strategy Update.pdf](#)  
[46 Illustrative Lighting Spill Technical Note and Associate Appendices.pdf](#)  
[47 Technical Note indicating how Horizon would meet committed noise levels.pdf](#)

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Good Evening

This is the fifth in a series of 8 e-mails for the Wylfa Newydd DCO Examination Deadline 3 deliverables.

The list below provides a complete list of all documents attached to this e-mail and we will also be delivering 2x USB pen drives containing all of our Deadline 3 submission to your offices at 10:00 tomorrow (Tuesday 18th December).

[46 Illustrative Lighting Spill Technical Note and Associate Appendices.pdf](#)  
[47 Technical Note indicating how Horizon would meet committed noise levels.pdf](#)  
[48 Off site Power Station Facilities - Building M3 Bat Survey Results.pdf](#)  
[49 Local Noise Mitigation Strategy Update.pdf](#)

Kind Regards

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This email was classified on 17 December 2018 18:25:44.

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# Wylfa Newydd Project

## Technical Note indicating how Horizon would meet committed noise levels

PINS Reference Number: EN010007

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18 December 2018

Revision 1.0

Examination Deadline 3

Planning Act 2008

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

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## 1 Introduction

- 1.1.1 Further to discussions on the proposed construction noise mitigation between Horizon and Natural Resources Wales (NRW) and an arising action to discuss the deliverability of the mitigation measures with Horizon Contractors, this technical note includes a proposed revised version of the noise mitigation presented in the Shadow Habitats Regulations Assessment (HRA); secured in section 11.4 of the Main Power Station Site sub-CoCP [APP-415] and also in the Marine Works sub-CoCP [APP-416]. This mitigation takes account of Contractor feedback and aims to make it more apparent how the proposals will be enacted.
- 1.1.2 An earlier version of this note was shared informally with NRW in October 2018 through the Statement of Common Ground (SoCG) process. The text has subsequently been developed following the preparation of responses to First Written Questions from the Wylfa Newydd Project Development Consent Order (DCO) Examining Authority, and it is this text that is presented here.
- 1.1.3 Horizon proposes to submit this text as a change to section 11.4 of the Main Power Station Site sub-CoCP and Marine Works sub-CoCP at Examination Deadline 4. There are several changes to the below text and, for reasons of readability, a mark-up has not been provided.

## 2 Revised mitigation

### [11.4] Mitigation of disturbance to breeding birds from construction noise and visual stimuli

#### *Monitoring*

[11.4.1] In the black-headed gull and tern breeding seasons that occur during the Project's Construction phase, noise levels will be measured at the Cemlyn Lagoon tern colony either through direct monitoring on the islands or extrapolated calculations based on monitoring at nearby locations.

[11.4.2] These noise levels will be monitored against action thresholds (amber and red = breach); which are to be defined according to the noise thresholds set out below (with amber being a noise level sufficiently below the agreed red threshold to enable mitigation action to be taken before an exceedance occurs). Where noise levels (based on hourly averages) reach the amber action threshold, the following steps will be taken:

- A review of the real time monitoring data will be undertaken to confirm that the monitored levels are not being impacted by other noise or vibration sources not connected to the Project.
- Once confirmed, the onsite management team will be notified that an action level has or is about to be exceeded and an action plan agreed.
- The appropriate site managers will review the works and working strategy in the areas likely to be contributing to the breach and consider any possible/viable mitigation actions.
- Mitigation measures will be identified to reduce the noise to the acceptable specified level at the receptors and may include:
  - plant/equipment substitution;
  - adjusting the scheduling of the works;
  - adjusting the intensity of the works;
  - adopting alternative construction methodologies; and
  - temporary relocation of certain activities.
- The decision-making process on the mitigation measures to be applied will be guided by safety considerations, amongst others, as well as the availability of equipment and potential impacts on other environmental receptors, and the overall construction programme.
- The appropriate site managers will ensure that the selected mitigation measures are implemented, noting that, for any construction activity to be halted, an assessment first needs to be undertaken regarding whether the works are stable, and it is safe to do so (i.e. some works may need to be completed before they can be stopped); this will affect the time taken to alter working practices.
- Monitoring will continue to verify that the control measures have reduced the noise levels to an acceptable level at the relevant receptors.

### ***Noise controls during the Construction phase***

[11.4.3] Between 15<sup>th</sup> April and 15<sup>th</sup> August<sup>1</sup>:

- Blasting on the site will only be undertaken when, accounting for wind factors, noise shielding and other mitigation, the predicted blast noise at the colony will be less than 60 dB or ambient noise at the colony (whichever is higher). This may require blast sizes to be reduced in certain weather conditions.
- Day-time construction noise at the colony will not exceed 59 dB L<sub>Aeq, 1-hour</sub>.
- Night-time<sup>2</sup> construction noise at the colony will not exceed 43 dB L<sub>Aeq, 1-hour</sub>.

### ***Additional noise controls during the 'establishment period'***

[11.4.4] During those 'establishment periods' (defined below) that occur during the Construction phase the following further constraints will be applied:

- Blasting on the site will only be undertaken when, accounting for wind factors, noise shielding and other mitigation, the predicted blast noise at the colony will be less than 55 dB L<sub>AF,max</sub> or the ambient noise at the colony (whichever is higher).
- Day-time construction noise at the colony will not exceed 55 dB L<sub>Aeq, 1-hour</sub> or the ambient noise at the colony (whichever is higher).

[11.4.5] The 'establishment period' is:

- A four-week period starting on 15<sup>th</sup> April, unless significant nest establishment [with the quantum to be agreed in consultation with NRW based on annual nesting activity] is observed ahead of this date, in which case it will begin earlier.
- The activities that constitute the establishment of nesting territories by any tern species that is a qualifying feature of the Morwenfolaidd Ynys Môn/Anglesey Terns SPA are aerial display flights over the nesting islands and/or courtship behaviour on the ground by scrape making.
- The observers will also monitor black-headed gull to determine if their nesting behaviour appears to be affected by construction noise. If there is a lack or low numbers (based on black-headed gull status and trends) of recorded black-headed gull nesting attempts at the Cemlyn colony, the additional establishment period measures will be implemented earlier.

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<sup>1</sup> Noting that on an annual basis these dates could vary to take account of early or late arrivals and departures of terns. Such variations will be agreed with the NWWFT site managers and NWT.

<sup>2</sup> To be defined in line with working hours.

- The establishment period will apply for no more than four weeks but would end earlier if [>c.50%] of the Sandwich terns expected to be present in the colony are considered to have begun egg-laying and be sitting on nests [quantum to be agreed with NRW].

### ***Reactive monitoring***

[11.4.6] In addition to the measures set out above, between 15<sup>th</sup> April and 15<sup>th</sup> August, the colony will be continuously observed by trained observers, who will be professional, independent ornithologists with a detailed knowledge of terns, during daytime working hours. If the observers determine that 'fly-up' responses appear to be associated with Project activities, the following actions (as per the mitigation procedures set out above) will be taken:

- The Project activities responsible for the tern 'fly-ups' will be identified (based on matching acoustic signatures with site activities).
- Site activities will be reviewed to identify what alterations can be made (e.g. change in work intensity, schedules or methods, or additional noise abatement).
- Alternatives will be adopted where they are assessed as being safe and practicable.
- Monitoring will continue in an effort to better understand and control the causes of previous Project related tern 'fly-ups'.

[11.4.7] The above protocol will be implemented by the site management team, who will have full knowledge of the construction activities being undertaken and the authority to instigate the control measures deemed to necessary.

### ***Disturbance at the breeding tern colony from visual stimuli***

[11.4.8] Between 15<sup>th</sup> April and 15<sup>th</sup> May there will be no construction works undertaken within 500m of the nesting islands and the areas on the shingle ridge that are known to be used occasionally by nesting terns. This period encompasses the main pre-laying and nest establishment period for all three tern species that use Cemlyn Bay. Thereafter, there will be no bulk earthworks undertaken within 500m of any known active tern nests within the Morwenoliaid Ynys Môn/Anglesey Terns SPA.

[11.4.9] During the establishment period, Horizon will only undertake works on the far side of Mound E that are not visible from the colony and minimise reworking of material placed in this area.