Response for Deadline 3, 25 April 2024

Response by Elizabeth Leanne Marogna to the Applicant's Response [to REPs 1-094 & 1-095] IP number 20045425

In the Applicant's response, there is a thread which re-enforces the narrative. The narrative in this case is:

"the ES assessments undertaken have concluded that no significant effects on marine ecology, terrestrial ecology or ornithology are likely to occur as a result of the Proposed Development alone or with other relevant projects or plans taking account of environmental measures embedded into the design of the Proposed Development." "Similarly, the Habitats Regulations Assessment (Without Prejudice) Derogation Case [APP-039] concludes that there will be no adverse effect to any of the protected sites assessed."

The above statement has been repeated throughout the Applicant's responses to representations I have made. I have counted six times alone in this specifically referenced material. The statement was adapted to cover water quality impacts of the River Adur and Cowfold Stream, but in essence says the same thing.

I am not an expert, and the commissioning of expert testimony has not played a large role in this examination for anyone bar the Applicant who has a financial interest and indeed is prescribed to instruct in order to produce the PEIR, ES, EIA, etc. Personally, I have a strong emotional investment in this area, especially the ecological environment we are blessed to be a part of. With a dash of imagination one can transport themselves to a situation where a many-hundreds-of-tons concrete pile of 13.5m (nearly 45ft in diameter) is hammered into the seabed. Can you image the force it takes to drive something that incredibly large into the seabed, whatever the habitat may be? Can you imagine the concussion that would quake the earth for kilometres in all directions? Many hundreds of times, shaking the seafloor and shifting enormous amounts of sediment. Can you imagine that this would have 'no significant effects'? Or 'no adverse effect' to any of the closely neighbouring 'protected sites'. The loss of countless lives, not human per se, but so many lives of creatures is inevitable. It is written by the Applicant in their response to REP 1-165:

"inevitably, there are adverse impacts associated with the scale and type of infrastructure that forms the Proposed Development..."

Seemingly, there is a contradiction. The ethical question remains: what is the amount of destruction for something to be negligible in effect verses it being significant. As well, it is important to note that similar statements in reference to the sub-tidal Chalk reefs have been criticised by Statutory bodies such as Natural England. In the Natural England representations REP1-030 *Section 2 – Consideration of a commitment to use rock bags (in relation to cable protection)* they highlight the Applicant's over-simplistic assessment of 'minor' impact on chalk habitats, lack of updated Protection Plan, lack of Cable Specification and Installation Plan, and lack of improved commitments to Habitats of Principal Importance, even though damage to this particular Chalk habitat in particular would be permanent and not recoverable. **I fully endorse this Summary of Key Issues**. Please see *Table 1 Summary of Key Issues*; *Document Reviewed – [REP1-030] – 8.25.13 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 13 – Further Information for Action Point 45 and 46 – Physical Processes and Benthic* 

In summary, the evidence that the Applicant's assessments have severely downgraded the significance of likely adverse effect such as permanent habitat loss to 'minor', casting doubt on the integrity of the reports commissioned by the Applicant.

The Applicant points out that terrestrial invertebrates (Insecta) were scoped out stating that there were no recent studies published regarding terrestrial invertebrates and wind turbine collisions. It is evident the Applicant did not look far, as there are many modern publications stating the immense impacts turbines have on insect populations. The marine environment is more difficult to study when it comes to insect studies, however, the Southern UK is the 'insect migration super-highway' of the UK. Insects migrate at altitudes that coincide with proposed height of Rampion 2 wind turbines. One study conducted by the German Aerospace Center estimated that 1,200 tons of insect biomass are lost annually to collisions with Germany's 30,000 onshore wind turbines. As another academic article explains, "Assuming an average wet mass of 1 mg for an

insect... this equates to about 1.2 trillion insects killed per year for all onshore wind turbines in Germany, or 40 million insects killed annually by a single wind turbine in Germany."

Papers by the following credible scientists show in great depth the risk turbines have to the insect population of the planet. While there is a need to use less harmful means of energy generation, discernment as to what is truly beneficial and what may likely cause more harm than good must be logically evaluated.

Christian Voigt, "Insect fatalities at wind turbines as biodiversity sinks," Conservation Science and Practice, Vol. 3, Issue 5, //docs.wind-watch.org/Voigt-Insect-fatalities-at-wind-turbines.pdf

Franz Trieb, "Interference of flying insects and wind parks," German Aerospace Center Institute of Engineering Thermodynamics, October 2018, //docs.wind-watch.org/Interference-of-Flying-Insects-and-Wind-Parks.pdf

Institute for Energy Research, "Wind turbines against nature," July 19, 2019, https://www.instituteforenergyresearch.org/renewable/wind/wind-turbines-against-nature/

K. Shawn Smallwood and Douglas Bell, "Effects of wind turbine curtailment on bird and bat fatalities," Wildlife Management, Vol. 84, Issue 4, https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21844

Maria Thaker et al., "Wind farms have cascading impacts on ecosystems across trophic levels," Nature Ecology & Evolution, Vol. 2, December 2018, //docs.wind-watch.org/Thaker-India-raptors-lizards.pdf

Michael Shellenberger, "Why Wind turbines threaten endangered species with extinction," Forbes, June 26, 2019, https://www.wind-watch.org/news/2019/06/27/why-climate-activists-threaten-endangered-species-with-extinction/

Paul Cryan, "Wind turbines as landscape impediments to the migratory connectivity of bats," Environmental Law, 2011, //docs.wind-watch.org/cryan-wind-turbines-migratory-bats.pdf

Simon Potts et al., "Safeguarding pollinators and their values to human well-being," Nature, December 2016, https://www.nature.com/articles/nature20588

Virginia Farm Bureau, "We would go hungry without our busy honeybees," accessed December 1, 2022, https://www.vafb.com/membershipwork/news-resources/honeybees

W. F. Frick et al., "Fatalities at wind turbines may threaten population viability of a migratory bat," Biological Conservation, Vol. 209, May 2017, //docs.wind-watch.org/frick2017.pdf

Wind Energy's Impact on Birds, Bats, and Insects

On the topic of Protected Seahorses, the Applicant continues to minimise their risk assessment for seahorses stating that 'seahorse numbers within the vicinity of the Proposed Development are generally low.' This despite the leading authority of seahorses in Britain Neil Garrick-Maidment telling me directly that he was misquoted in the Applicant's ES and also that they are dismissing the risk to seahorses by disregarding the evidential information provided by Mr Garrick-Maidment that seahorses overwinter in large numbers in this area of the English Channel.

Finally, without a decommissioning plan submitted before consent, the DCO is an assessment of only half, or even less of the works and therefore effects of the proposed development. Natural England also highlights this as a concerns, to which I lend my weight.

Sincerely,

Elizabeth Leanne Marogna