



# Ymddiriedolaeth Genedlaethol National Trust

## HORIZON NUCLEAR POWER LIMITED DEVELOPMENT CONSENT ORDER

**EN010007**

### RESPONSE BY NATIONAL TRUST

**ISSUE: NOISE AND VIBRATION AT FELIN GAFNAN, IMPACT ON TENANTED PROPERTIES AND HERITAGE ASSETS**

#### 1.GENERAL COMMENTARY

1.1 National Trust considers that Chapter D16 of the Environmental Statement (APP-135) has not adequately considered the combined construction impacts from dust, noise, lighting, and vibration on the residential amenity of the National Trust's tenants at Felin Gafnan and Tyddyn Sydney. National Trust considers that a property-specific level of detail is required.

1.2 National Trust considers that insufficient information has been provided at individual property level in order to identify the specific impacts on residential amenity for the two tenanted properties for the duration of construction. National Trust considers that a lack of property-specific noise and vibration information has been provided in order to determine the likely impact, consequence and duration of construction at the two tenanted properties (Felin Gafnan and Tyddyn Sydney).

1.3 National Trust has requested property specific detail for the duration of construction since Pre application 1 but none has been forthcoming.

1.4 National Trust also considers that insufficient information has been provided on vibration impacts at Felin Gafnan during construction. Further discussion of this matter is provided below at 2.3.1

#### 2. OUTSTANDING ISSUES

##### 2.1 Property level specific detail

2.1.1 In order to properly assess the construction impacts at Felin Gafnan and Tyddyn Sydney, National Trust considers that a specific assessment at property level, identifying impacts for the duration of construction, is required. Horizon has carried out an aggregated assessment for residential properties in receptor D as a very generic assessment, and does not provide the detail that is essential for Felin Gafnan and Tyddyn Sydney. A property-specific assessment, together with a commitment to provide all necessary mitigation identified during that assessment would satisfy the concerns identified in paragraphs 1.1, 2, 3 and 4.

2.1.2 The ES (D6 Noise and Vibration, APP-125) concludes the post magnitude of change is medium and small based on mitigation in the form of “noise barriers in the form of bunds and working behind outer faces”. No detail is provided within the Landscape and Habitat Management Strategy on the specifics relating to bunds, how this will be achieved and where the bunds will be. The Trust request that Horizon provide this information so that it can better understand what their likely effects will be. The Trust reserves its position on this issue until that information is provided.

## **2.2 Uncertainty in mitigation and monitoring**

### **Mitigation**

2.2.1 Horizon look to secure mitigation through the Code of Construction Practice (APP-414), which includes a Local Noise Mitigation Strategy (Section 8.3, APP-414), and the Main Power Station Site sub-CoCP (APP-415).

2.2.2 The Main Power Station Site sub-CoCP is specific only in relation to a noise bund at zone 9 (Section 8.3.3). Section 8.4.1 identifies noise monitoring at up to six residential properties close to those used for the baseline monitoring and “precise locations will be discussed with the IACC and be confirmed by the first Section 61 application, once initial site suitability visits have been undertaken and access arrangements to the locations have been agreed” (para 8.4.1).

2.2.3 Inherent in this approach is that Horizon will not be identifying specific noise impacts and their construction duration until a Section 61 application is made. We note that Horizon propose monitoring at Felin Gafnan (ES document D6 Noise and Vibration page D6-70, APP-125 states: “It is intended that monitoring equipment will be installed at Felin Gafnan, subject to access arrangements and site suitability survey.”) Horizon have not discussed this issue with National Trust or its tenants at Felin Gafnan. National Trust would have expected discussions on this issue to be part of a comprehensive monitoring proposal and await further discussion on this matter well in advance of any Section 61 Application. National Trust’s response to Deadline 1 Question (Q2.0.40) concerns the lack of detail in relation to environmental monitoring and the Trust looks forward to receiving Horizon’s proposals in respect of this issue in due course.

2.2.4 National Trust would, therefore, encourage Horizon to bring forward a monitoring programme for Felin Gafnan as soon as possible and in sufficient time to allow the National Trust and the Examination Authority to consider its proposals.

### **Monitoring.**

2.2.5 National Trust has concerns in relation to the multiple consents (DCO and Marine Licence) in proximity to Felin Gafnan and how an overarching noise condition will move forward. National Trust is also concerned about the associated monitoring and enforcement regime.

2.2.6 In relation to monitoring, National Trust raised concerns in its consultation response to Natural Resources Wales on the Permits and Marine Licence consultation in September 2018. It has similar concerns in respect of the DCO application, specifically concerning monitoring and enforcement at Felin Gafnan and Tyddyn Sydney. Horizon has failed to provide sufficient monitoring detail in its application for both the DCO and the Marine Licence.

2.2.7 Horizon have not brought forward an adequate monitoring and enforcement programme for Felin Gafnan and Tyddyn Sydney. National Trust has raised its concern about this with Horizon on a number of occasions. The concern can be crystallised as follows:

2.2.8 The proposed marine licence and DCO bring forward significant issues relating to air quality, odours, artificial lighting, noise and vibration. We want Horizon to clarify:

- how the overlap of consenting activities and the proposed use of Section 61 of the Control of Pollution Act by Horizon would work in practice; and
- How any monitoring and conditions would be enforced?

At this stage we do not support the proposed 60dB threshold (proposed within the Marine Licence), and would query how any licence condition would operate alongside the DCO regime, including future Section 61 thresholds. Similarly, we seek clarification on how any noise condition (and its associated enforcement) would operate in isolation.

2.2.9 National Trust want this aspect to be clarified as soon as possible, to ensure we are clear on the potential effects on our properties and can appropriately advise our tenant at Felin Gafnan on conditions, monitoring and enforcement.

### **Marine Works sub-CoCP.**

2.2.10 In relation to the Marine works sub-CoCP, we note no specific reference to Felin Gafnan, clearly the most important residential receptor to construction works, and no detail as to specific property impact, monitoring or mitigation and compensation.

2.2.11 National Trust does not support this lack of detailed approach by Horizon, since it and its tenants must understand the likely specific noise and vibration impacts at Felin Gafnan and Tyddyn Sydney, and when they will take place.

2.2.12 In relation to the high level mitigation proposed (Section 6.4 of ES document D6 Noise and Vibration (APP-125), we await with interest the response from IACC and NRW to Question 9.0.15 of the Examining Authority in relation to the certainty of implementation of the proposed mitigation; Question 9.0.17 in relation to night time,

evening and weekend activity and how restriction would work in practice; Q9.0.20 in terms of who would constitute a near neighbour; Q4.0.6 and Q4.0.7 as to whether IACC are content with the defence to proceedings in respect of Statutory Nuisance.

2.2.13 In relation to the proposed voluntary Local Noise Mitigation Strategy and proposed mitigation and achievement criteria (listed on page D-70 within ES document D6 Noise and Vibration (APP-125), achieving an appropriate solution may not be possible due to the restrictions imposed by listing (eg the Grade II\* listed Felin Gafnan Mill House). The Trust therefore requests that Horizon confirm how the proposed mitigation will work in practice with the constraints of a listed building.

### **2.3 Vibration Impacts**

2.3.1 In relation to the vibration impact of construction at the mill at Felin Gafnan, National Trust commissioned PDA Acoustic Consultants to carry out an independent vibration assessment review of the submitted DCO documents. The review is appended to this response and concludes:

-there is potential for significant vibration effects at Felin Gafnan and the criterion for vibration assessment within the reports for construction is reasonable;

-the criterion for blasting, and the initial assessment of blasting vibration is less clear (than the criterion for vibration assessment) and will need to be ensured that:

- Appropriate vibration criteria (at Felin Gafnan) are set for blasting, if necessary taking into account any structural weakness or difficulty to repair the buildings;
- The blasting contractor carries out Section 61 assessments and ensures that appropriate predictions and monitoring of blast vibrations are carried out.

2.3.2 The review also recommends that appropriate real time vibration monitoring is carried out during any high risk activities including the provision to halt activities immediately if the criteria set out in the Environmental Statement are exceeded until a suitable alternative method can be determined.

2.3.3 The review also considered table 5.4 of ES 6.2.21 ES Volume B Noise and Vibration Modelling and Assessment Methodology Report, and states:

‘.....we note that the Negligible’ and ‘Small’ magnitude of change categories are below the value of BS 5228-2 when it has been reduced by 50% (to account for structurally vulnerable buildings). Hence, we would recommend for historic properties that the ‘Small’ magnitude of change category is not exceeded. With respect to vibration limits from blasting operations, the values from BS 5228-2 are again cited, being 15mm/s PPV at 4Hz increasing to 20mm/s at 15Hz for unreinforced or light framed structures. We would note that these quoted limits are stated to be appropriate for buildings, “including those of historic value that are considered structurally sound.” It is also stated (cited from BS 5228-2) that,

“Important buildings which are difficult to repair, or those thought to be structurally unsound, shall require special consideration on a case-by-case basis.”

2.3.4 We note that the stated limits for blasting vibration are not as conservative as those given for the construction plant and it will need to be ensured that appropriate limits are set by the blasting contractor for the National Trust properties. We note that the proposed limits are predicted to be suitable if the properties are considered to be structurally sound and are not considered to be ‘difficult to repair’. We would recommend that if this cannot be demonstrated as applicable to the National Trust buildings then reduced limits derived as indicated in BS 5228-2 (Code of practice for noise and vibration control on construction and open sites), ‘on a case-by-case basis,’ will be required.

2.3.5 National Trust echoes the recommendations made in the review.

### 3. CONCLUSIONS

3.1 National Trust considers there are unresolved matters of detail in relation to the assessment of the impact of Wylfa Newydd on two tenanted properties within its ownership and to the Grade II\* listed mill at Felin Gafnan.

3.2 National Trust has made reference to these properties and issues within other Written Representations, including the Landscape and Habitat Management Strategy and in relation to Landscape issues, and the need for clarification of matters relating to mitigation including the need for noise bunds.

3.3 This Written Representation raises specific detail in relation to noise and vibration on National Trust assets and raises issues in relation to the need for: property level specific detail; greater clarification of proposed mitigation; greater understanding of monitoring and enforcement and the future Section 61 application; together with uncertainty in the vibration impacts identified in the application on the Mill at Felin Gafnan.