

This response is prepared on behalf of Môr Hafren Bio Power and addresses the points raised in Question 5 of Hearing 3 (with reference also to the comments raised by Cardiff Council's Ecologist).

Cardiff Council Ecologist comments:

Point 1: Response: The increase in NO_x has been considered in **DOC 76** (Version 2 Môr Hafren ERF Habitats Regulations Assessment Screening - see paragraphs 6.1.6 and 6.1.7) (DOC 76 HRA). This shows that at the location where the PC exceeds the 1% critical level threshold for NO_x the background levels are just over half the critical level set for all vegetation types. Given this it is concluded there will be no likely significant effects. The further consideration requested was undertaken.

Point 2: Response: As the Cardiff Council Ecologist notes, Wentloog Avenue and Lamby Way are over 700m from the Severn Estuary SAC. It is well established that impacts from road emission are most likely to occur within 200m of road edge (see for example Design Manual for Roads and Bridges, Highways Agency 2007, A guide to the assessment of air quality impacts on designated nature conservation sites, Institute of Air Quality Management, June 2019 and Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations Natural England, 2018). There needs to be a clear impact pathway for consideration of likely significant effects which clearly is not present in this case given the distance of the roads from the SAC.

Point 3: Response: The Wealden case relates to the reliance on thresholds to screen out likely significant effects relating to changes in air quality due to traffic movements. The key point regarding Wealden was traffic movements from the plan alone were close to the screening threshold used to determine likely significant effects, the in-combination effects of traffic from other plans and projects on the same affected roads breached the threshold.

In this case, **DOC 76 HRA** clearly demonstrates that background level of NO_x at Peterstone Great Wharf is 55% of the critical level (see para 6.1.7). Paragraph 10.1.5 of DOC 76 shows that the background rate of nitrogen deposition at Peterstone Great Wharf is 47.5% of the critical load. Critical loads are defined as:

" a quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge". Critical levels are defined as "concentrations of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur according to present knowledge".

To act in-combination with other plans and project the contribution from other sources at Peterstone Great Wharf would need to be over 10kg/N/ha/yr. to exceed the lower end of the critical load range. Clearly this is not a plausible scenario hence the conclusion there was no likelihood on in-combination effects. The same is true for NO_x where the in-combination contribution from other plans and projects would need to be over 10 µg/m³ to exceed the critical level. As with nitrogen deposition this is clearly not a plausible scenario.

Notwithstanding the above, an in-combination assessment has been undertaken for the three projects highlighted which confirms the critical levels and loads remain below relevant thresholds so confirming the conclusion that no likely significant effects would occur in-combination with other plans and projects.

GP Planning Ltd (detailed input Bradley Murphy Design)

18th March 2021