

# Wylfa Newydd Project

## Request for Non-Material Change no.1

### Blasting Strategy

PINS Reference Number: EN010007

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October 2018

Revision 2.0

Planning Act 2008

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

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## 1 Introduction

### 1.1 Purpose of this report

- 1.1.1 This purpose of this report is to set out Horizon Nuclear Power Wylfa Limited’s (“Horizon”) formal written request for a non-material change to the time frame within which blasting would be permitted to occur during the construction phase of the Wylfa Newydd DCO Project. Horizon is currently seeking a Development Consent Order to enable the construction, operation and maintenance of the Wylfa Newydd DCO Project (“**DCO application**”), which was submitted and accepted for examination by the Secretary of State for Business, Energy and Industrial Strategy on 28 June 2018. The DCO application is currently in the pre-examination phase.
- 1.1.2 Horizon carried out public consultation on the proposed change between **Tuesday 14 August 2018** and **Friday 28 September 2018**. Following the close of consultation, Horizon considered the responses received and updated this document to have regard to those responses. This updated document is now submitted to the Examining Authority as a formal written request for the non-material change to be considered for acceptance into examination by the Examining Authority.
- 1.1.3 The non-material change proposed is to extend the weekday hours for blasting from between 10:00 and 16:00, to between 09:00 and 19:00, and Saturday blasting from between 10:00 and 13:00, to between 09:00 and 13:00. These changes are proposed following ongoing contractor engagement, additional information regarding construction blasting requirements and to minimise project risk. No new or different likely significant environmental effects are predicted in relation to the proposed change.
- 1.1.4 This document uses terms and definitions that are taken from and can be seen in the DCO General Glossary (APP-006).

### 1.2 Scope of this report

- 1.2.1 This report describes the proposed change being sought by Horizon to the DCO application and sets out the environmental appraisal of this proposed change. It includes a table (0) clearly setting out the implications of the proposed change to the assessments detailed in the DCO application, and a statement on any new or different likely significant environmental effects (if any) of the proposed change.
- 1.2.2 This report also includes a summary of the consultation undertaken and a ‘schedule of engagement’ (Table 2-2) listing the parties that were identified as having an interest in this proposed change.
- 1.2.3 Finally, a ‘schedule of consequential amendments’ is provided (Table 2-3), listing the original application documents (or parts thereof) which will need to be amended by Horizon should the Examining Authority accept the proposed change into examination.
- 1.2.4 Horizon’s objective in compiling the original consultation materials (and subsequently this document) was to ensure that stakeholders were provided

with sufficient information to comment on the change and, after consultation, for the Examining Authority to be able to make a decision on whether or not to accept the change into the examination of the DCO application.

1.2.5 However, should the stakeholders or the Examining Authority require any additional information in support of this request, Horizon will endeavour to provide it as soon as possible in response to any request for such information.

### **1.3 Non-materiality of the proposed change**

1.3.1 In assessing the proposed change, Horizon has had regard to the advice contained in the Planning Inspectorate's Advice Note 16: *How to request a change which may be material* (Version 2, March 2018) [RD1].

1.3.2 In determining whether the proposed change was material or non-material, Horizon reviewed its Environmental Statement (APP-055 to 401) and its associated appendices submitted as part of the DCO application to determine whether or not there were any new or different likely significant effects resulting from the proposed change:

- noise and vibration (chapter D6, APP-125);
- landscape and visual (chapter D10, APP-129);
- terrestrial and freshwater ecology (chapter D9, APP-128);
- the marine environment (chapter D13, APP-132); and
- combined topic effects (chapter D16, APP-135).

1.3.3 The proposed change has been reviewed and assessed, and has not been found to result in any new or different likely significant environmental effects than those reported in the Environmental Statement. It is also not anticipated that the proposed change to the blasting strategy will result in any new or different likely significant cumulative environmental effects resulting from the interaction with other projects.

1.3.4 In parallel to this change, Horizon also consulted on another proposed non-material change to increase the maximum daily limit of vessels using the Marine Off-Loading Facility (“MOLF”). Following consultation, a formal written request for this non-material change was submitted to the Examining Authority for consideration. It is not anticipated that the proposed change to the blasting strategy outlined in this report will interact with the proposed vessel movements change to produce any new or different likely significant environmental effects resulting from the interaction of these projects either in combination or cumulatively with any other projects.

1.3.5 The Shadow Habitats Regulations Assessment Report (APP-050/051), and the Health Impact Assessment Report (APP-429) have also been considered in light of the proposed change, and Horizon has concluded that the change would not result in a change to the conclusions on effects in those reports. All other assessments would remain unaffected by the proposed change.

1.3.6 Taking the above factors into account, and the representations received in response to the consultation, Horizon therefore believes that the proposed change to the blasting strategy should be regarded as a non-material.

## **1.4 Engagement and consultation on the proposed change**

### *Historical consultation*

1.4.1 Previous consultations held on the Wylfa Newydd DCO Project that have referenced blasting have been on the Preliminary Environmental Information Report (PEIR) that was produced for the Pre-Application Consultation Stage One (PAC1) document. PAC1 ran for a 10-week period ending on the 8 December 2014.

1.4.2 PAC1 consulted on blasting between the hours of 09.00 to 17.00 Monday to Friday.

1.4.3 In addition, pre-application consultation Stage Two (PAC2) consulted on the creation of a “blasting management plan... to set out good practice measures for the reduction of potential air overpressure effects”. A non-statutory consultation in February 2016 with the Isle of Anglesey County Council (IACC) and Natural Resources Wales (NRW) on the EIA Progress Report stated that: “it is likely that there would be one to two [blasting] events per day, up to maximum of three per day, scheduled between 10:00 hours and 16:00 hours, Monday to Friday and Saturday mornings. If more than three fracturing events per day are required for operational reasons, these would be designed to meet lower vibration limits, in accordance with BS6472-2.”

### *Consultation on the proposed change*

1.4.4 In developing its approach to consultation on the proposed change, Horizon identified a number of parties which it considered would have an interest in the proposed change (including prescribed persons under section 42(a)-(d) of the Planning Act 2008, statutory consultees and Persons with an Interest in Land). These parties are listed in Section 2.8 and were specifically notified of the consultation on the proposed change.

1.4.5 Consultation on the proposed change was undertaken from Tuesday 14 August 2018 until Friday 28 September 2018. This consultation was a combined consultation with the proposed change to the marine vessel movements.

1.4.6 English and Welsh copies of the consultation materials (the previous version of this report, Technical Report and Summary Info-sheets) were published on Horizon’s consultation website ([www.horizonnuclearpower.com/consultation](http://www.horizonnuclearpower.com/consultation)) so that they were publicly available to anyone with an interest in the proposed change.

1.4.7 During the consultation period, Horizon hosted two drop-in events on its consultation bus in Cemaes and Tregele. These events were held on Tuesday 4 September 2018 at the Cae Pwmp and Douglas Inn car parks. The purpose of these events was to enable members of the public to come and speak to a Horizon representative about the proposed change and view hard copies of

the consultation materials. The Cemaes event was attended by 18 parties, and the Tregele event by 15 parties (total of 33 parties).

- 1.4.8 In addition to these events, Horizon also undertook a maildrop of its newsletter '*Neighbour News*' to all households within the Cemaes and Tregele areas. The newsletter included an article which detailed the proposed change, upcoming consultation events, and how people could have their say on the proposal. A copy of this newsletter is appended to this document as **Appendix 1**.
- 1.4.9 All parties were asked to provide their responses to Horizon via its Freepost address (Freepost WYLFA NEWYDD) or by emailing [wylfaenquiries@horizonnuclearpower.com](mailto:wylfaenquiries@horizonnuclearpower.com). A freephone number (0800 954 9516) was provided for questions. Follow-up calls and meetings were also offered if required; however, no requests were received.

## **1.5 Summary of responses received**

- 1.5.1 At the end of the consultation period, Horizon had received responses from nine parties, including key stakeholders Isle of Anglesey County Council ("IACC"), North Wales Wildlife Trust ("NWWT") and Natural Resources Wales ("NRW").
- 1.5.2 This section sets out a summary of the consultation responses received and Horizon's response. Copies of the responses received, and Horizon's detailed response has been appended as **Appendices 2 and 3**.

### **Disagreement with the DCO Assessments**

- 1.5.3 A number of responses raised concerns with the adequacy of the underlying assessments and mitigation or controls in the DCO application (for example, the Wylfa Newydd Code of Construction Practice ("CoCP" (APP-414)). In particular:
  - NRW and NWWT expressed their disagreement with the conclusions in the Environmental Statement and the Shadow Habitats Regulations Assessment (submitted as part of the DCO application) on the likely effects on the Anglesey Tern Special Protected Area (SPA) and the adequacy of the mitigation proposed to control these effects.
  - IACC stated that appropriate controls and mitigation should be included to control the effects of blasting and that IACC should have an approval power in respect of the final CoCPs (rather than these being approved through examination). In addition, IACC also considers additional assessment is required to assess the potential effect of vibration on historic assets.
- 1.5.4 While Horizon acknowledges these concerns, they relate to the examination of the DCO application itself and its underlying assessments, rather than the assessment of the proposed change. For this reason, Horizon considers that these concerns will be considered as part of the examination process, rather than through this change request. Horizon has, however, addressed the SPA and the marine environment as part of its assessment of the proposed change in section 2.7 below.

### Views on materiality

1.5.5 Horizon is pleased that the majority of consultees, including NRW and IACC (despite raising their concerns with the DCO application), agree with its assessment that the proposed change will not have new or different likely significant environmental effects.

1.5.6 Only NWWT expressed disagreement to the proposed change being a non-material change. As set out in this report, Horizon has reviewed the DCO application and the Environment Statement and has concluded that the proposed changes will not result in any new or different significant effects from those assessed within the DCO application. For this reason, this request is made as a request for a non-material change.

### IACC

1.5.1 IACC's response raises a number of concerns in relation to the proposed extended blasting hours and the appropriate standard to be followed during blasting activities. In particular:

- IACC further considers that while BS6472-2:2008 [RD2] includes advice for blasting in civil engineering works, BS 5228-2:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites. Vibration' [RD3] is more specific for construction and open sites, and is therefore considered more relevant for the Wylfa Newydd DCO Project.
- IACC objects to blasting being undertaken between 18:00 and 19:00 on the basis that it will result in adverse effects on the local community and that BS6472-2:2008 'Guide to evaluation of human exposure to vibration in buildings' [RD2] states that blasting outside the normal working hours (regarded as 08.00 to 18.00 Monday to Friday, and 08.00 to 13.00 on a Saturday) normally only takes place in exceptional circumstances. IACC's response expresses concerns regarding the high sensitivity of the local community to blasting between 18:00 and 19:00.
- In addition, IACC considers that a lower level of satisfactory magnitude (4.5 ppv mms-1) should apply to blasting between 18:00 to 19:00 in order to mitigate impacts.

1.5.2 In respect of the relevant standard that should apply, Horizon's view is that both BS5228-2 and BS6472-2 are relevant to the proposed blasting activities. Whilst these standards are complimentary, their focus is different:

- BS5228 recommends procedures for noise and vibration control at the source in respect of construction operations (not solely from blasting); and,
- BS6472 provides guidance on human exposure to blast-induced vibration in buildings (i.e. at the receptor).

- 1.5.3 As acknowledged in BS5228<sup>1</sup>, the standards are interlinked and should not be considered in isolation. While BS5228 notes that there will be situations where limitations on emissions of vibration from sites should be set (both in terms of specific vibration limits and in terms of working hours); it does not provide any further guidance on this point, other than broad advice that a statistical limit should be chosen within a range of values. In particular, BS5228 [RD3] does not make any specific recommendations on the hours of the day during which blasting should be undertaken (whereas BS6472 does).
- 1.5.4 For this reason, in the Wylfa Newydd CoCP [APP-414] and Main Power Station Site sub-CoCP [APP-415], Horizon has considered the guidance in both BS522-2 [RD3] (in respect of the Main Construction activities) and BS647-2 [RD2] (in respect of hours of blasting activities).
- 1.5.5 Although Horizon accepts that the final hour of blasting proposed for weekdays (18:00 and 19:00) occurs later than recommended by BS6472-2 [RD2], it considers that this deviation is offset by commencing the blasting an hour later than BS6472-2 [RD2] recommends (Horizon proposes to start at 09:00 on weekdays rather than 08:00 as per BS6472-2 [RD2]). In preparing this proposed change, Horizon has assessed the potential health impacts of blasting between 18:00 and 19:00 and has concluded that there are no new or different likely significant effects from those assessed in the Environmental Statement (Refer to section 2 of this document for further details).
- 1.5.6 For these reasons, Horizon does not consider that a lower level of satisfactory magnitude (4.5 ppv mms-1) should apply to blasting between 18:00 to 19:00.

#### **NWWT**

- 1.5.7 In addition to the concerns regarding the DCO assessments, NWWT's response also raises concerns about the increases in the frequency or periodicity of the blasting as a result of the proposed change.
- 1.5.8 Horizon confirms that the proposed change will not increase the frequency of the blasting; it only seeks to extend the window within which blasting can occur.

#### **North Wales Fire and Rescue Service**

- 1.5.9 The North Wales Fire and Rescue Service response did not raise any concerns in respect of the proposed change but noted a number of minor inconsistencies and typos within the original document and the Technical Report. Horizon acknowledges these inconsistencies and has made the necessary updates to resolve these issues.

#### **Coed Cottages**

- 1.5.10 Coed Cottages' response raised concerns that it had not received previous copies of Horizon's newsletter and that it was unaware of the proposed

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<sup>1</sup> The foreword of BS5228 recognises the interrelationship with BS6472-2 [RD2], and Annex F of BS5228-2 [RD3] directs the reader to BS6472-2 [RD2] in respect of human response to vibration.

blasting and crushing works, and the potential effects on the local community (in particular, tourism).

- 1.5.11 As part of its consultation on the proposed change, Horizon expanded the distribution of its newsletter which meant that Coed Cottage received a copy (copy attached as **Appendix 1**). The newsletter is regularly published on Horizon's website; but the purpose of the maildrop was to ensure that all potentially affected parties were made aware of the consultation process (that may have not already registered to receive newsletters).
- 1.5.12 Blasting and crushing works have always been part of Horizon's construction methodology and were included as part pre-application consultation documents and the DCO application which was submitted in June 2018. The potential noise, light, and tourism effects of these works have been assessed as part of the DCO application and will be considered through the examination of the DCO application. The DCO application (and relevant assessments) can be accessed on the Planning Inspectorate's website.
- 1.5.13 Horizon and Coed Cottages have arranged a meeting in November 2018 (separately to this consultation process) and Horizon is happy to discuss any of the concerns raised in Coed Cottages' response or the DCO application further at that meeting.

### **Trinity House and North Wales Police**

- 1.5.14 Responses received from Trinity House and North Wales Police did not raise any objections or concerns with the proposed change.

### **Llanbadrig and Mechell Community Councils**

- 1.5.15 Llanbadrig and Mechell Community Councils support the proposed change provided blasting does not extend past 19:00. In addition, they have asked that Horizon explains and implements mitigation measures for people and properties that will be adversely affected.
- 1.5.16 Horizon confirms that the proposed change will not result in blasting activities occurring after 19:00. The mitigation proposed to address effects related to blasting activities is contained within the DCO application (including, for example, the CoCP) and will be considered as part of the examination of the DCO application. This mitigation will also apply to the additional hours under the proposed change.

### **Local Resident**

- 1.5.17 The response of a local resident raised concerns about the proposed change on health and well-being of local people and tourism, the inadequacy of the consultation events held and why the proposed change had not been included in the original DCO application.
- 1.5.18 As set out in Table 2-1 and section 1.3 above, in preparing the proposed change, Horizon undertook a detailed review of the assessments in the DCO application and concluded that the proposed change will not have any new or different significant effects than those already assessed under the DCO application, including effects on local community and tourism. The

appropriateness of the effects that have been identified in the DCO application will be considered by the Examining Authority as part of its examination; however, the proposed changes do not alter the original conclusions.

- 1.5.19 The consultation events that were held by Horizon were only one of the ways in which the public could consider and provide their views on the proposed change. In addition to the consultation materials being publicly available on the consultation website, Horizon also undertook maildrops within affected areas, provided a free postal address and enquiry line, and offered further meetings with affected parties if required. For these reasons, Horizon considers that the consultation process was adequate to enable all parties to provide their views on the proposed change.
- 1.5.20 In respect of the timing of the proposed change, paragraphs 2.4.2 to 2.4.3 below outline that the proposed change has arisen following selection of the project management contractor (and the arrangements of how the contractor will deliver the Wylfa Newydd DCO Project) and Horizon becoming aware, since the submission of the DCO application, of additional information regarding construction blasting requirements (compared to quarry blasting) and the interaction of blasting activities with other construction activities and plant.
- 1.5.21 For these reasons, this change could not be included within the DCO application, and therefore is being sought now.

## **1.6 Procedure after consultation**

- 1.6.1 Horizon has considered each response received from the consultation on the proposed change and updated this document to detail and have regard to those responses. This updated document is now submitted to the Planning Inspectorate as a formal written request for the non-material change (this document) to be considered and accepted by the Examining Authority.
- 1.6.2 Horizon appreciates that the acceptance and appropriate procedure for the consideration and examination of this proposed change is entirely at the discretion of the Examining Authority. However, if the Examining Authority is minded to accept the proposed changes into the examination, Horizon considers that the remainder of the examination period would provide sufficient time for Interested Parties to consider and make representations on the published proposed changes to the Examining Authority and for any other procedural requirements to be met.

## 2 Non-Material Change: Blasting Strategy

### 2.1 Background to the proposed change

- 2.1.1 During construction of the proposed Wylfa Newydd Power Station, blasting will be required as part of the bulk earthworks for site levelling and grading, and will also be required as part of the deep excavations for the power blocks (Units 1 and 2), during construction of the Cooling Water Intake, and outfall tunnels, and service trenches, and for dry excavation of the inner harbour. Additional blasting may be required for excavation of redundant buried features such as culverts and building foundations.
- 2.1.2 Multiple activities such as rock anchoring, rock pinning, shotcrete application and preparation for structure foundations will be ongoing simultaneously during the blasting and excavation phase. These activities require significant numbers of people, plant and equipment and associated coordination. Due to the associated risk of blasting, a robust management system will be enforced and it will be necessary to establish, clear, secure and control danger zones with barriers, warning systems and sentries. During the blasts, the workforce and plant will be cleared from the areas which will reduce the working time available for production and, as such, the blasts would normally be planned to occur during breaks. However, there will be points in the project where this is not practical and blasts would need to be planned outside of these times. As such, flexibility in blasting times is key to ensure an efficient and safe construction timetable.
- 2.1.3 Within the Environmental Statement (appendix B6-2 Noise and Vibration Modelling and Assessment Methodology Report, APP-086) and the Main Power Station Site sub-Code of Construction Practice (sub-CoCP) (APP-415) as submitted, it was proposed that blasting would be scheduled Monday to Friday between 10.00 and 16.00, and Saturday between 10.00 and 13.00.

### 2.2 Minerals Technical Advice Note 1

- 2.2.1 The blasting times proposed within the DCO application as submitted align with the recommendations set out in Minerals Technical Advice Note 1 (MTAN1, paragraph 83) and as consulted with IACC in respect of Saturday mornings.
- 2.2.2 MTAN1 specifically relates to aggregates extraction and covers the impact of production blasting in quarries, rather than blasting for the purposes of the complex construction operations. MTAN1 sets out recommended times of day for blasting, and maximum levels of ground vibration at properties due to blasting at quarries.
- 2.2.3 On-going contractor involvement since the preparation of the DCO application submission has led to the conclusion that reliance on MTAN1 for blasting times could cause operational difficulties. The primary activity of a quarry is aggregate production for which large bench blasts are required. Blasts at quarries are specifically designed to produce rock at the required shape and size and (as a secondary consideration) to minimize any further rework. One blast in a quarry may produce enough material for over a week of extraction.

As such the quarry will be set up as an efficient aggregates production facility to meet the quantities and quality required. The blasting requirements and conditions in the Wylfa Newydd Development Area (WNDA) will be very different, as set out below. As such it is considered that the appropriate revised standard is British Standard BS 6472-2:2008 Guide to Evaluation of human exposure to vibration in buildings. Blast-induced vibration [RD2]

## **2.3 Basis for revised blasting controls British Standard BS6472-2**

- 2.3.1 Section 6 of British Standard BS 6472-2:2008 [RD2] sets out satisfactory vibration magnitudes from blasting.
- 2.3.2 Ground vibration is measured in terms of Peak Particle Velocity (PPV) with units in mm/s. For blast vibration occurring up to three times per day, BS 6472-2 [RD2] states that: *“the generally accepted maximum satisfactory magnitude for residential premises is a PPV of 6.0 mm·s<sup>-1</sup>. However, when 6.0 mm·s<sup>-1</sup> is considered to be too restrictive a value between 6.0 mm·s<sup>-1</sup> and 10.0 mm·s<sup>-1</sup> could be used”*.
- 2.3.3 If more than three blasts per day are required, BS 6472-2:2008 [RD2] sets out a formula to apply a reduction factor in satisfactory magnitude.
- 2.3.4 BS 6472-2 [RD2] notes that the time of the blasts, the period between the blasts, and the number of blasts in a given time period can all influence the perception of satisfactory magnitude. In respect of time of day, BS 6472-2 [RD2] advises that the normal working hours for blasting for surface mineral extraction can be regarded as 08.00 to 18.00 Monday to Friday, and 08.00 to 13.00 on a Saturday with no blasting on Sundays or Public Holidays. This provides 10-hour windows for blasting Monday to Friday, and a five hour window on Saturday.

## **2.4 Justification for the proposed change and use of BS6472-2**

- 2.4.1 Blasting at the WNDA is far more complex in nature than blasting at a quarry. The areas to be blasted at the WNDA such as the basements, trenches and tunnels are set over many levels and are different shapes and sizes. Blasting will be required not only to remove the bulk of the hard material efficiently, but also as a method of precision fracturing of the rock to meet the profile required in the conditions set out in the design. Due to the complexity of the operation, it is likely that each blast will be of a bespoke design and dependent on the amount of material required to be removed or the final profile needed. The data collected from each blast will be used to ensure continuous improvement and understanding of future blast requirements.
- 2.4.2 Since the preparation and submission of the DCO application, additional work has been ongoing on the construction of the Power Station including examining the blasting schedule (critically, the requirement to achieve three blasts per day for the deep excavations), and the risks posed to the wider Project programme if this schedule could not be met reliably throughout the course of Main Construction. This work has arisen due to the subsequent

appointment of the project management contractor (and the arrangements of how the contractor will deliver the Wylfa Newydd DCO Project) and additional information coming to light regarding construction blasting requirements (compared to quarry blasting) and the interaction of blasting activities with other construction activities and plant.

2.4.3 In undertaking this additional work with further contractor involvement, it was identified that, given the complexity of the blasting needed and the prospect of works being subject to delays, the daily time frames for blasting currently proposed within the DCO application would not be sufficient to allow three blasts per day in the deep excavations to be achieved on a consistent basis. This is due to the following factors:

- complexity of blasting activities (e.g. time taken to lay charges), particularly with respect to deep excavations below -2m AOD which become more intricate, and is expected to necessitate some pre-split blasting involving smaller satisfactory magnitude blasts;
- human resource constraints (e.g. shift patterns and staff breaks) which limit the period of time when sufficiently trained personnel can be available onsite to carry out blasting activities; and
- health and safety considerations associated with blasting activities. For example, clearing the area of personnel and equipment prior to blasting is disruptive and has an impact on productivity (at this point in the programme there will be over 1000 people on site along with the associated equipment such as excavators, lorries, drilling rigs, dumper trucks and construction barges). Large blasts for example in the deep excavation or harbour would require substantial evacuation areas and even blasts requiring small evacuation areas could require onsite road closures impacting on earthworks and other site logistics.

2.4.4 The assessment concluded that, while reliance on the MTAN1 time frame may be suitable for blasting in aggregates production, the potential for delays (and extensions) to the blasting schedule in the WNDA were such that they posed a significant risk to the wider Project programme.

2.4.5 Consequently, Horizon has looked at further guidance on blasting and concluded that it would be more appropriate to align the time period for blasting closely to that stipulated in BS 6472-2 [RD2] for surface mineral extraction, which regards normal working hours for blasting to be 08.00 to 18.00 Monday to Friday (10 hours) and 08.00 to 13.00 (4 hours) on a Saturday.

2.4.6 The proposed change, described in detail below, would provide Horizon with sufficient flexibility to allow the blasting schedule to be achieved practically, reliably and safely, with the further option of recovering potential delays if necessary.

2.4.7 From a commercial and environmental standpoint, aligning more closely with BS6472-2 [RD2] is Horizon's optimum option for achieving its programme and cost schedule. Continuing with the current time frame detailed in MTAN1, and subsequently in the DCO application, is likely to result in delays to the wider Project programme, because of the difficulty in achieving three blasts per day

in the deep excavation, increased costs because of the same issue, and potentially prolonged environmental effects.

- 2.4.8 As detailed below, the proposed change has been reviewed and assessed, and has not been found to result in any new or different likely significant environmental effects than those reported in the Environmental Statement
- 2.4.9 This approach also aligns with wider Project ambitions to meet the urgent national need for new, low carbon electricity generation that is safe, secure and affordable, in accordance with UK Government policy set out in National Policy Statement EN-1.

## 2.5 Description of the change

- 2.5.1 Horizon is proposing an extension to the time frame within which blasting for the Main Construction works is permitted, from:
  - Monday to Friday between 10.00 and 16.00, and Saturday between 10.00 and 13.00;
  - to
  - Monday to Friday between 09.00 and 19.00, and Saturday between 08.00 and 13.00 (With no blasting after dusk between March and September). In practice, because of the change in length of day and the change to BST, dusk falls after 19:00 from April until September.
- 2.5.2 In accordance with BS 6472-2 [RD2], the Environmental Statement states that there would be no blasting on Sundays and Bank Holidays; this aspect of the Main Construction working hours for blasting remains unaffected by the proposed change.

**Table 2-1 Proposed change**

DCO Submission			Proposed Change		
Day	Time	No of hours	Typical Weekday	Time	No of hours
Monday - Friday	10:00 – 16:00	6	Monday - Friday	09:00 – 19:00 (November to February inclusive) 09:00 – the earlier of dusk or 19:00 (March to September inclusive)	10
Saturday	10:00 – 13:00	3	Saturday	08:00 – 13:00	5

- 2.5.3 The proposed change would align the time period for blasting closely to that stipulated in BS 6472-2 but with start and end times both one hour later to accommodate worker shift patterns for the Wylfa Newydd Project which are intended to minimise traffic congestion (see section 4.3 of the Main Power Station Site sub-CoCP). The total daily duration for blasting is consistent with

BS 6472-2 [RD2], that is 10 hours per day Monday to Friday, and the standard hours set out in BS 6472-2 on a Saturday.

## **2.6 Summary of environmental appraisal**

2.6.1 The proposed change has been reviewed and assessed to identify any potential likely significant environmental effects that would be new or different to those assessed in the DCO application. This information is summarised in 0; where relevant, further discussion is provided below.

### ***Environmental Statement***

2.6.2 This review identified that the proposed change could potentially have implications to the following assessments contained in the Environmental Statement:

- noise and vibration (chapter D6) (for noise and vibration effects of construction blasting and interaction with ecological receptors and the marine environment as below);
- landscape and visual (chapter D10) for landscape and visual effects of construction and interaction with ecological receptors and the marine environment as below;
- terrestrial and freshwater ecology (chapter D9) (from noise and visual disturbance effects to ecological receptors, notably birds);
- the marine environment (from noise and visual disturbance effects to ecological receptors, notably the tern colony at Cemlyn Lagoon) (chapter D13); and
- combined topic effects (chapter D16) being the relevant intra development construction effects. Note, cumulative effects were considered but scoped out of this assessment as the issue affects the main site only and cumulative effects with any other development are considered unlikely; and

### ***Shadow Habitats Regulation Assessment***

2.6.3 Further consideration has also been given to the potential effect of the proposed change to the appropriate assessment for birds detailed in the Shadow Habitats Regulations Assessment Report.

2.6.4 Remaining assessments detailed within the Shadow Habitats Regulations Assessment Report have been assessed but based on professional judgement are not considered to be affected by the proposed change and have therefore not been considered further within this environmental appraisal.

### ***Other assessments***

2.6.5 Of the remaining assessments submitted as part of the Wylfa Newydd DCO application, only the Health Impact Assessment Report is considered to be

potentially affected by the proposed change and has been considered further as part of this environmental appraisal.

2.6.6 All other assessments (e.g. Welsh Language Impact Assessment, APP-433; Equality Impact Assessment, APP-434 and Water Framework Directive Compliance Assessment, APP-444) would remain unaffected by the proposed change and have therefore not been considered further.

## **2.7 Topic assessments**

2.7.1 The effects of the proposed change to the assessments listed below are summarised in 0, with further discussion provided below where relevant.

### ***Noise and vibration***

2.7.2 The Main Power Station Site sub-CoCP stipulates that blasting activities will comply with vibration threshold values set out in the noise and vibration management strategy (section 8 of the Main Power Station Site sub-CoCP). The vibration threshold values are consistent with those recommended in BS 6472-2 [RD2].

2.7.3 The proposed change is to provide Horizon with sufficient flexibility to allow the blasting schedule to be achieved practically. There is no increase in the number of blasts which would be required, and the blasting vibration limits remain unaltered. As set out in section 2.5, the total number of hours per day during which blasting could be undertaken will remain consistent with the recommendations in BS 6472-2 [RD-2], albeit with the start and end times of the weekday period both shifted one hour later than recommended by BS 6472-2 [RD-2] to reflect shift patterns.

2.7.4 All blasting will continue to be subject to the noise and vibration control measures (including monitoring) set out in section 8 of the Main Power Station Site sub-CoCP to reduce potential disturbance effects to human and ecological receptors. These control measures include strict adherence to BS6472-2 [RD2] which sets satisfactory vibration magnitudes for residential receptors, offices and workshops. All blasting methods would therefore be designed to comply with the vibration threshold values set out in BS6472-2 to prevent undue disturbance at residential dwellings, education facilities, bat roosts and barn owl roosts.

### ***Terrestrial and freshwater ecology***

2.7.5 To ensure that there are no new or different likely significant effects on terrestrial receptors such as bats, otters and other crepuscular species, the proposed change does not seek to permit any additional blasting to occur after dusk during the spring/summer months.

2.7.6 Irrespective of the time of day blasting would occur, mitigation measures have been outlined in the Main Power Station Site sub-CoCP which would control effects to both human and ecological receptors. As noted above, these mitigation measures include application of the following vibration levels set out in BS6472-2 [RD2].

2.7.7 The proposed change is not considered to alter the assessment of disturbance effects outlined in chapter D9 of the Environmental Statement.

### ***Landscape and visual***

2.7.8 The proposed change remains within the wider Main Construction working hours outlined in the Main Power Station Site sub-CoCP and therefore, lighting related to other construction activities will be required across the site whilst blasting is ongoing. No additional lighting is required.

2.7.9 There are a number of embedded and good practice mitigation measures outlined within the Environmental Lighting Impact Assessment that would reduce lighting effects to human and ecological receptors such as those noted above. As summarised in 0, the proposed change is therefore not considered to result in any new or different likely significant effects to human and ecological receptors from construction lighting.

### ***Implications of the proposed change to the assessment of effects to the tern colony at Cemlyn Lagoon***

2.7.10 Given the location of the WNDA within the Anglesey Terns/Morwenoliaid Ynys Môn Special Protection Area and the proximity of the tern colony at Cemlyn Lagoon to the WNDA, further consideration has been given to the potential effects of the proposed change on this statutory designated site and its qualifying features (i.e. Arctic tern, *Sterna paradisaea*; common tern, *Sterna hirundo*; roseate tern, *Sterna dougallii*; and Sandwich tern, *Thalasseus sandvicensis*). Consideration has also been given to effects on Black headed gulls (*Chroicocephalus ridibundus*), which, although not a qualifying feature of the SPA do support the integrity of the site.

2.7.11 The potential effect of the proposed change to these receptors has been considered in the context of both the Environmental Impact Assessment and Shadow Habitats Regulations Assessment, with any new or different likely significant environmental effects to those reported in the Environmental Statement and Shadow Habitats Regulations Assessment Report and Shadow HRA Addendum (AS-010) assessed.

### ***The avoidance of blasting outwith daylight hours during the tern breeding season***

2.7.12 The proposed change would not permit blasting to occur after dusk between March and September.

2.7.13 No additional lighting is required and consequently, the proposed change would not alter the magnitude of visual disturbance effects to the tern colony at Cemlyn Lagoon, remaining as reported in chapter D13 of the Environmental Statement and the Shadow Habitats Regulations Assessment Report.

2.7.14 As the proposed change would not increase the overall impact of noise disturbance to the tern colony at Cemlyn Lagoon from that currently assessed in chapter D13 of the Environmental Statement) and in the Shadow Habitats Regulations Assessment (, there are no new or different likely significant environmental effects.

2.7.15 As the proposed change would not increase the overall impact of noise disturbance to, or lighting impacts on, the tern colony at Cemlyn Lagoon from that currently assessed in chapter D13 of the Environmental Statement and in the Shadow Habitats Regulations Assessment, there are no new or different likely significant environmental effects as a result of the proposed change.

### ***Implications to human health***

- 2.7.16 Noise effects on health include annoyance, cardiovascular effects, learning disruption and sleep disturbance. The intermittent nature of blasting noise is considered an acute (brief) rather than a chronic (ongoing) noise exposure. As noted in table L-6 of the Health Impact Assessment Report, learning disruption is particularly associated with acute time domains for elevated noise.
- 2.7.17 The proposed change is considered unlikely to increase learning disruption, as both the original and proposed time windows span normal school hours. Indeed, blasts that occur later in the day and after school hours can be expected to have less effect on learning disruption.
- 2.7.18 The earlier start (09:00 rather than 10:00 on weekdays and Saturdays) is considered unlikely to affect health outcomes, as most people would be about their usual daytime routines by this time. The later end to the blasting time window (19:00 rather than 16:00 on weekdays) may mean that more people experience noise from blasts undertaken in the early evening, having returned home.
- 2.7.19 The proposed change may affect the period of undisturbed sleep for off-shift construction workers accommodated at the Site Campus. These potential adverse effects to sleep disturbance are noted, but are considered within the bounds of the existing moderate adverse assessment score for noise effects from the WNDA (as set out in section D.3 of the Health Impact Assessment Report). The proposed change would therefore not result in a change to the findings of the Health Impact Assessment Report.

**Table 2-2 Likely new or different environmental effects**

Document name	Reference Number	Chapter name	New or different likely significant effect	Material change/non-material change/no change
Environmental Statement chapter D6	APP-125	Noise vibration and	<p>Given the information presented in paragraphs 2.7.2 to 2.7.4, the proposed change would not have new or different likely significant environmental effects in terms of the noise and vibration assessment, in particular effects to human and ecological receptors due to:</p> <ul style="list-style-type: none"> <li>disturbance from air overpressure (including audible noise from blasting); and</li> <li>disturbance from vibrations.</li> </ul> <p>Thus, there is considered to be no new or different likely significant environmental effects to the assessment of noise and vibration and the conclusions presented in chapter of the Environmental Statement D6 remain as reported.</p>	Non-material change
Environmental Statement chapter D9	APP-128	Terrestrial and freshwater ecology	<p>As outlined in paragraphs 2.7.5 to 2.7.7, the proposed change would not significantly alter the assessment of effects to terrestrial and freshwater ecological receptors due to:</p> <ul style="list-style-type: none"> <li>noise disturbance; and</li> <li>visual disturbance from lighting.</li> </ul>	Non-material change

Document name	Reference Number	Chapter name	New or different likely significant effect	Material change/non-material change/no change
			<p>Given the information presented in paragraphs 2.7.2 to 2.7.7, there would be no new or different likely significant environmental effects to terrestrial and freshwater ecology assessment with respect to the other impact pathways outlined in table D9-6 of chapter D9 of the Environmental Statement.</p> <p>Thus, there is considered to be no material change to the assessment of terrestrial and freshwater ecology and the conclusions presented in chapter D9 of the Environmental Statement remain as reported.</p>	
Environmental Statement chapter D10	APP-129	Landscape and visual	<p>As outlined in paragraphs 2.7.8 to 2.7.9, the proposed change would not result in any new or different likely significant environmental effects to landscape and visual receptors due to:</p> <ul style="list-style-type: none"> <li>• visual disturbance from lighting; or</li> <li>• effects of sky-glow.</li> </ul> <p>Thus, there is considered to be no new or different likely significant environmental effects to the landscape and visual assessment, and the</p>	Non-material change

Document name	Reference Number	Chapter name	New or different likely significant effect	Material change/non-material change/no change
			conclusions presented in chapter D10 of the Environmental Statement remain as reported.	
Environmental Statement chapter D13	APP-132	The marine environment	<p>As outlined in paragraphs 2.7.10 to 2.7.15, the proposed change would not significantly alter the assessment of effects to seabirds (target and secondary species) due to:</p> <ul style="list-style-type: none"> <li>• visual disturbance from lighting; and</li> <li>• airborne noise disturbance.</li> </ul> <p>Thus, there is considered to be no new or different likely significant environmental effects to the assessment of the marine environment assessment and the conclusions presented in chapter D13 of the Environmental Statement remain as reported.</p>	Non-material change
Environmental Statement chapter D16	APP-135	Combined topic effects	<p>As outlined in paragraphs 2.7.2 to 2.7.9 and this table, the proposed change would not significantly alter the assessment of effects to human and ecological receptors.</p> <p>Thus, the proposed change is not considered to have any new or different likely significant cumulative or combined effects above that already assessed and therefore the conclusions presented</p>	No change

Document name	Reference Number	Chapter name	New or different likely significant effect	Material change/non-material change/no change
			in chapter D16 of the Environmental Statement remain as reported.	
Habitats Regulations Assessment Report	APP-050/051	Appropriate assessment: Birds	<p>As outlined in paragraphs 2.7.10 to 2.7.15, the proposed change would not significantly alter the appropriate assessment in particular effects to the tern colony at Cemlyn Lagoon due to:</p> <ul style="list-style-type: none"> <li>• visual disturbance from lighting; and</li> <li>• airborne noise disturbance.</li> </ul> <p>Thus, there is considered to be no new or different likely significant environmental effects to the appropriate assessment for birds and the conclusions of the Habitats Regulations Assessment remain as reported.</p>	Non-material change
Health Impact Assessment Report	APP-429	Noise	<p>As outlined in paragraphs 2.7.16 to 2.7.19 the proposed change is unlikely to increase learning disruption or affect health outcomes although it is recognised that people may experience noise during the early evening, having returned home.</p> <p>The proposed change only has the potential to effect sleep disruption for some groups, namely young children with earlier bedtimes, and off-shift</p>	Non-material change

Document name	Reference Number	Chapter name	New or different likely significant effect	Material change/non-material change/no change
			<p>construction workers accommodated at the Site Campus.</p> <p>Whilst noted, the potential adverse effects associated with the proposed change are considered within the bounds of the existing moderate adverse assessment score for noise effects from the Wylfa Newydd Development Area (as set out in section D.3 of the Health Impact Assessment Report).</p> <p>Thus, there is considered to be no new or different likely significant environmental effects to the assessment of effects to human health and the conclusions of the Health Impact Assessment Report remain as reported.</p>	

## 2.8 Schedule of engagements

Table 2-3 Schedule of engagements

Date	Event
28 June 2018	DCO application accepted for examination
6 July to 13 August 2018	Relevant representations period
14 August 2018	Horizon sends a notification to PINS of consultation on non-material change to blasting strategy Horizon sends consultation document for non-material change to blasting strategy to consultees specified below. Follow-up calls and meetings provided as required
28 September 2018	Consultation on non-material change to blasting strategy ends (extra time allowed for August holiday period)
1 to 15 October 2018	Horizon considers responses received during consultation and finalises its request for a non-material change to the blasting strategy
17 October	Horizon submits a formal written request for a non-material change to the Examining Authority.
23 October 2018	Preliminary Meeting

A list of specified consultees is set out below (those who responded during the consultation are marked with an \*):

- Welsh Government
- Natural Resources Wales\*
- Isle of Anglesey Council\*
- Gwynedd Council
- Conwy County Borough Council
- North Wales Wildlife Trust\*
- RSPB Cymru
- National Trust
- Betsi Cadwaladr University Health Board
- Public Health Wales
- Welsh Ambulance Service Trust
- North Wales Police\*
- North Wales Fire and Rescue Service\*
- National Grid
- Welsh Water

- SP Manweb plc
- Magnox
- Nuclear Decommissioning Authority
- North Anglesey Partnership
- Destination Anglesey Partnership
- North Wales Economic Ambition Board
- Joint Nature Conservation Committee
- Cyngor Tref Amlwch (Town Council)
- Cyngor Cymuned Cylch-Y-Garn (Community Council)
- Cyngor Cymuned Llanbadrig\*
- Cyngor Cymuned Mechell\*
- Cyngor Cymuned Llanelian
- Cyngor Cymuned Rhosybol
- Trinity House\*
- Talybolion Local Members
- Twrcelyn Local Members
- Local residents – via Horizon’s Near Neighbour Database which is used to keep local people up to date with activity on the Wylfa Newydd site. This approach was considered proportionate to the nature and scale of the proposed non-material changes, and consistent with the historic approach for communications regarding onsite activity. In total, there are 898 residential addresses in the mailing area. \*
- Persons with an Interest in Land – Horizon consulted all owners/occupiers, owners, occupiers and those with an interest in land or rights over land within the Main Site area (including those properties within the identified noise buffer area). Again, this approach was considered proportionate to the nature and scale of the proposed non-material changes, and consistent with historic approaches (being the same as the pre-application Consultation on Additional Land carried-out in January 2018). In total, there are 188 properties identified.

## 2.9 Schedule of consequential amendments to application documents

**Table 2-4 Schedule of consequential amendments to application documents**

Application document name	Application Reference Number	Section of document	Version to be amended	Description of amendment
Environmental Statement appendix B6-2: Noise and Vibration Modelling and Assessment Methodology Report	6.2.21	5.5	1.0	Update to blasting schedule (i.e. working hours for blasting)
Environmental Statement chapter D1: Proposed development	6.4.1	1.6	1.0	Update to blasting schedule (i.e. working hours for blasting)
Environmental Statement chapter D9: Terrestrial and Freshwater ecology	6.4.9	9.5	1	Update assessment to include additional text provided in section 2.6 of this document
Environmental Statement chapter D13: The marine environment	6.4.13	13.5	1.0	Update to blasting schedule (i.e. working hours for blasting)
Main Power Station Site sub-Code of Construction Practice	8.7	8.2	1.0	Update to blasting schedule (i.e. working hours for blasting)
Marine Works sub-Code of Construction Practice	8.8	4.2	1.0	Update to blasting schedule (i.e. working hours for blasting)

### 3 References

Table 2-5 Schedule of references

ID	Reference
RD1	<p>The Planning Inspectorate. 2018. Advice Note 16: How to request a change which may be material. [Online]. [Accessed: June 2018]. Available from: <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/07/Advice-note-16.pdf">https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/07/Advice-note-16.pdf</a></p>
RD2	<p>British Standards Institution. 2008. <i>BS 6472-2 Guide to Evaluation of human exposure to vibration in buildings. Blast-induced vibration.</i> London: British Standards Institution.</p>

## 4 Appendix 1: Copies of “Neighbour News”

# Newyddion i Gymdogion

RHIFYN 08 - Awst 2018



## Wylfa Newydd – Diweddarriad i'n cymdogion agosaf

Ym mis Mehefin 2018, fe wnaethon ni gyflwyno ein cais am Orchymyn Cydsyniad Datblygu i adeiladu a gweithredu Wylfa Newydd, gorsaf bŵer niwclear newydd ar Ynys Môn.

Ers cyflwyno'r cais, rydyn ni'n cynnig newidiadau i ddau weithgaredd adeiladu penodol: ffrwydro creigiau a symudiadau llongau.

Er nad ydyn ni'n rhagweld effeithiau amgylcheddol sylweddol newydd yn wahanol i'r rhai a gyflwynir yn ein cais, hoffem glywed eich barn chi. Gallwch ddarllen mwy am yr hyn sy'n cael ei gynnig isod, yn ogystal â rhagor o fanylion ynglŷn â beth yw Gorchymyn Cydsyniad Datblygu.

### Amserau ffrwydro

Yn ystod gwaith adeiladu Wylfa Newydd, bydd angen creigiau arnom i helpu i lenwi'r safle. I wneud hyn, rydyn ni'n bwriadu defnyddio craig a gafwyd drwy ffrwydro ac yna torri'r creigiau hynny ar y safle, yn hytrach na'u cludo o rywle arall.

Bydd angen ffrwydro hefyd fel rhan o'r gwaith cloddio dwfn ar gyfer y blociau unedau pŵer ac yn ystod gwaith adeiladu'r



### Dweud eich dweud

Rydyn ni'n cynnal dwy sesiwn galw heibio lle gallwch chi ddod i siarad ag aelod o dîm Horizon a dod i wybod mwy am y newidiadau arfaethedig hyn.

Dewch i'n gweld ni **ddydd Mawrth 4 Medi**:

- 10am-1pm, maes parcio Cae Pwmp, Cemaes
- 2pm-5pm, maes parcio'r Douglas Inn, Tregele

Gallwch ddarllen y dogfennau technegol ar-lein yn: [www.horizonnuclearpower.com/ymgyngoriad](http://www.horizonnuclearpower.com/ymgyngoriad)

Rhowch eich barn i ni yn ysgrifenedig drwy e-bost neu lythyr **erbyn 28 Medi 2018** - mae ein manylion ar gefn y daflen newyddion hon.

## Newidiadau i amseriadau - parhad...



strwythur sugno dŵr oeri, twneli arllwys a ffosydd gwasanaethu, ac ar gyfer gwaith cloddio sych yr harbwr mewnol. Yn ogystal, mae'n bosibl y bydd angen cynnal gwaith ffrwydro er mwyn cael gwared â nodweddlion o dan y tir sydd bellach yn ddiangen, fel twneli dŵr a sylfeini adeiladau.

Roedd ein cais Gorchymyn Cydsyniad Datblygu yn cynnwys amseroedd arfaethedig ar gyfer gweithgarwch ffrwydro ar y safle. Ers hynny, rydyn ni wedi parhau i edrych ar y broses o adeiladu'r orsafr bŵer, gan gynnwys adolygu'r amserlen ffrwydro er mwyn lleihau unrhyw oedi i'r graddau mwyaf posibl mewn perthynas â rhaglen ehangach y Prosiect.

O'r herwydd rydyn ni'n cynnig newid amser y ffrwydro er mwyn iddo ddigwydd yn ystod yr oriau canlynol:

**Dydd Llun i Ddydd Gwener rhwng 09.00 a 19.00, a dydd Sadwrn rhwng 08.00 a 13.00 (ond dim ffrwydro ar ôl y gwyll rhwng mis Mawrth a mis Medi).** Ni fyddai gwaith ffrwydro yn cael ei gynnal ar ddydd Sul nac ar wyliau'r banc.

### Symudiadau llongau yn y Cyfleuster Dadlwytho Morol

Byddwn yn cludo rhwng 60% a 80% o'n deunyddiau swmp ar y môr, gan ddefnyddio Cyfleuster Dadlwytho Morol wedi ei adeiladu'n arbennig ym Mhorth-y-Pistyll.

Rydyn ni'n cynnig newid y cyfyngiad dyddiol uchaf ar nifer symudiadau'r llongau yn y Cyfleuster Dadlwytho Morol yn ystod adegau allweddol. Byddai hyn yn ein galluogi ni i adennill unrhyw amser a gollir oherwydd y llanw, tywydd, gwahaniaethau mewn maint llwythau neu ddociau'n cau, ac

yn sicrhau bod y cyfleuster Dadlwytho Morol yn cael ei ddefnyddio yn y ffordd fwyaf effeithiol bosibl drwy gydol y cyfnod adeiladu.

Rydyn ni'n cynnig cynyddu'r terfyn dyddiol uchaf o bedwar symudiad bob dydd (dwy long) i **16 symudiad y dydd (wyth llon)**. Byddai nifer go iawn y symudiadau llongau bob dydd yn amrywio o un diwrnod i'r llall, sy'n golygu na fyddai llongau yn dod i'r Cyfleuster Dadlwytho Morol rai diwrnodau, ond y gallai fod yn llawn ar ddiwrnodau eraill.

Mae cyfanswm nifer y symudiadau llongau yr un fath â'r hyn a ddisgrifiwyd ac a aseswyd yng nghais Gorchymyn Cydsyniad Datblygu gwreiddiol Wylfa Newydd. Nid ydyn ni'n rhagweld y daw effeithiau amgylcheddol newydd i ganlyn y newid hwn.

### Mae eich safbwytiau'n cyfri

**Peidiwch ag anghofio rhoi gwybod i ni beth yw eich barn chi drwy ddefnyddio'r Rhadbost neu'r cyfeiriadau e-bost isod erbyn 28 Medi.**

**Ac os hoffech wybod am unrhyw agwedd arall ar Brosiect Wylfa Newydd, mae croeso i chi e-bostio neu ein ffonio ni.**



**Gwen Parry-Jones**

**Cyfarwyddwr Gweithredol, Datblygu Gweithrediadau Pŵer Niwclear Horizon**

### Diweddariad am yr ysgubor ystlumod

Fel y cynlluniwyd yn flaenorol, rydyn ni wedi dechrau adeiladu ysgubor ystlumod yng Nghemaes. Bydd y gwaith adeiladu yn cymryd hyd at 12 wythnos.



### Beth yw Gorchymyn Cydsyniad Datblygu?

Gelwir prosiectau mawr fel Wylfa Newydd yn Brosiectau Seilwaith o Arwyddocâd Cenedlaethol. Maen nhw angen Gorchymyn Cydsyniad Datblygu, a Llywodraeth y Deyrnas Unedig sy'n penderfynu a ddylid rhoi caniatâd ai peidio. Mae Horizon wedi gwneud cais am Orchymyn Cydsyniad Datblygu i Ysgrifennydd Gwladol y Deyrnas Unedig dros Fusnes, Ynni a Strategaeth Ddiwydiannol.

Mae proses y Gorchymyn Cydsyniad Datblygu yn cael ei rheoli gan yr Arolygiaeth Gynllunio, a gallwch gysylltu â'r Arolygiaeth yn:

<https://infrastructure.planninginspectorate.gov.uk/cy/>

e-bostio [Nlenquiries@pins.gsi.gov.uk](mailto:Nlenquiries@pins.gsi.gov.uk) neu ffonio 0303 444 5000.

Mae ein cais Gorchymyn Cydsyniad Datblygu ar gyfer Wylfa Newydd wedi ei rannu'n wyth cyfrol â chod lliw. Mae llawer o'r rhain yn cynnwys gwybodaeth fanwl a thechnegol helaeth, ond mae dogfennau i'w cael hefyd sy'n disgrifio datblygiad, nodau, effeithiau a manteision y Prosiect sy'n fwy hygyrch i'r holl ddarllenwyr.

Rydyn ni wedi cynhyrchu llyfrym defnyddiol dan y teitl 'Llywio drwy ein cais Gorchymyn Cydsyniad Datblygu' sy'n rhoi rhagor o fanylion. Mae modd i chi gael copi yn ein digwyddiadau sydd i ddod.

## Cysylltu â ni

 [ymholiadauwylfa@horizonnuclearpower.com](mailto:ymholiadauwylfa@horizonnuclearpower.com)

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 0800 954 9516

 [Freepost WYLFA NEWYDD](mailto:Freepost WYLFA NEWYDD)

 [@HorizonNuclear](https://twitter.com/HorizonNuclear)

 [@horizonnuclear](https://www.instagram.com/horizonnuclear)

Mae Horizon yn mynd ati o'i wirfodd i ddarparu cylchlythyrau i roi'r wybodaeth ddiweddaraf i'r gymuned am ddatblygiad y prosiect. Bydd unrhyw ddata personol a roddwch yn cael eu defnyddio ar gyfer hyn yn unig. Efallai y byddwn ni'n rhoi eich enw a'ch manylion cyswllt i drydydd partïon sy'n argraffu ac yn dosbarthu'r cylchlythyr hwn. Ond ni fyddwn yn defnyddio nac yn rhannu'r data mewn unrhyw ffordd arall. Rydyn ni o ddifri am ddiogel data. Os hoffech chi gael mwy o wybodaeth am y data sydd gennym amdanoch chi, sut rydyn ni'n eu defnyddio, sut rydyn ni'n eu cadw'n ddiogel a sut i'w cywiro neu eu dileu, cysylltwch â ni: [dataprivacy@horizonnuclearpower.com](mailto:dataprivacy@horizonnuclearpower.com)

# Neighbour News

ISSUE 08 — August 2018



## Wylfa Newydd – update for our nearest neighbours

In June 2018, we submitted our application for a Development Consent Order (DCO) to build and operate Wylfa Newydd, a new nuclear power station on Anglesey.

Since our submission we are proposing amendments to two particular construction activities: rock blasting and vessel movements.

While we are not predicting any new significant environmental effects from those presented in our application, we would like to hear what you think. You can read more about what's being proposed below, as well as further details about what a Development Consent Order is.

### Blasting timing

During the construction of Wylfa Newydd, we will need rock to help level the site. To do this, we have proposed to use rock obtained from blasting that is then crushed on site, rather than transporting it from elsewhere.

Blasting will also be needed as part of the deep excavations for the power unit blocks and during the construction of the



### Have your say

We're holding two drop-ins where you can come and speak with a member of the Horizon team and find out more about these proposed changes.

Come and see us on **Tuesday 4 September** at:

- 10am-1pm, Cae Pwmp car park, Cemaes
- 2pm-5pm, Douglas Inn car park, Tregele

You can read the technical documents online at: [www.horizonnuclearpower.com/consultation](http://www.horizonnuclearpower.com/consultation)

Please give us your views in writing by email or letter **by 28 September 2018** - our details are on the back of this newsletter.

Continued over the page

## Changes to timings continued...



Cooling Water Intake, outfall tunnels and service trenches, and for the dry excavation of the inner harbour. Blasting may also be required for removing redundant buried features such as water tunnels and building foundations.

Our DCO application included proposed times for blasting activity on the site. Since then we've continued looking at the construction of the power station, including reviewing the blasting schedule to minimise any potential risks to the wider Project programme.

As a result, we're proposing changes to the timing of the blasting so that it would take place during the following hours:

**Monday to Friday between 09.00 and 19.00, and Saturday between 08.00 and 13.00 (with no blasting after dusk between March and September).** There would still be no blasting on Sundays and Bank Holidays.

## Vessel movements at the MOLF

We will bring between 60% and 80% of our bulk materials in by sea, using a specially constructed Marine Off-Loading Facility (MOLF) at Porth-y-Pistyll.

We are proposing to change the upper daily limit of vessel movements to and from the MOLF at key periods. This would allow us to recover time following delays caused by tides, weather, varying load sizes or dockside closures, ensuring the MOLF is used most effectively throughout construction.

## What is a 'DCO'?

Large projects like Wylfa Newydd are known as Nationally Significant Infrastructure Projects (NSIPs). They require a Development Consent Order (DCO) that is determined by UK Government. Horizon has applied for a DCO from the UK Secretary of State for Business, Energy and Industrial Strategy.

The DCO process is managed by the Planning Inspectorate and you can contact them at: <https://infrastructure.planninginspectorate.gov.uk/>, email [Nlenquiries@pins.gsi.gov.uk](mailto:Nlenquiries@pins.gsi.gov.uk) or call 0303 444 5000.

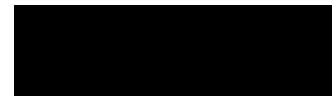
We are proposing to increase the upper daily limit from four movements per day (two vessels) to **16 movements per day (eight vessels)**. The actual number of daily movements throughout the construction programme would vary from day-to-day, meaning that some days the MOLF may be used to its full capacity, while on other days it may receive no vessel deliveries at all.

The total number of vessel movements remain the same as described and assessed in the original Wylfa Newydd DCO application. We don't predict any new environmental effects from this change.

## Your views count

**Don't forget to let us know your views using the Freepost or email addresses below by 28 September.**

**And if you'd like to know about any other aspect of the Wylfa Newydd Project, please feel free to email or call us.**



**Gwen Parry-Jones**  
Executive Director, Operations Development  
Horizon Nuclear Power

## Bat barn update

As previously planned, we've started to build a second bat barn in Cemaes.

Construction will take up to 12 weeks.



Our DCO application for Wylfa Newydd has been broken down into eight colour-coded volumes. Many of these contain extensive detailed and technical information, but there are also documents describing the Project's development, aims, impacts and benefits that are more accessible to all readers.

We've produced a handy booklet called 'Navigating our Development Consent Order Application' that explains more. You can pick up a copy at our upcoming events.

## Getting in touch



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## **5 Appendix 2: Copies of responses received during consultation**

**From:** NWWT - 28-09-2018

**Received:** 2018-09-28T00:53:04Z

**To:** WylfaEnquiries@Horizonnuclearpower.com; wylfaenquiries@horizonnuclearpower.com;

**Subject:** Consultation on proposed non-material amendments 1) changes to timings for blasting on site 2) changes to vessel movements

Wylfa Enquiries

Further to your consultation on the two proposed non-material amendments: -

- Changes to timings for blasting
- Changes to vessel movements

I am writing via this email to register North Wales Wildlife Trusts concern and lack of agreement to the proposition that these changes are non-material and do not alter the nature and conclusions of the Environmental Statement and the shadow Habitats Regulations Assessment. NWWT recently submitted our detailed comments to NRW on the Permits and Marine Licences and so have scrutinised both the ES, the project activities and the shadow HRA along with the relevant Codes of Construction/Operation Practice and have found many areas which cause concern. Those concerns have particular relevance to the topics under consideration in this consultation. The figures and detail of Marine Licence Project Description and Activities have been referred to where necessary, as in some cases they provide a slightly greater level of understanding of the nature of the development than the DCO project description ES A2 – Project overview and introduction to the developments. This is particularly in relation to the marine works and consequently the operation of the harbour (MOLF) and vessel movements.

## CHANGES TO VESSEL MOVEMENTS

### Uncertainty over materials' derivation, delivery methods and calculation of total vessel movements

There is a high degree of uncertainty about what materials can be derived on site and if they can't whether they will be delivered via sea or road. The projects description for the Marine Licence demonstrates uncertainty in a number of areas: -

- temporary access ramp materials either from off or on site. Delivery by road or sea.
- temporary barge berth constructed from either site won or imported materials. It is not stated whether imported materials would be delivered by road or sea
- the CWS coffer dam incorporating temporary causeway. Sheet wall piles and tubular piles to be delivered by road or sea.
- drainage pipes to be delivered by road or sea.

- Cooling water intake coffer dam “the steel piles, bracing materials **and fill material** will be delivered to site by sea and/or by road” (my emphasis).
- Temporary waste water outfall “rock foundations, pipeline and concrete mat and other materials” will be delivered by sea or road.
- The temporary waste water outfall will be dismantled and either used on site or removed off-site to a licensed tip. It is not clear if the off-site location might be the Holyhead Disposal site which would require further vessel movements
- The core of the western breakwater will be materials derived from the Power Station Site. However, the pre-cast armour units and the rock underlay will be transported to site by sea or from land.

The basis for the impact assessment has been made on 60 – 80% of deliveries being made from sea, but with the level of uncertainty indicated above it is unclear whether a **total figure** has been calculated of the hypothetical maximum number of deliveries and what therefore may entail the worst case of 80%.

The non-material amendment which has now been submitted confounds the situation, as the maximum number of boat movements/day is to be raised from 4 (equivalent 2 vessels) to 16 (equivalent 8 vessels). Horizon indicates that this will not alter the **total** number of vessels, but a total figure appears not to have been accurately calculated (cf discussion at 3.2.2 of Biosecurity Risk Assessment Strategy Report and supporting documents [RD17] & [RD18]<sup>1</sup>): -

*“Hitachi-GE Nuclear Energy Ltd. has produced a report (Transportation and Logistics Study CPJ-UW-A408) detailing transportation plans for equipment and materials required for construction [RD17]. The report aims to identify the transport modes and estimated number of vessels required. The details given in [RD17] are not final; further considerations are required. [RD17] should therefore be taken as the best estimate of logistical implications at the time of the report and is subject to change [RD18].”*

**My emphasis** From paragraph 3.2.2 of Biosecurity Risk Assessment Strategy Report

doc ref ML-OTH-03-BSRA for the Marine Licence

The Transport & Logistics Study report [RD17] and its accompanying caveats [RD18] do not appear to be referred to in any of the submitted DCO documents or the Environmental Statement. Therefore this level of uncertainty does not appear to have been replicated in modelling for example in relation to air emissions. In fact, Appendix D5.02 (Main Site Construction Phase Air Dispersion EIA – Final Modelling Report) simply states that “*Horizon provided the number of marine vessels/types and MOLF construction plant on a monthly basis for each of the 2020 (when the MOLF is undergoing construction) and 2023 (when the MOLF is operational) construction years*”, with no qualification to represent any estimated upper or lower limits or referencing of the Transport & Logistics caveats. Given Horizon’s own self-acknowledged estimates of vessel movements it is highly likely that the proposed non-material amendment change could result in considerably more vessel movements than was initially considered or modelled within the ES chapters.

## Air Quality

- The Marine Works sub-CoCP indicates (7.3.2) that additional air quality modelling may be needed to develop an air quality control protocol and the assumptions based in the modelling report (D5-2) will also be altered now by the non-material amendment. This will change, as a starting point, the predicted total one hour mean nitrogen dioxide values, but may also result in changes to the total annual mean levels depending on the distribution of deliveries across the year and/or the number of vessels increase in totality. The supporting document of the non-material amendment provides only a simple statement to indicate that the models have been re-run and that no significant change resulted. This is not sufficient in our view.
- The Tables in ES Chapter D5 would also need to be adjusted for short-term changes in NOx, nitrogen deposition and acid deposition for Year 2 harbour (MOLF) construction (and potentially Y5) depending on how the mix of changes in vessel rates is distributed over the construction period.
- Given these results it would also alter the illustrations in the ES figures D5-7 – D5-10 and there will be a considerably greater magnitude of change over the current baseline levels. It is of note that a baseline levels ‘temperature’ plan is not provided in a visual representation, although the ES acknowledges that the baseline is relatively broad brush.
- ES Appendix B5-2 bases statements on the conclusions of a report [RD6 CEH report] that is not referenced in the B5-2 documents list and was not available for review. This is important as there appears to be little understanding of why the critical load for Cemlyn Bae SAC was changed from 8 KgN/ha/year to 20 and whether this includes only the terrestrial vegetated habitats rather than those of the saline lagoon itself. Therefore no conclusions on the Report’s veracity can be provided by the consultees and cannot be commented on in relation

to the proposed non-material amendment. Additionally, this appendix which defines the critical loads for ecological receptors does not include Tre'r Gof in Table 4-1.

- It is unclear if Trwyn Pen Carreg and Arfordir Mynydd y Wylfa – Trwyn Penrhyn Local Wildlife Sites' critical loads have considered the lichen/bryophytes and the nationally significant CHEG fungi as critical receptors to changes in air quality. APIS (Air Pollution Information Service) habitat statistics do not include a habitat defined by coastal grassland heath matrix but the description for dwarf heath communities the mosses, lichen and bryophyte element of habitat is recognised as being most susceptible to nitrogen deposition. Given the importance of the lower plant element in the coastal communities a lower critical threshold may need to be considered. For example, in lichen and moss dominated habitats the loads can be as low as 5 or 8KgN/ha/year (APIS search term 'lichen & moss' advanced search critical load).
- NWWT raised concerns in their Marine Licence response regarding the effectiveness of the proposed monitoring and mitigation in relation to the CoCP and have suggested that further consideration needs to be given to a number of areas relating to shipping movements, such as alternative power sources when vessels are docked rather than operating at 80% engine capacity. This is even more pertinent given the proposed quadrupling of vessel movements.

#### Shipping Movements

- Little information appears to be available within the DCO or the Marine Licence application on the matter of shipping movements in and out of the harbour (MOLF) or their approach to it. Nor does ES chapter D15 (Shipping & Navigation) provide any additional information on shipping routes for deliveries or disposal of dredging materials. This is a critical consideration now a four-fold increase in vessel movements is being considered. This in our view is not only in relation to ecological receptors but also in terms of the Navigational Risk Assessment (Marine Licence) for the project, however, this element is entirely outside our remit.
- There appears to be little consideration of the consequences of a four-fold increase in large sea-going ships (up to 100m long) crossing the Sandwich tern foraging route as the birds are less than 1km to 1.5km from the breeding colony. The work within the ES and its appendices show that the majority of Sandwich terns leave the breeding colony to fly east across Porth-y-Pistyll, the location of the new harbour (MOLF) and breakwaters and all vessels entering the harbour will bisect the tern's foraging trajectory.
- Changes resulting from the non-material amendment will result in one vessel on average passing in or out of the harbour (MOLF) every 1.5 hours, or alternatively ships being grouped to all passage on an adventitious tide. This is opposed to the ES consideration of one vessel on average every 6 hours. This difference is considered to add significantly to the levels of disturbance to the terns both alone and in combination with other impacts associated with the DCO. This is within the context that the shadow HRA has not demonstrating beyond reasonable scientific doubt that there will be no Adverse Effect on Site Integrity. This is an opinion that is not only held by NWWT but also by the SNCN in their responses to the DCO and therefore this matter should be investigated more thoroughly in relation to this four-fold increase in the number of vessels entering and leaving the harbour within any 24-hour period and the associated risks to the breeding tern colony.
- NWWT do not feel that there had been sufficient consideration, within the original ES, of factors to reduce and mitigate for these impacts and proposed controls on delivery routes, timings or break out routes from the Holyhead Separation Lanes were poorly developed to deal with ES' original conclusions. It is our opinion that there is a greater imperative to consider this matter in relation to the proposed changes to vessel movements.

#### **CHANGE TO TIMING OF BLASTING**

NWWT have consistently disagreed with the assessment of noise impacts and tern behavioural responses as presented by Horizon in the ES and the SHRA. It is our view that conclusions cannot be drawn 'beyond reasonable scientific' regarding this either as an isolated disturbance factor, or as a cumulative factor in conjunction with other impacts. These concerns are shared by NRW.

The proposed changes to the blasting operations increases the frequency/periodicity of the blasting in any given day and so this along with the changes to vessel movements is highly likely to result in a synergistic effect in-combination. For example, there could feasibly be blasting for the majority of the tern's daylight foraging time - a 66% increase in week day times when blasting can occur. This could occur and be combined with the maximum of 16 vessel movements – a four-fold increase over the initial assessed levels of disturbances. This is not an inconsiderable alteration to the level of disturbance the breeding population will be subject to.

Therefore, in this consultation response NWWT has also considered the adequacy of how Horizon proposes to control activities to manage & reduce impacts at the Anglesey Tern SPA.

- The main features of the noise mitigation for terns is laid out in the sHRA and is summarised in the Executive Summary (1.1.27 – 1.1.38). In this document blasting constraints are proposed during the ‘establishment period’ (55dBBLAFmax – para 1.1.35), taken to be 15th April for 4 weeks 13th May, and at a higher level (60dBBLAFmax – para 1.1.30) for the remainder of the breeding season, until 15<sup>th</sup> August.
- During the TCPA negotiations and the recently granted Site Preparation & Clearance proposals the breeding season for the tern colony in its entirety - including black-headed gull breeding - has been conditioned as 7<sup>th</sup> March to 15<sup>th</sup> August. This inconsistency needs to be addressed and it is suggested that Horizon undertake a clear review of the sHRA protocol as there are some major changes that may be required to the proposed approach in order to make it satisfactory.
- Points that it is suggested should be considered given the increased in-combination disturbance risks are: -
- Considering the colony ‘establishment period’ – the Marine Licence CoCP indicates (para 8.3.3) that the April 15<sup>th</sup> start date will be guided by information from NWWT on when the first terns/black-headed gull typically arrive to set up the colony (ML CoCP 8.8.3). This information has been provided to Horizon sometime ago and no analysis appears to have been provided by them to justify this date.
- It is suggested that the start date should be extended to include the period when the black-headed gulls arrive and breed, as they are acknowledged to be a key part of the defensive strategy for Sandwich tern colonies (Strangford Lough 2017 and Cabot & Nisbet). NWWT have considered their data and the black-headed gull colony formation would be encompassed to a large extent by the 7<sup>th</sup> March date as agreed within the TCPA conditions.
- Observation of aerial display or other cut-offs such as 50% of expected numbers of Sandwich tern are not considered useful markers or thresholds. Firstly, Cabot & Nisbet indicate that Sandwich tern often display, court and mate away from the colony breeding site. Additionally, a figure of what might be the ‘expected number of Sandwich terns’ is undefined and will vary from year to year, or if the JNCC designation figures were to be used rather than a 5-year average. It also takes no account of late arrivals due to a slow season due to weather or for late influxes of birds potentially from failed breeders at other colonies.
- The SPA is designated not only for its Sandwich terns but also for common, Arctic and Roseate terns. From analysis of the Cemlyn data common & Arctic terns do not begin to arrive until the end of April and although they tend to settle and nest quickly the first birds to be seen on nests are all after the 13<sup>th</sup> May proposed cut-off for the ‘establishment period’ in the 4 years of Cemlyn data analysed. Significant effort is being undertaken under the *Life* Project to establish breeding Roseate terns at Cemlyn SPA and this species breeds later even than common tern (Cabot & Nisbet). The proposed mitigation for noise with the current ‘establishment period’ will not capture the early breeding phase of any of the other qualifying species of the Anglesey Terns SPA.
- It is very unclear why the ‘establishment period’ is limited to only 4 weeks as the incubation period for Sandwich terns is 26 – 28 days (ie 4 weeks Cabot & Nisbet) and the breeding colony will be vulnerable to disturbance and breeding failure for a considerably longer period, given that an adult will ‘brood’ young chicks and one adult will predominantly be responsible for providing small prey items for a period of time after hatching, until the chicks can be left and larger prey items can be consumed.
- The setting of two dB levels (55 & 60) over the breeding season is also questioned. What appears to be the most pertinent driver within the noise protocol is that “*any further constraints in blast size is likely to prevent any meaningful work on the site*” (sHRA 1.1.36). It is also speculated that Horizon have tried to obviate the restrictions already proposed by an increase in the number of blasting opportunities in a day.
- The effectiveness of monitoring is also in question.

In relation to marine mammals there is a similar matter in relation to periodicity of blasting activity. However, more importantly NWWT question the effectiveness of the proposed noise safeguards (MMO & PAM) in the CoCPs when blasting operations and the necessary observation period for marine mammals could now clearly conflict with periods of dusk/dawn and more often with bad light associated with bad weather in conjunction with sunrise/sunset.

Whilst a review of the mitigation/control measures does not appear to have been warranted by Horizon, it is clear that the alteration to the blasting and resulting acoustic landscape needs careful consideration against the proposed controls in order to ensure that they are still fit for purpose. If as suggested above, changes are necessary to the

proposed mitigation such as that provided in the SHRA in relation to terns and/or in CoCPs then this would need to be considered as a material matter and appropriate amendments to the DCO proposed.

I look forward to receiving Horizon's amended approach to these matters, in particular, a more significant review of the mitigation and control measures which can be achieved to reduce the impacts of these changes. NWWT reserve the right to draw the ExA to our opinions in relation to these matters where they overlap with evidence that will be presented to the DCO Examination.

Regards

Footnote <sup>1</sup> [RD17] HNGE. 2016. *Transport and Logistics Study*. Document ID: A63-1505-0001-00001. Document No. CPJ-UW-A408 revision 1 and

[D18] Horizon. 2016. *HGNE Transport and Logistics Study 2016 report caveats*. DCRM Ref Number: HNP-S9-SDT-REP-00093 revision 0.1.)

**Biodiversity Planning  
On behalf of North Wales Wildlife Trust**

Address: 26 Lower Lane, Chinley, High Peak, SK23 6BD

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Ynys Môn • Isle of Anglesey  
LL77 7XA**

Dyddiad / Date: 28<sup>th</sup> September 2018

**Sent by email**  
IACC - 28-09-2018

Dear Sir/Madam,

### **Wylfa Newydd – Proposed changes to timings for blasting on site**

With reference to Horizon Nuclear Power's (Horizon) consultation regarding the proposed changes to timings for blasting on site, the Isle of Anglesey County Council (IACC) has now had the opportunity to review the consultation documentation, which includes a technical document (*Request for Non-Material change no.1 – Blasting Strategy. Revision 1.0 August 2018*).

In summary, the IACC accepts the use of BS6472-2:2008 'Guide to evaluation of human exposure to vibration in buildings' subject to adequate provision being included in the Wylfa Newydd Code of Construction Practice (CoCPs) and sub CoCPs to secure the use of best practice measures to control the effects of blasting. The IACC however objects to the proposal for blasting between 1800 and 1900 hours, and for blasting within this period not to be treated as "other times" within the meaning of BS6472-2.

Please note that our comments are without prejudice to any comments we may wish to make at a later date. At that time there may be new or additional information available which we will need to take into account in making a formal response to any Town and Country Planning Application (TCPA) or Development Consent Order (DCO) application.

It is noted that Horizon proposes changes to the timing blasting to that detailed as part of the Development Consent Order (DCO) application which includes changing the timing as follows;

<b>Proposed DCO Blasting Timing</b>	<b>Proposed Change</b>
<i>Monday to Friday between 10:00 and 16:00</i>	<i>Monday to Friday between 09:00 and 19:00</i>
<i>Saturday between 10:00 and 13:00</i>	<i>Saturday between 08:00 and 13:00 (with no blasting after dusk between March and September)</i>
<i>No blasting on Sundays and Bank Holidays.</i>	<i>No blasting on Sundays and Bank Holidays.</i>

The confirmation that there will only be three occurrences of vibrations per day is noted.

Horizon confirms that the changes to the timing schedule as outlined in the DCO application will align blasting times more closely to those stipulated in BS6472-2 but with start and end times amended to accommodate worker shift patterns, which are designed to minimise traffic congestion.

It is noted that Horizon predicts that there will be no new environmental effects from this proposed change.

While the IACC is satisfied that the proposed change is non-material in context, we do have some comments in terms of changes to impacts.

1. While BS6472-2 includes advice for blasting in civil engineering works, the Council considers that BS5228 '*Construction Noise and Vibration*' is more specific for construction and open sites, and therefore considered more relevant for the Wylfa Newydd Project (although it is noted that the standard is primarily concerned with vibration caused by machinery and piling). The IACC therefore recommends that the Wylfa Newydd CoCP and relevant sub CoCPs confirms that the project will implement and adhere to the good practice advice contained in BS5228 so far as it is relevant to the project. This will ensure in practice that the working methods are employing a reasonable equivalent of best practice across types of noises and vibration management, particularly from the surface mineral extraction by blasting sections. Of particular relevance is section 8.6.9 of BS5228 *Practical measures to reduce vibration and air overpressure from blasting* and Section 9.1 which refers to *Monitoring*.

Also considered of relevance are the following sections of BS5228;

- 8.6.3 *location of site elements*
- 8.6.4 *working methods*
- 8.6.5 *selection of plants*
- 8.6.6 *deployment of plant*
- 8.6.8 *site management*

The IACC requests that the DCO includes provisions to allow the final versions of the Wylfa Newydd CoCP and sub CoCPs to be approved by the LPA, in consultation with NRW.

2. Horizon confirms that the proposed change will ensure that blasting timings are more closely aligned with the relevant British Standard BS 6472-2 on human exposure to vibration.

The British Standard provides specific guidance upon the recommended times within which blasting should occur and confirms satisfactory vibration magnitudes (peak particle velocity), defining blasting during the day, night and other times. The standard confirms that normal 'daytime' hours for blasting for surface mineral extraction purposes is 08:00 to 18:00 Monday to Friday and 08:00 to 13:00 on a Saturday, with no blasting on Sundays or Bank Holidays.

Horizon's proposed blasting timings are non-compliant with the Standard as blasting between the hours of 18:00 and 19:00 hours Monday to Friday falls into the 'other times' of blasting as defined by the standard. The standard confirms that 'other times' extends to the hours outside of the working day but exclude night time which is defined as 23:00 to 07:00.

Horizon notes that the timings have been amended to accommodate shift worker patterns. However as confirmed in paragraph 2.7.18 of the technical document that forms part of the consultation, the hours of 18:00 and 19:00 hours are the hours when people arrive home from work and expect to be able to relax, and will therefore be more sensitive to disturbance. The high sensitivity increases the magnitude of effects and should therefore be mitigated for by confining such events to recommended hours and standard practices.

The British Standard also confirms that blasting outside the recommended hours should only be in exceptional circumstances. Horizon are requesting blasting outside the recommended hours as part of its routine blasting timing schedule.

The IACC therefore, for these reasons, objects to the proposed change to the blasting timings.

The consultation document does not confirm any satisfactory vibration magnitude.

The IACC requests that should Horizon confirm that exceptional blasting is required between the hours of 18:00 and 19:00, this should fall into the 'other times' of blasting as defined in BS 6472-2 in order to acknowledge that people would be more sensitive to blasting during these hours. To comply with BS 6472-2, the vibration levels during the 'other times' should therefore be held at the lower level of satisfactory magnitude ( $4.5 \text{ ppv mms}^{-1}$ ) in order to mitigate impacts, including mitigating for potential disturbance effects and distress to residents. This should be confirmed in the noise and vibration management strategy included in the Main Power Station Site sub CoCP.

3. The IACC is unclear as to the rationale for confirming that blasting will not take place after dusk between the months of March and September, as dusk falls later through the summer months. Clarification is required as to whether restricting blasting after dusk is required for the winter months and not the summer months.
4. The IACC has confirmed in our response to Horizon dated 27<sup>th</sup> September 2018 <sup>1</sup> that further assessment is required in the DCO application to the potential effect of vibration on historic assets which includes the following:
  - During construction, the DCO submission identifies the potential for vibration to cause structural damage to the Corn Mill, but notes that safe working practices would be implemented to avoid any lasting damage.
  - Although mitigation against physical damage arising from vibration is presented in principle, further detail of this mitigation proposal is required before it can be considered robustly by the IACC (including detail of how the mitigation is to be secured). It is noted that safe working practices would be

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<sup>1</sup> Review of Horizon's DCO submission (Wylfa Newydd Development Area

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identified to avoid any lasting damage but no detail is provided to allow an assessment of the likely effectiveness of any mitigation proposals and for the degree of damage to this heritage asset, which is of 'the highest significance' in NPS terms, to be ascertained

- The DCO submission does not offer a statement as to whether these effects would constitute harm in policy terms, and no judgement is offered as to whether harm would be of substantial magnitude. The magnitude of change to setting during construction through visible and audible change to setting combined with light pollution and change to air quality could also approach or even amount to substantial harm, even where material damage through vibration could be avoided.
- The IACC has also identified in the same response (dated 27<sup>th</sup> September 2018) that further assessment is required of the combined effects (noise, dust, vibration, lighting, visual impact) on the historic environment, including potential impacts on Cestyll Garden and its associated Grade II\* Building (Corn Mill).
- Measures to safeguard (from physical damage and the effects of dust, vibration, changes to water quality, light pollution, etc.) and to enhance the essential elements of the Dame Sylvia Crowe Landscape during the construction phase, to be incorporated into, for example, the CEMP and any construction phase landscape schemes.

5. The IACC has also advised in our letter dated 19<sup>th</sup> September 2018<sup>2</sup> of the reputational risk if the impacts of construction lead to a negative perception which will adversely affect Anglesey's reputation as a leading nature-based tourism destination. This includes impacts on the AONB, Coastal path and Public Rights of Way. Mitigation is required in the form of capital fund to improve existing provision and to support marketing and promotion of the visitor experience, AONB and Coastal Path to address negative impacts on the tourism sector.

6. One direct method of controlling noise and vibration will be the need for Horizon to submit an application to the IACC for Prior Consents under Section 61 of the Control of Pollution Act 1974 for all construction work. Each application will need to contain particulars of the works to be undertaken, the working methods and the details of the plant to be used to undertake the work. Details will also need to be submitted of the proposed noise and vibration control measures. Such applications will also need to be supported by vibration risk assessments which would confirm that safe working distances, or alternatives compaction techniques, can be deployed. It is noted that the addition of this mitigation has had the effect of reducing the significance of vibration effects to moderate adverse at the WNDA.

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<sup>2</sup> Review of Horizon's DCO Application (Tourism)

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We trust that these comments will be of assistance to you and will be taken into consideration in refining your proposals in order to ensure that they cause minimal disturbance and distress to nearby residents. If you have any queries please do not hesitate to contact us.

**Yours Sincerely**

Croeso i chi ddelio gyda'r Cyngor yn Gymraeg neu'n Saesneg. Cewch yr un safon o wasanaeth yn y ddwy iaith.  
You are welcome to deal with the Council in Welsh or English. You will receive the same standard of service in both languages.

Hi

It is with great concern ,that today we have received a copy of Neighbour News and we note it is issue 08 and this is the first copy we have ever received. It has highlighted Blasting times, also ongoing crushing which we had no prior knowledge of. Our main concern is as previously stated noise, light & pollution mitigation. This is not only as residents but as Tourism/accommodation suppliers.

Kind regards

--

Coed Cottages

NRW - 28-09-2018

Horizon Nuclear Power Ltd  
Sunrise House  
1420 Charlton Court  
Gloucester Business Park  
Gloucester  
GL3 4AE

28 September 2018

Dear Sir/Madam,

**PLANNING INSPECTORATE REFERENCE: EN10007**

**RE: WYLFA NEWYDD PROJECT – REQUEST FOR NON-MATERIAL CHANGE**

**1. INTRODUCTION**

- 1.1. Thank you for your letter dated 14 August 2018 inviting Natural Resources Wales (NRW) to provide representations on Horizon Nuclear Power's (HNP) request for non-material change to the Development Consent Order (DCO) application.
- 1.2. We note that the consultation comprises the following documents:
  - Info Sheet: Proposed Changes to Blasting on Site (August 2018)
  - Technical Note: Request for Non-Material Change no.1 – Blasting Strategy (August 2018)
  - Info Sheet: Proposed changes to vessel movements (August 2018)
  - Technical Note: Request for Non-Material Change no.2 – Marine Vessel Movements (August 2018)
- 1.3. NRW provide the representations below with respect to the proposed request for non-material change in relation to blasting (comments 2.1 to 2.8) and marine vessel movements (comments 3.1 to 3.6). Planning Inspectorate's Advice Note 16 (*Advice Note Sixteen: How to request a change which may be material*, March 2018) states in paragraph 2.1 that whether a proposed change would be considered to be a material change “*is a question of planning judgment which may be based on criteria including, for example, whether the change would generate a new or different likely significant environmental effect(s)*”. This is ultimately a judgment for the Examining Authority however NRW provides the advice below in respect of the proposed amendments.

## 2. BLASTING STRATEGY

2.1. Paragraph 1.14 of the Blasting Strategy states that “*the non-material change proposed relates to the time frame within which blasting would be permitted to occur. Horizon is seeking to extend the weekday hours for blasting from between 10.00 and 16.00, to between 09.00 and 19.00, and Saturday blasting from between 10.00 and 13.00, to between 09.00 and 13.00*”. We also note paragraph 2.7.3 which states that “*there is no increase in the number of blasts which would be required, and the blasting vibration limits remain unaltered*”.

2.2. NRW have the following comments to make on the Topic Assessments in section 2.7 of the Blasting Strategy.

- *Terrestrial and Freshwater Ecology*

2.3. NRW note that European and nationally protected species (including bats and otters) are present within the Wylfa Newydd Development Area and could potentially be affected by noise and visual disturbance as a result of the construction works. The Environmental Statement (ES) and supporting appendices submitted as part of the DCO proposes mitigation measures to avoid and reduce impacts on protected species.

2.4. NRW agrees that the proposed change is not likely to result in new or different likely significant environmental effects on European and/or Nationally Protected Species.

- *Landscape and Visual*

2.5. Paragraph 2.7.8 states that the change to allow extended blasting hours “*remains within the wider Main Construction working hours outlined in the Main Site Power Station Sub Code of Construction Practice*”. Paragraph 2.7.8 also states that no additional lighting will therefore be required.

2.6. The Wylfa Newydd Project is located partly within the Ynys Môn / Anglesey Area of Outstanding Natural Beauty. NRW advises that the proposed change is not likely to result in new or different likely significant environmental effects on the Ynys Môn / Anglesey Area of Outstanding Natural Beauty.

- *Morwenoliaid Ynys Môn / Anglesey Terns Special Protection Area (SPA)*

2.7. Paragraph 2.7.15 of the Blasting Strategy states the proposed change does not affect the assessments undertaken in D13 of the ES and the Shadow Habitats Regulations Assessment (HRA). It is also stated that no new or different likely significant environmental effects are generated as a result of the change. NRW agree that no new or different likely significant environmental effects are generated by the proposed change.

2.8. Please note however, that NRW does not agree with the conclusions of the assessments in D13 and the Shadow HRA with respect to the Anglesey Terns SPA. As detailed in NRW's Relevant Representations, we do not consider that the evidence and mitigation presented in the Shadow HRA demonstrates that noise and vibration (including partly as a result of blasting) associated with the construction phase will not have adverse effects on the sandwich, arctic and common tern populations at the Cemlyn colony. NRW considers that adverse effects on the SPA (relating to sensitivity of sandwich, arctic and common terns to construction noise) cannot be ruled out. The proposed change has the potential to increase the risk of disturbance to the tern colony. As detailed above, and for the purpose of this consultation specifically, NRW agree that no new or different likely significant environmental effects are generated by the proposed change, however NRW does not agree with the conclusions of the assessment with respect to the impacts on the Anglesey Terns SPA and this should be addressed.

### **3. MARINE VESSEL MOVEMENTS**

3.1. Paragraph 1.1.4 of the Marine Vessel Movements document states that "*the non-material change proposed relates to the upper daily limit of vessel movements to and from the Marine Off-Loading Facility (MOLF). Horizon is seeking to increase the upper daily limit from four movements per day (two vessels) to 16 movements per day (eight vessels) within the total vessel movements described and assessed in the Wylfa Newydd DCO application*".

3.2. NRW have the following comments to make on the Topic Assessments in section 2.4.

- *Air Quality*

3.3. Paragraphs 2.4.14 – 2.4.24 and Table 2-4 describe the possible effects of increased emissions of the peak marine vessel movements on Tre'r Gôf and Cae Gwyn Sites of Special Scientific Interests (SSSI) and Bae Cemlyn / Cemlyn Bay Special Area of Conservation / SSSI. NRW agree that the proposed change would not result in new or different likely significant environmental effects.

- *Marine mammals*

3.4. Paragraphs 2.4.30 – 2.4.36 and Table 2-4 considers potential impacts of the proposed change on marine mammals and states that the proposed change does not affect the assessments undertaken in D13 of the ES and the Shadow HRA. NRW agrees that the proposed change would not result in new or different likely significant environmental effect on marine mammals (as European Protected Species and/or designated features of Welsh Special Areas of Conservation).

- *Seabirds*

3.5. Paragraph 2.4.37 of the Marine Vessel Movements document states that “*the proposed change would not alter the magnitude of visual disturbance effects to seabirds, remaining as reported in chapter 13 of the Environmental Statement... and the Shadow Habitats Regulation Assessment Report*”. It is also stated that no new or different likely significant environmental effects are generated as a result of the change. NRW agree that no new or different likely significant environmental effects are generated by the proposed change.

3.6. Please note however, that NRW does not agree with the conclusions of the assessments in D13 and the Shadow HRA with respect to the Anglesey Terns SPA. We do not consider that the evidence and mitigation presented in the Shadow HRA demonstrates that noise and vibration cumulatively with the visual effects (including partly as a result of marine vessel movements) associated with the construction phase will not have adverse effects on the sandwich, arctic and common tern populations at the Cemlyn colony. NRW considers that adverse effects on the SPA (relating to sensitivity of sandwich, arctic and common terns to construction disturbance) cannot be ruled out. The proposed change has the potential to increase the risk of disturbance to the tern colony. As detailed above at paragraph 2.8, and for the purpose of this consultation specifically, NRW agrees that no new or different likely significant environmental effects are generated by the proposed change, however NRW does not agree with the conclusions of the assessment with respect to the impacts on the Anglesey Terns SPA and this should be addressed.

Please do not hesitate to contact us should you require further advice.



NWP - 28-09-2018

Rheolwr Rhaglen / Programme Manager  
Swyddfa Rheolaeth Portffolio / Portfolio Management  
Office Heddlu Gogledd Cymru / North Wales Police  
Pencadlys Yr Heddlu / Police Headquarters  
Bae Colwyn / Colwyn Bay  
Conwy  
LL29 8AW

Horizon Nuclear Power Wylfa Limited  
Wylfa Newydd Site Office  
Cemaes Bay  
Anglesey  
LL67 0AA

28<sup>th</sup> September 2018

**Re: DCRM Ref. No: HNP-HZDCO-PAC-LET-00001**

**Wylfa Newydd Development Consent Order application update – your views are welcome**

I write to formally submit the views of North Wales Police (NWP) in relation to the proposed changes to vessel movements and proposed changes to timings for blasting on site.

I note the information in the documentation, at this point I have no further comments to make.

Regards

Request for Non-Material Change No.1 – Blasting Strategy

Technical Report: WN0902-JAC-PAC-REP-00080

North Wales Fire and Rescue Service note the content of the Notice to Consultees and the Technical Document (viewed on line) and have no adverse comments regarding the proposal.

It is noted that there are a number of inconsistencies in the documents, which are identified below, and which should be clarified prior to being formally submitted to the Planning Inspectorate (PIN's).

Page	Paragraph	Inconsistency
1	1.1.4	Proposed time for Saturday stated in notice is different to that stated in the Technical Document: Notice: Sat 0800 – 1300 Tech Doc: Sat 0900 – 1300
7	2.4.5	Last line ... and 0800 to 1300 (4hrs) on a Saturday. Should this be 5 hrs? See Pg 6 Para 2.3.4
8	2.5.1	Contradicts Para 1.1.4 on Pg 1 however is in line with the Notice issued.
8	2.5.3	Proposed change aligns closely to BS6472-2 with start and end times 1 hour further forward to accommodate worker shift patterns - see section 4.3 Main Power Station Site sub-CoCP Application Reference 8.7  Doc 8.7 Section 4.3 Pg 9 Para 4.3.2 'drilling and packing for blasting 0700 – 1900 (moving/repositioning rock in excavation 0700 – 1900)  Blasting 0800 – 1800 Monday – Friday would better align to shift time and be less likely to disturb neighbours. This would also be consistent with proposed change to starting blasting at 0800hrs on Saturdays. (see Pg6 Para 2.3.4)
12	2.7.18	Indicates that blasting will commence at 0900 on Saturdays - there is no consistency in the document / Notice. Is Saturday 0800 or 0900 start?

Request for Non-material Change No.2 – Marine Vessel Movements.

Technical Report: WN0902-JAC-PAC-REP-00081

North Wales Fire and Rescue Service note the content of the document and while supportive in principle, that the aim is to ensure that 60-80% of construction materials are delivered by sea and to allow for recovery of programme delays due to such factors as inclement weather, tides etc., the FRS wish to understand what the contingency arrangements are should there be a delay in the development of the MOLF or if it should be unavailable for an extended period.

It is noted that due to the potential increase in the number of vessel movements that the Navigational Risk Assessment (Doc D15-1, 6.4.99) will be updated to reflect this.

**From:** LR - 27-09-2018

**Received:** 2018-09-27T08:46:20Z

**To:** WylfaEnquiries@Horizonnuclearpower.com; wylfaenquiries@horizonnuclearpower.com;

**Subject:** Consultation DCRM Ref. No: HNP-HZDCO-PAC-LET-00002/1254

To [REDACTED]

My views on your proposals contained in your letter of 13th August 2018.

- 1) It is clear from the date of this letter-the last day for input into your Planning Application ENO10007- that these intentions to change proposals were already in train before the closing date for input to the application. As such they invalidate both that planning application and this 'consultation'. The Information supplied by you, upon which objections to the the Planning Application are based, are clearly not to be trusted as an indication of your intentions. You clearly intend to adjust any commitment given to suit yourselves at any time you choose and inconvenience the people of Anglesey in any way you choose.
- 2) Your contempt for the people affected by your proposals is clearly demonstrated by the time and place where people affected can make their views known; three hours in a bus in a car park on Tuesday 4th September - the day many children will be going back to School after the Summer Holidays!
- 3) Your proposals will affect the health and well-being of local people. The increased blasting and disruption caused by more vessel movements will also disrupt the Tourist Industry on which many people depend. Tourism also makes other businesses viable by the increase of all activities. Locals and visitors alike do not want their rest and activities disturbed by 'blasting' and 'vessel movements' to suit your Company's Financial objectives.

I shall be writing to the Planning Inspectorate regarding my concerns expressed in 1) above.

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**From:** Trinity House - TH - 25-09-2018

**Received:** 2018-09-25T09:41:42Z

**To:** WylfaEnquiries@Horizonnuclearpower.com; wylfaenquiries@horizonnuclearpower.com;

**Cc:**

**Subject:** Wylfa Newydd Nuclear Power Station DCO Update

Good morning [REDACTED]

Thank you for your letter attached.

I can confirm that Trinity House has no objections or comments to make concerning these two proposed amendments. However, I would like to draw your attention to the correct contact details that should be used for Trinity House below.

Kind regards,

Navigation Directorate  
Trinity House  
Trinity Square  
Tower Hill  
London  
EC3N 4DH

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**RESPONSE BY LLANBADRIG AND MECHELL COMMUNITY COUNCILS TO HORIZON CONSULTATION  
ON INCREASING VESSEL MOVEMENTS TO AND FROM THE MARINE OFFLOADING FACILITY AND  
EXTENDING HOURS FOR BLASTING - 1 OCTOBER 2018.**

**MOLF increased movements**

We understand that Horizon wishes to import 60 – 80% of materials by sea. We welcome this strategy because it will reduce road congestion and is less damaging to the environment. To achieve this target Horizon now wishes to increase vessel movements from four movements (two vessels) per day to sixteen movements (eight vessels) per day.

We are persuaded by the supporting technical report which concludes that the additional environmental impact would be very small. Risk assessment also concludes that there is minor additional risk.

The North coast of Anglesey is a hazardous environment for shipping. Cemlyn Bay has the notorious Harry Furlong reef and Skerries close by. Over the winter poor or extreme weather is an additional hazard. The sea bed off our coast is littered with wrecks of ships that in earlier times were unable to cope with these conditions.

With modern navigation technology and competent harbour management the change envisaged should not cause concern. Therefore, we support this change. We would appreciate being advised about what regime of Harbour management is proposed and what enforcement powers may be acquired.

**Blasting**

Horizon argues that its blasting requirements are complex and different from conventional quarrying. For safety reasons there will be times when it will be necessary to evacuate large numbers of workers with consequential disruption to construction activities. As we understand the proposal it is not intended to increase the number of blast actions (three per day) but to extend the period in a day. We note that the proposed change extends the blasting period during the week by 3 hours per day and by two hours on Saturday. We accept that the reasoning for this is sound and that the benefit will be to deliver construction on time. The shorter the total period devoted to blasting the better. Therefore, we support this change on the basis that during the week blasting will not occur after 19.00 irrespective of the timing of dusk. We would oppose any attempt to carry out blasting later than 7 p.m. because of the potential effect upon the bedtime of children.

We believe that the proposed change reinforces the urgency for Horizon to explain and implement mitigation measures for people and properties that will be adversely affected.

## 6 Appendix 3: Horizon's responses to consultation responses received

Consultee	Ref	Response	Horizon's Response
NWWT	NWWT-28-09-2018	<p>I am writing via this email to register North Wales Wildlife Trust's concern and lack of agreement to the proposition that these changes are non-material and do not alter the nature and conclusions of the Environmental Statement and the shadow Habitats Regulations Assessment. NWWT recently submitted our detailed comments to NRW on the Permits and Marine Licences and so have scrutinised both the ES, the project activities and the shadow HRA along with the relevant Codes of Construction/Operation Practice and have found many areas which cause concern. Those concerns have particular relevance to the topics under consideration in this consultation.</p>	<p>The response from NWWT seems to be primarily addressing the issues in the DCO application in respect of the impact of noise on the Anglesey tern SPA and not directly relevant to the proposed change. This RfNMC only seeks to change the window within which blasting can occur; the 10 hour window for blasting recommended in BS6472-2 remains the same but moved on by one hour. This RfNMC has regard to the issue surrounding marine ecology and particularly the SPA (see section 2.7).</p> <p>Horizon has assessed this RfNMC against the Environmental Statement and has concluded there will be no new or significantly different environmental effects as a result of the RfNMC than those assessed in the Environmental Statement.</p>
NWWT	NWWT-28-09-2018	<p>NWWT have consistently disagreed with the assessment of noise impacts and tern behavioural responses as presented by Horizon in the ES and the sHRA. It is our view that conclusions cannot be drawn 'beyond reasonable scientific' regarding this either as an isolated disturbance factor, or as a cumulative factor in</p>	<p>As noted above, this response seems to be addressing the issues in the DCO application which are not the subject of this RfNMC. The adequacy of the Environmental Impact Assessment and sHRA will be considered as part of the examination of the DCO application. As part of this process, the RfNMC had regard to this in that Horizon is not considering blasting after dusk during the tern breeding season.</p>

Consultee	Ref	Response	Horizon's Response
		conjunction with other impacts. These concerns are shared by NRW.	
NWWT	NWWT-28-09-2018	<p>The proposed changes to the blasting operations increases the frequency/periodicity of the blasting in any given day and so this along with the changes to vessel movements is highly likely to result in a synergistic effect in-combination. For example, there could feasibly be blasting for the majority of the tern's daylight foraging time - a 66% increase in week day times when blasting can occur. This is could occur and be combined with the maximum of 16 vessel movements – a four-fold increase over the initial assessed levels of disturbances. This is not an inconsiderable alteration to the level of disturbance the breeding population will be subject to.</p> <p>In relation to marine mammals there is a similar matter in relation to periodicity of blasting activity. However, more importantly NWWT question the effectiveness of the proposed noise safeguards (MMO &amp; PAM) in the CoCPs when blasting operations and the</p>	The RfNMC does not alter the 'frequency/periodicity' of blasting but merely the time window in which blasting can occur.

Consultee	Ref	Response	Horizon's Response
		necessary observation period for marine mammals could now clearly conflict with periods of dusk/dawn and more often with bad light associated with bad weather in conjunction with sunrise/sunset.	
NWWT	NWWT-28-09-2018	<p>Therefore, in this consultation response NWWT has also considered the adequacy of how Horizon proposes to control activities to manage &amp; reduce impacts at the Anglesey Tern SPA.</p> <ul style="list-style-type: none"> <li>• The main features of the noise mitigation for terns is laid out in the sHRA and is summarised in the Executive Summary (1.1.27 – 1.1.38). In this document blasting constraints are proposed during the ‘establishment period’ (55dBLAFmax – para 1.1.35), taken to be 15th April for 4 weeks 13th May, and at a higher level (60dBLAFmax – para 1.1.30) for the remainder of the breeding season, until 15th August.</li> <li>• During the TCPA negotiations and the recently granted Site Preparation and Clearance proposals the breeding season for the tern colony in its entirety -</li> </ul>	As noted above, this response seems to be addressing the issues in the DCO application which are not the subject of this RfNMC. The change request relates only to the time window in which blasting can occur.

Consultee	Ref	Response	Horizon's Response
		<p>including black-headed gull breeding - has been conditioned as 7th March to 15th August. This inconsistency needs to be addressed and it is suggested that Horizon undertake a clear review of the sHRA protocol as there are some major changes that may be required to the proposed approach in order to make it satisfactory.</p> <p>Whilst a review of the mitigation/control measures does not appear to have been warranted by Horizon, it is clear that the alteration to the blasting and resulting acoustic landscape needs careful consideration against the proposed controls in order to ensure that they are still fit for purpose. If as suggested above, changes are necessary to the proposed mitigation such as that provided in the SHRA in relation to terns and/or in CoCPs then this would need to be considered as a material matter and appropriate amendments to the DCO proposed.</p> <p>I look forward to receiving Horizon's amended approach to these matters, in particular, a more significant review of the mitigation and control measures which</p>	

Consultee	Ref	Response	Horizon's Response
		can be achieved to reduce the impacts of these changes.	
IACC	IACC-28-09-2018	<p>IACC accepts the use of BS6472-2:2008 'Guide to evaluation of human exposure to vibration in buildings' subject to adequate provision being included in the Wylfa Newydd Code of Construction Practice (CoCPs) and sub CoCPs to secure the use of best practice measures to control the effects of blasting.</p> <p>The IACC requests that the DCO includes provisions to allow the final versions of the Wylfa Newydd CoCP and sub CoCPs to be approved by the LPA, in consultation with NRW.</p>	Noted. Security of mitigation within the CoCP (and its approval) will be considered as part of the DCO Application examination process, rather than through this change request.
IACC	IACC-28-09-2018	<p>While BS6472-2 includes advice for blasting in civil engineering works, the Council considers that BS5228 'Construction Noise and Vibration' is more specific for construction and open sites, and therefore considered more relevant for the Wylfa Newydd Project (although it is noted that the standard is primarily concerned with vibration caused by machinery and piling). The IACC therefore recommends that the Wylfa Newydd CoCP and relevant sub CoCPs confirms that the project will implement</p>	<p>In respect of the relevant standard that should apply, Horizon's view is that both BS5228-2 and BS6472-2 are relevant to the proposed blasting activities. Whilst these standards are complimentary, their focus is different:</p> <ul style="list-style-type: none"> <li>• BS5228-2 recommends procedures for noise and vibration control at the source in respect of construction operations (not solely from blasting); and,</li> <li>• BS6472-2 provides guidance on human exposure to blast-induced vibration in buildings (i.e. at the receptor).</li> </ul>

Consultee	Ref	Response	Horizon's Response
		<p>and adhere to the good practice advice contained in BS5228 so far as it is relevant to the project. This will ensure in practice that the working methods are employing a reasonable equivalent of best practice across types of noises and vibration management, particularly from the surface mineral extraction by blasting sections.</p>	<p>As acknowledged in BS5228-2<sup>2</sup>, the standards are interlinked and should not be considered in isolation. While BS5228-2 notes that there will be situations where limitations on emissions of vibration from sites should be set (both in terms of specific vibration limits and in terms of working hours); it does not provide any further guidance on this point, other than broad advice that a statistical limit should be chosen within a range of values. In particular, BS5228-2 does not make any specific recommendations on the hours of the day during which blasting should be undertaken (whereas BS6472-2 does).</p> <p>For this reason, in the Wylfa Newydd CoCP [APP-414] and Main Power Station Site sub-CoCP [APP-415], Horizon has considered the guidance in both BS5228-2 [RD3] (in respect of the Main Construction activities) and BS6472-2 [RD2] (in respect of hours of blasting activities).</p> <p>Additionally BS5228-1 E.5 – Construction works involving long-term substantial earth moving that projects with long term earthworks are more akin the mineral abstraction than conventional construction and hence the guidance in MPS 2 (16) (mineral policy statement) is taken onto consideration when setting assessment criteria for construction noise.</p> <p>The proposed change affects only the time period of the day when blasts may be undertaken, and does not alter the management or mitigation measures which will be implemented to control blast vibration and air overpressure; nonetheless Horizon welcomes IACC's feedback on this issue. It is noted that through the s.61 application for prior consent process IACC will be given foresight of all blast vibration and air overpressure control measures.</p>

<sup>2</sup> The foreword of BS5228 recognises the interrelationship with BS6472, and Annex F of BS5228 directs the reader to BS6472 in respect of human response to vibration.

Consultee	Ref	Response	Horizon's Response
IACC	IACC-28-09-2018	<p>While the IACC is satisfied that the proposed change is non-material in context, we do have some comments in terms of changes to impacts.</p> <p>Horizon notes that the timings have been amended to accommodate shift worker patterns. However as confirmed in paragraph 2.7.18 of the technical document that forms part of the consultation, the hours of 18:00 and 19:00 hours are the hours when people arrive home from work and expect to be able to relax, and will therefore be more sensitive to disturbance. The high sensitivity increases the magnitude of effects and should therefore be mitigated for by confining such events to recommended hours and standard practices.</p> <p>[...]</p> <p>Horizon's proposed blasting timings are non-compliant with the Standard as blasting between the hours of 18:00 and 19:00 hours Monday to Friday falls into the 'other times' of blasting as defined by the standard. The standard confirms that 'other times' extends to the hours outside</p>	<p>It is noted that IACC agreed with the assessment of this change as non-material.</p> <p>Although Horizon accepts that the final hour of blasting proposed for weekdays (18:00 and 19:00) occurs later than recommended by BS6472, it considers that this deviation is offset by commencing the blasting an hour later than BS6472 recommends (Horizon proposes to start at 09:00 on weekdays rather than 08:00 as per BS6472). In preparing this proposed change, Horizon has assessed the potential health impacts of blasting between 18:00 and 19:00 and has concluded that there are no new or different likely significant effects from those assessed in the Environmental Statement (Refer to section 2 of this document for further details). For this reason, Horizon does not consider that a lower level of satisfactory magnitude (4.5 ppv mms-1) should apply to blasting between 18:00 to 19:00.</p>

Consultee	Ref	Response	Horizon's Response
		<p>of the working day but exclude night time which is defined as 23:00 to 07:00.</p> <p>The British Standard also confirms that blasting outside the recommended hours should only be in exceptional circumstances. Horizon are requesting blasting outside the recommended hours as part of its routine blasting timing schedule.</p> <p>The IACC however objects to the proposal for blasting between 1800 and 1900 hours, and for blasting within this period not to be treated as "other times" within the meaning of BS6472-2.</p>	
IACC	IACC-28-09-2018	The consultation document does not confirm any satisfactory vibration magnitude.	Satisfactory vibration magnitudes for various levels of blasting are set out in The Power Station Main Site sub-CoCP [APP-415]. It is not intended to alter these as a result of the proposed change.
IACC	IACC-28-09-2018	The IACC requests that should Horizon confirm that exceptional blasting is required between the hours of 18:00 and 19:00, this should fall into the 'other times' of blasting as defined in BS6472-2 in order to acknowledge that people would be more sensitive to blasting during these hours. To comply with BS6472-2, the vibration levels during the 'other times'	Although Horizon accepts that the final hour of blasting proposed for weekdays (18:00 and 19:00) occurs later than recommended by BS6472-2, it considers that this deviation is offset by commencing the blasting an hour later than BS6472-2 recommends (Horizon proposes to start at 09:00 on weekdays rather than 08:00 as per BS6472-2). In preparing this proposed change, Horizon has assessed the potential health impacts of blasting between 18:00 and 19:00 and has concluded that there are no new or different likely significant effects from those assessed in the Environmental

Consultee	Ref	Response	Horizon's Response
		should therefore be held at the lower level of satisfactory magnitude (4.5 ppv mms-1) in order to mitigate impacts, including mitigating for potential disturbance effects and distress to residents. This should be confirmed in the noise and vibration management strategy included in the Main Power Station Site sub CoCP.	Statement (Refer to section 2 of this document for further details). For this reason, Horizon does not consider that a lower level of satisfactory magnitude (4.5 ppv mms-1) should apply to blasting between 18:00 to 19:00.
IACC	IACC-28-09-2018	The IACC is unclear as to the rationale for confirming that blasting will not take place after dusk between the months of March and September, as dusk falls later through the summer months. Clarification is required as to whether restricting blasting after dusk is required for the winter months and not the summer months.	Using March 2020 as an example, the expected time of sunset varies from 17.50 on the 1 <sup>st</sup> to 18.35 on the 28 <sup>th</sup> (before the clocks go forward). Without this additional constraint, the proposed change could therefore result in blasting being conducted after dusk. The rationale for this therefore is to ensure that the tern colony is not disturbed during the breeding season.
IACC	IACC-28-09-2018	The IACC has confirmed in our response to Horizon dated 27th September 2018 1 that further assessment is required in the DCO application to the potential effect of vibration on historic assets which includes the following: <ul style="list-style-type: none"> <li>During construction, the DCO submission identifies the potential for vibration to cause structural damage to the Corn Mill, but notes that safe working practices would</li> </ul>	Horizon is developing a methodology for monitoring vibration at historic buildings as part of the Heritage SoCG in consultation with National Trust. Once agreed this will be shared with IACC for their comment. However, as with several other comments from IACC, this issue relates to the DCO application is not specific to the proposed change in blasting hours.  It should also be noted that construction is temporary and, by monitoring and preventing any vibration induced damage, there will be no permanent construction effects on heritage assets after construction is completed.

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		<p>be implemented to avoid any lasting damage.</p> <ul style="list-style-type: none"> <li>Although mitigation against physical damage arising from vibration is presented in principle, further detail of this mitigation proposal is required before it can be considered robustly by the IACC (including detail of how the mitigation is to be secured). It is noted that safe working practices would be identified to avoid any lasting damage but no detail is provided to allow an assessment of the likely effectiveness of any mitigation proposals and for the degree of damage to this heritage asset, which is of 'the highest significance' in NPS terms, to be ascertained.</li> <li>The DCO submission does not offer a statement as to whether these effects would constitute harm in policy terms, and no judgement is offered as to whether harm would be of substantial magnitude. The magnitude of change to setting during construction through visible and audible change to setting</li> </ul>	

Consultee	Ref	Response	Horizon's Response
		<p>combined with light pollution and change to air quality could also approach or even amount to substantial harm, even where material damage through vibration could be avoided. The IACC has also identified in the same response (dated 27th September 2018) that further assessment is required of the combined effects (noise, dust, vibration, lighting, visual impact) on the historic environment, including potential impacts on Cestyll Garden and its associated Grade II* Building (Corn Mill).</p> <ul style="list-style-type: none"> <li>• Measures to safeguard (from physical damage and the effects of dust, vibration, changes to water quality, light pollution, etc.) and to enhance the essential elements of the Dame Sylvia Crowe Landscape during the construction phase, to be incorporated into, for example, the CEMP and any construction phase landscape schemes.</li> </ul>	

Consultee	Ref	Response	Horizon's Response
IACC	IACC-28-09-2018	<p>The IACC has also advised in our letter dated 19th September 2018 of the reputational risk if the impacts of construction lead to a negative perception which will adversely affect Anglesey's reputation as a leading nature-based tourism destination. This includes impacts on the AONB, Coastal path and Public Rights of Way. Mitigation is required in the form of capital fund to improve existing provision and to support marketing and promotion of the visitor experience, AONB and Coastal Path to address negative impacts on the tourism sector.</p>	<p>While Horizon acknowledges these concerns, they relate to the examination of the DCO application itself and its assessments, rather than the assessment of the proposed change. For this reason, Horizon considers that these concerns will be considered as part of the examination process, rather than through this change request.</p> <p>Horizon has proposed a comprehensive approach to mitigation to address the impacts of the Wylfa Newydd Project on visitor experience, impacts on public rights of way, including the Wales Coastal Path and in relation to landscape and visual impacts. This includes inherent mitigation, through design of the project, including how the power station integrates into its surroundings, and through colour and design of the power station buildings and ancillary structures and the proposed mounding and landscaping strategy. Horizon has sought to locate specific elements of the power station and associated development to limit the impacts as far as possible. Horizon is also proposing planning obligations to seek to mitigate impacts which cannot be addressed through inherent project design, and this includes a Tourism Fund.</p> <p>Horizon recognises the importance of tourism to Anglesey and North Wales and therefore this fund would be available to mitigate the unforeseen effects on the tourism sector. It is envisaged that some of the Tourism Fund would be provided early to develop measures to show that Anglesey is "open for business" and the planning obligations delivered through the Site Preparation and Clearance application include some of this early funding which would be used tourism-related activities including "safeguarding and enhancing the image and perception of North Anglesey as a visitor destination". The draft planning obligations for the DCO also include funding which would be available for IACC to use to improve public rights of way</p>

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			<p>within the vicinity of the WNDA, or other sections of the WCP on Anglesey which could include interpretation and signage, maintenance or resurfacing as appropriate.</p> <p>It is not considered that the RfNMC in relation to blasting materially impacts on the overall approach to mitigation for the Wylfa Newydd Project described above.</p>
IACC	IACC-28-09-2018	<p>One direct method of controlling noise and vibration will be the need for Horizon to submit an application to the IACC for Prior Consents under Section 61 of the Control of Pollution Act 1974 for all construction work. Each application will need to contain particulars of the works to be undertaken, the working methods and the details of the plant to be used to undertake the work. Details will also need to be submitted of the proposed noise and vibration control measures. Such applications will also need to be supported by vibration risk assessments which would confirm that safe working distances, or alternatives compaction techniques, can be deployed. It is noted that the addition of this mitigation has had</p>	<p>Agreed. In the CoCP, Horizon has committed to submitting applications for prior consent under Section 61 of the Control of Pollution Act 1974, and these will include predictions of noise and vibration and the proposed steps to manage noise and vibration.</p>

Consultee	Ref	Response	Horizon's Response
		the effect of reducing the significance of vibration effects to moderate adverse at the WNDA.	
Coed Cottages	COED-15-08-2018	It is with great concern, that today we have received a copy of Neighbour News and we note it is issue 08 and this is the first copy we have ever received.	As the Wylfa Newydd Project has developed, we've always reviewed the way we communicate the work we're doing. The reason you're receiving this edition of the newsletter is because we've recently expanded the mailing zone for Neighbour News. In the past, we've written to households within a kilometre of the site boundary but believe it's important to make sure wider audiences are aware of the project as it progresses.
Coed Cottages	COED-15-08-2018	It has highlighted Blasting times, also ongoing crushing which we had no prior knowledge of. Our main concern is as previously stated noise, light & pollution mitigation. This is not only as residents but as Tourism/accommodation suppliers.	Our planned activities around blasting and rock crushing have always formed part of our proposals for the construction of the Project. This is, in part, to limit the amount of rock we need to transport to site from other locations to reduce our effects on traffic on the island. The assessment of the noise generated from construction activities can be found in chapter D6 of our Environmental Statement which forms part of our DCO application to the Planning Inspectorate. All work on site will be managed utilising the construction practices and mitigation measures described in the Wylfa Newydd Code of Construction Practice [APP-414] which was submitted as part of our DCO application which you can find here: <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010007/EN010007-001724-8.6%20Wylfa%20Newydd%20Code%20of%20Construction%20Practice%20%28Rev%201.0%29.pdf">https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010007/EN010007-001724-8.6%20Wylfa%20Newydd%20Code%20of%20Construction%20Practice%20%28Rev%201.0%29.pdf</a>
NRW	NRW-28-09-2018	<b>Terrestrial and Freshwater Ecology</b> NRW note that European and nationally protected species (including bats and	Noted that NRW agreed with the assessment of this change as non-material.

Consultee	Ref	Response	Horizon's Response
		<p>otters) are present within the Wylfa Newydd Development Area and could potentially be affected by noise and visual disturbance as a result of the construction works. The Environmental Statement (ES) and supporting appendices submitted as part of the DCO proposes mitigation measures to avoid and reduce impacts on protected species. NRW agrees that the proposed change is not likely to result in new or different likely significant environmental effects on European and/or Nationally Protected Species.</p> <p><b>Landscape and Visual</b></p> <p>Paragraph 2.7.8 states that the change to allow extended blasting hours “remains within the wider Main Construction working hours outlined in the Main Power Station Site Sub Code of Construction Practice”. Paragraph 2.7.8 also states that no additional lighting will therefore be required.</p> <p>The Wylfa Newydd Project is located partly within the Ynys Môn / Anglesey Area of Outstanding Natural Beauty. NRW advises that the proposed change is not likely to result in new or different likely significant environmental effects on</p>	

Consultee	Ref	Response	Horizon's Response
		<p>the Ynys Môn / Anglesey Area of Outstanding Natural Beauty.</p> <p><b>Anglesey Terns Special Protection Area (SPA)</b></p> <p>Paragraph 2.7.15 of the Blasting Strategy states the proposed change does not affect the assessments undertaken in D13 of the ES and the Shadow Habitats Regulations Assessment (HRA). It is also stated that no new or different likely significant environmental effects are generated as a result of the change. NRW agree that no new or different likely significant environmental effects are generated by the proposed change.</p>	
NRW	NRW-28-09-2018	<p>Please note however, that NRW does not agree with the conclusions of the assessments in D13 and the Shadow HRA with respect to the Anglesey Terns SPA. As detailed in NRW's Relevant Representations, we do not consider that the evidence and mitigation presented in the Shadow HRA demonstrates that noise and vibration (including partly as a result of blasting) associated with the construction phase will not have adverse effects on the sandwich, arctic and common tern populations at the Cemlyn colony. NRW considers that adverse</p>	<p>While Horizon acknowledges these concerns, they relate to the examination of the DCO application itself and its assessments, rather than the assessment of the proposed change. For this reason, Horizon considers that these concerns will be considered as part of the examination process, rather than through this change request. Horizon has, however, addressed the SPA and the marine environment as part of its assessment of the proposed change in section 2.7 of the RfNMC.</p>

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		<p>effects on the SPA (relating to sensitivity of sandwich, arctic and common terns to construction noise) cannot be ruled out. The proposed change has the potential to increase the risk of disturbance to the tern colony. As detailed above, and for the purpose of this consultation specifically, NRW agree that no new or different likely significant environmental effects are generated by the proposed change, however NRW does not agree with the conclusions of the assessment with respect to the impacts on the Anglesey Terns SPA and this should be addressed.</p>	
North Wales Police	NWP-28-09-2018	I note the information in the documentation, at this point I have no further comments to make.	Noted.
North Wales Fire and Rescue Service	NWFR-28-09-2018	North Wales Fire and Rescue Service note the content of the Notice to Consultees and the Technical Document (viewed on line) and have no adverse comments regarding the proposal. It is noted that there are a number of inconsistencies in the documents, which are identified below, and which should be clarified prior to being formally submitted to the Planning Inspectorate (PIN's).	Noted. Horizon has updated the RfNMC and Technical Document to ensure it is consistent.

Consultee	Ref	Response	Horizon's Response
North Wales Fire and Rescue Service	NWFR-28-09-2018	Pg 1, Para 1.1.4 - Proposed time for Saturday stated in notice is different to that stated in the Technical Document: Notice: Sat 08.00 – 13.00 Tech Doc: Sat 09.00 – 13.00	Typo in 1.1.4 - the technical document should read 08:00 - 13:00 as per Table 2-1 in the consultation document.
North Wales Fire and Rescue Service	NWFR-28-09-2018	Pg 7, Para 2.4.5 - Last line ... and 0800 to 1300 (4hrs) on a Saturday. Should this be 5 hrs? See Pg 6 Para 2.3.4	Typo 2.4.5 should read 'and 08.00 to 13.00 (5 hours)...'. This has been amended in the RfNMC.
North Wales Fire and Rescue Service	NWFR-28-09-2018	Pg 8, Para 2.5.1 - Contradicts Para 1.1.4 on Pg 1 however is in line with the Notice issued.	Para 2.5.1 is correct. 1.1.4 needs changing as above. This has been amended in the RfNMC.
North Wales Fire and Rescue Service	NWFR-28-09-2018	Pg 8, Para 2.5.3 - Proposed change aligns closely to BS6472-2 with start and end times 1 hour further forward to accommodate worker shift patterns - see section 4.3 Main Power Station Site sub-CoCP.  Doc 8.7 Section 4.3 Pg 9 Para 4.3.2 drilling and packing for blasting 07.00 – 19.00 (moving/repositioning rock in excavation 07.00 – 19.00).  Blasting 08.00 – 18.00 Monday – Friday	Noted.

Consultee	Ref	Response	Horizon's Response
		would better align to shift time and be less likely to disturb neighbours. This would also be consistent with proposed change to starting blasting at 0800hrs on Saturdays. (see Pg 6, Para 2.3.4)	
North Wales Fire and Rescue Service	NWFR-28-09-2018	Pg 12, Para 2.7.18 - Indicates that blasting will commence at 09.00 on Saturdays - there is no consistency in the document / Notice. Is Saturday 08.00 or 09.00 start?	Noted, as above.
Local Resident	LR-27-09-2018	<p>It is clear from the date of this letter-the last day for input into your Planning Application ENO10007- that these intentions to change proposals were already in train before the closing date for input to the application. As such they invalidate both that planning application and this 'consultation'. The Information supplied by you, upon which objections to the Planning Application are based, are clearly not to be trusted as an indication of your intentions. You clearly intend to adjust any commitment given to suit yourselves at any time you choose and inconvenience the people of Anglesey in any way you choose.</p>	<p>In respect of the timing of the proposed change, paragraphs 2.4.2 to 2.4.3 of the RfNMC outlines that the proposed change has arisen following selection of the project management contractor (and the arrangements of how the contractor will deliver the Wylfa Newydd DCO Project) and Horizon becoming aware, since the submission of the DCO application, of additional information regarding construction blasting requirements (compared to quarry blasting) and the interaction of blasting activities with other construction activities and plant.</p>

Consultee	Ref	Response	Horizon's Response
Local Resident	LR-27-09-2018	Your contempt for the people affected by your proposals is clearly demonstrated by the time and place where people affected can make their views known; three hours in a bus in a car park on Tuesday 4th September - the day many children will be going back to School after the Summer Holidays!	<p>The consultation events that were held by Horizon were only one of the ways in which the public could consider and provide their views on the proposed change. In addition to the consultation materials being publicly available, Horizon also undertook maildrops within affected areas, and provided Freephone telephone enquiry line, a Freepost postal address, an email address and a dedicated consultation website that included a non-technical information sheet. All of these were accessible in both Welsh and English. Further meetings with affected parties were also offered if required.</p> <p>For these reasons, Horizon considers that the consultation process was adequate to enable all parties to provide their views on the proposed change.</p>
Local Resident	LR-27-09-2018	Your proposals will affect the health and well-being of local people. The increased blasting and disruption caused by more vessel movements will also disrupt the Tourist Industry on which many people depend. Tourism also makes other businesses viable by the increase of all activities. Locals and visitors alike do not want their rest and activities disturbed by 'blasting' and 'vessel movements' to suit your Company's Financial objectives.	<p>As set out in Table 2-1 and section 1.3 in the RfNMC, in preparing the proposed change Horizon undertook a detailed review of the assessments in the DCO application and concluded that the proposed change will not have any new or different significant effects than those already assessed under the DCO application, including effects on local community and tourism. With regard to construction activities at the Wylfa Newydd Development Area, the population health and well-being effects from air quality, noise and lighting are assessed in sections D.2 and D.3 of the Comprehensive Health Impact Assessment Report submitted as part of our DCO application.</p> <p>The socio-economic assessment within our DCO application concludes that there would be a project wide, significant adverse effect on tourism during the construction phase of the Project. In recognition of this Horizon proposes additional mitigation including a Tourism Fund. The appropriateness of the effects that have been</p>

Consultee	Ref	Response	Horizon's Response
			identified in the DCO application will be considered by the Examining Authority as part of its examination; however, the proposed changes do not alter the original conclusions.
Trinity House	TH-25-09-2018	I can confirm that Trinity House has no objections or comments to make concerning these two proposed amendments.	Noted
Llanbadrig and Mechell Community Councils	LMCC-01-10-2018	Horizon argues that its blasting requirements are complex and different from conventional quarrying. For safety reasons there will be times when it will be necessary to evacuate large numbers of workers with consequential disruption to construction activities. As we understand the proposal it is not intended to increase the number of blast actions (three per day) but to extend the period in a day. We note that the proposed change extends the blasting period during the week by 3 hours per day and by two hours on Saturday. We accept that the reasoning for this is sound and that the benefit will be to deliver construction on time. The shorter the total period devoted to blasting the better. Therefore, we support	Noted. Horizon confirms that the proposed change will not result in blasting activities occurring after 19:00. The mitigation proposed to address effects related to blasting activities is contained within the DCO application (including, for example, the Wylfa Newydd Code of Construction Practice) and will be considered as part of the examination of the DCO application. This mitigation will also apply to the additional hours under the proposed change.

Consultee	Ref	Response	Horizon's Response
		<p>this change on the basis that during the week blasting will not occur after 19.00 irrespective of the timing of dusk. We would oppose any attempt to carry out blasting later than 7 p.m. because of the potential effect upon the bedtime of children.</p> <p>We believe that the proposed change reinforces the urgency for Horizon to explain and implement mitigation measures for people and properties that will be adversely affected.</p>	

