Hornsea Offshore Wind Farm

Project Two

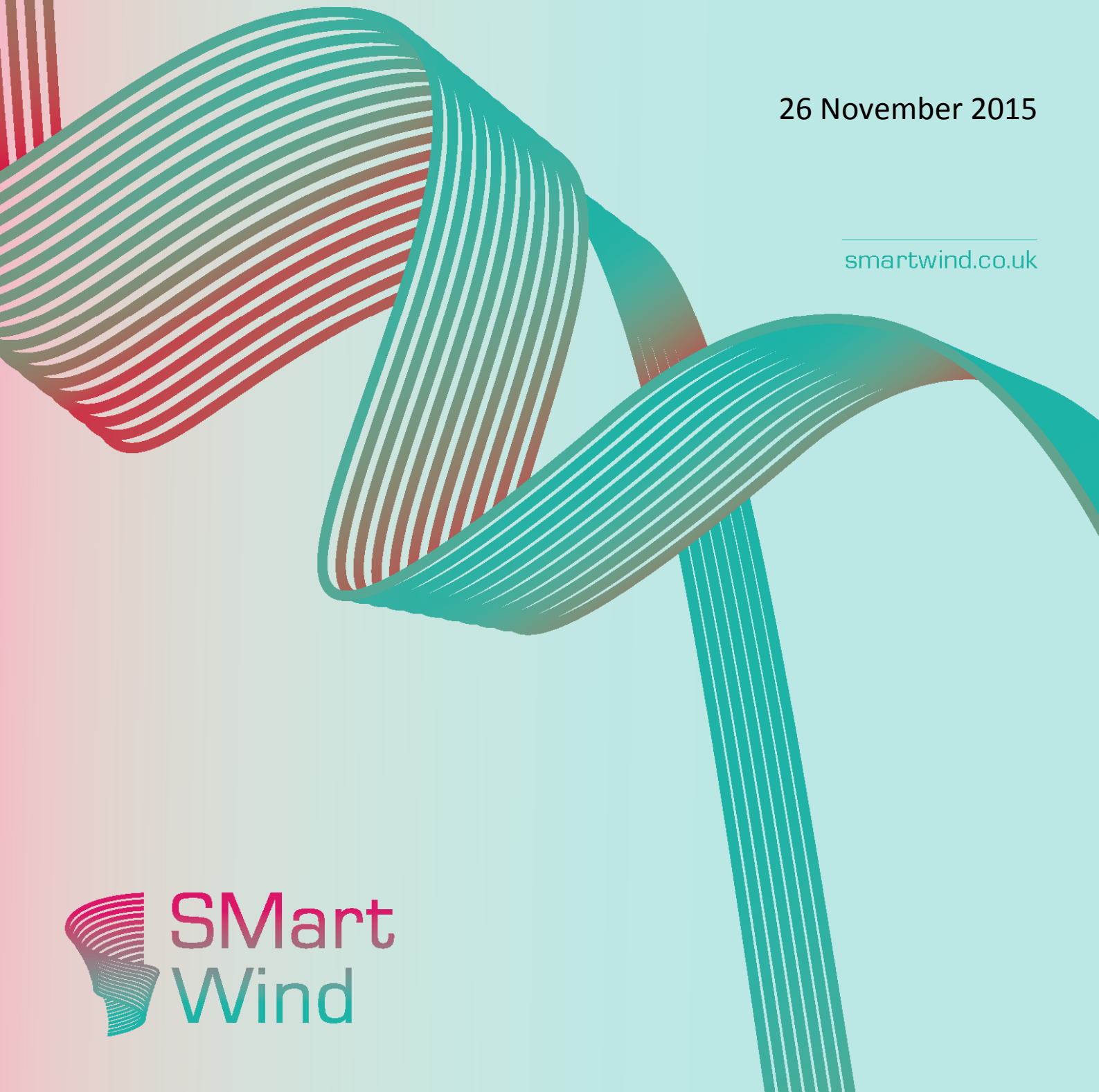
Summary of kittiwake position between Natural England and the Applicant at Deadline VI

Appendix E to the Response submitted for Deadline VI

Application Reference: EN010053

26 November 2015

smartwind.co.uk



SMart Wind

Summary of the kittiwake position between the Applicant and Natural England as at Deadline VI

Overview

The following position paper sets out the Applicant's summary of matters relating to kittiwake at Deadline VI, considering in particular:

- Summary of Project alone mortality positions;
- Summary of in-combination positions; and
- Consequence of mortality.

Summary of Project alone mortality positions

There are significant differences between the levels of kittiwake mortality predicted to occur as a result of the Project alone by the Applicant's expert ornithological consultants and by Natural England.

The Applicant's Project alone assessments predict an annual mortality of 2.6 kittiwake associated with the Flamborough and Filey Coast pSPA and the Flamborough Head and Bempton Cliffs SPA (taking account of the proposals to reduce the Project's envelope (see the cover letter to the Applicant's response to Deadline VI which narrates the proposed amendments to the design envelope) and based on what the Applicant's consultants' consider to be a realistic and balanced assessment.

Natural England predict an annual mortality of 49 kittiwake associated with the pSPA. Whilst this is still a very small proportion of the pSPA population (0.057%) it is an order of magnitude greater than the Applicant's assessment and is considered by the Applicant to be based on layers of wholly unrealistic precaution (in this regard please see Appendix F of the Applicant's response to Deadline VI and paragraphs 1.5.16, 1.6.28, 1.7.4 and 1.9.5 of the Appendix DD of the Applicant's response to Deadline IV).

It is noted, however, that despite the disagreement on the Project alone mortality numbers, there is common ground between both parties that the Project alone will not result in an adverse effect on the kittiwake feature of the Flamborough and Filey Coast pSPA and the Flamborough Head and Bempton Cliffs SPA (see paragraph 3.2.19 of the updated SoCG between the parties submitted at Deadline V).

Summary of in-combination mortality positions

There are similarly significant differences between the levels of kittiwake mortality predicted to occur as a result of the Project in-combination with other plans and projects by the Applicant's expert ornithological consultants and by Natural England.

The Applicant's in-combination assessments predict an annual mortality of 110 kittiwake associated with the SPA and pSPA (based on what the Applicant's consultants' consider to be a realistic and balanced assessment).

Natural England predict an annual mortality of 349 adult kittiwake associated with the SPA and pSPA. Whilst this is also a small proportion of the SPA and pSPA population (0.39%) it is an order of magnitude greater than the Applicant's assessment and is again considered by the Applicant to be based on layers of wholly unrealistic precaution, this time replicated across a number of projects (in this regard please see Section 1.5 of Appendix F of the Applicant's response to Deadline VI and paragraphs 1.11.14 to 1.11.15 of Appendix DD of the Applicant's response to Deadline IV). In reality the Applicant submits that the in-combination impact is likely to be less even than the Applicant has presented on the basis (a) its assessment is itself considered to be very precautionary; and (b) it is based on the consented worst case envelopes of a number of projects which it is known will not build out in that way. For example Hornsea Project One has stated that the preferred supplier will utilise a 7MW turbine. There will therefore be a lower kittiwake mortality than that predicted based on a greater number of 5MW wind turbine generators.

Consequence of mortality

In addition to disagreements over the "level of mortality", both alone and in-combination, the Applicant's ornithological consultants and Natural England disagree over the implications of the predicted mortality in-combination.

Natural England's position on the implications of kittiwake mortality in-combination has been unclear throughout the Project's Examination (and indeed their conclusions which they appear to be drawing have changed radically during the course of the Application). No clear scientific rationale has been presented by Natural England to explain why their position has changed so radically from their advice on recent previous offshore wind farm projects. This is against a backdrop of numerous recent decisions by the Secretary of State which applied the same assessment tools as are being advocated in this Application and established that there was *no prospect of an adverse effect on the integrity of the SPA or pSPA based on in-combination kittiwake mortality numbers* far higher than those now predicted by Natural England in this Application (see Figure 1 below). These decisions were supported by Natural England. For example on the following recently consented projects:

1.1.1 Hornsea Project One - 357 to 472 was considered an acceptable range of annual mortality within which no AEoI could be concluded by Natural England and the Secretary of State. Natural England also advised that a PBR model threshold of 512 adult kittiwakes, using a *f* value of 0.1 was appropriate;

1.1.2 Dogger Bank Creyke Beck A and B - 402 was considered by Natural England at their Deadline IV submission for the Creyke Beck examination to be an acceptable level of annual mortality at which to conclude no AEoI and the Secretary of State went on to consent this project with an in-combination number of 392. In addition it is noted that at Table 2 of Natural England's submission at Deadline IV they stated that "*in PVA models submitted for Hornsea OWF Project One, a value of 500 was suggested to be a suitable lower limit at which to conclude no AEOI.*";

1.1.3 Dogger Bank Teesside A and B - Table 2.1 of Natural England's submission at Deadline VI states that in-combination mortality of 372 adults is less than the value of 500 adults at which a precautionary density-independent PVA model suggests the population would still have a more than 95% probability of continued growth. A density-dependent model predicts a more stable population and an additional mortality of 500 birds does not increase the probability of population decline significantly; and

1.1.4 Navitus Bay - The Secretary of State's decision states, "*Natural England advised (REP – 3696) that 500 adult kittiwake is the value at which a precautionary density dependent PVA model suggests the Flamborough kittiwake population would still have a >95% probability of continued growth. A density-dependent model predicts a more stable population and an additional mortality of 500 birds does not increase the probability of population decline significantly. Natural England advises (REP - 3696) that a PBR model threshold of 573 adult kittiwakes, using an f value of 0.1, was also appropriate."* In addition, the in-combination mortality predicted in Navitus Bay of 371 adult kittiwakes from the Flamborough colony for North Sea and Channel Offshore Wind farms is considerably lower than the PVA or PBR thresholds advised by Natural England to be acceptable. Natural England advised Navitus Bay that there would be no AEoI, on the basis of both PVA and PBR analysis.

As can be seen from the above and in Figure 1, the Project's predicted maximum in-combination kittiwake collisions per annum, considering both the Applicant's figure of 110 and Natural England's figure of 349, fall well below those thresholds previously advised to be acceptable by Natural England and also the levels of predicted in-combination mortality approved (on a precautionary basis) by the Secretary of State. If Natural England were being consistent with the advice it has given on these previous schemes then it would be advising that an in-combination effect of 349 birds would not give rise to an AEoI. If the Secretary State does not accept the Applicant's prediction of 110 birds, then the Applicant considers that at the very least she should be applying 349 birds as the threshold in this case.

Natural England's advice appears to depart from the Secretary of State's Precautionary Approved Threshold and their own previous levels of acceptable mortality. Natural England has been unable to offer any substantive explanation for this fundamental shift in view, simply noting in their hearing summaries (at paragraph 2.17 of Section A of its response to Deadline V) that their "*focus*" is now on particular metrics due to:

- Ongoing litigation in Scotland (which the Applicant assumes is reference to the RSPB petitions for judicial review of decisions to grant offshore windfarm consents in the Firth of Forth). Natural England has not given any indication of what aspect of these legal challenges

is informing its current thinking. The Applicant notes there have been hearings in the Court of Session in relation to these judicial reviews and decisions by the Court are still awaited. The Applicant is therefore surprised and concerned that these challenges (the merits of which are as yet undecided) are informing Natural England's approach;

- An unpublished BTO report which Natural England has informed the Applicant cannot, as yet, be provided to it or the Examination and the content or merits of which the Applicant has therefore had no opportunity to comment; and
- Natural England's "*improved understanding of how to apply these metrics to declining and unfavourable populations".* Again the precise nature or genesis of that improved understanding has not been explained.

The Applicant considers that Natural England's current conclusion on the effects of kittiwake mortality in-combination is unsupported, unreasonable and lacking in transparency. The underlying rationale for Natural England's position has not been appropriately explained. Much of what the Applicant has been told about the factual circumstances (which are presumably influencing Natural England's approach) is itself inaccurate or consists of vague assertions. This is further explained at the Applicant's Appendix DD of Deadline IV and Appendix EE of Deadline V but to highlight a couple of examples:

- Status of population – Natural England state that they believe the kittiwake population to be currently in decline (and that it may continue to decline (or at best be stable)). They appear to base this conclusion on a disputed 1987 count. The Applicant considers that the records from this count are inaccurate and has presented evidence to this effect (See Appendix U of its response to Deadline V). Irrespective of this, the Applicant does not consider there to be any convincing evidence to indicate that the population has been in decline in recent years. On the contrary the Applicant is of the opinion that in recent years population has been relatively stable and likely to have been maintained at carrying capacity through compensatory population effects - hence the Applicant's advocacy of the density dependent PVA model. The Applicant's position on this point is set out in paragraph 1.7.1 of Appendix F of the Applicant's response to Deadline VI; and
- Natural England have indicated (at Deadline III – Appendix 2 of their submission) that the conservation objective for the FFC pSPA is likely to be to maintain or restore the population to a, presently, undetermined level. They have not provided any visibility on the timeline for setting the conservation objectives for the pSPA, the stage which that process has reached within Natural England, or the factors being considered in setting that objective (including presumably a consideration of the prospect of achieving any objective set and the proposed methodology for doing so).

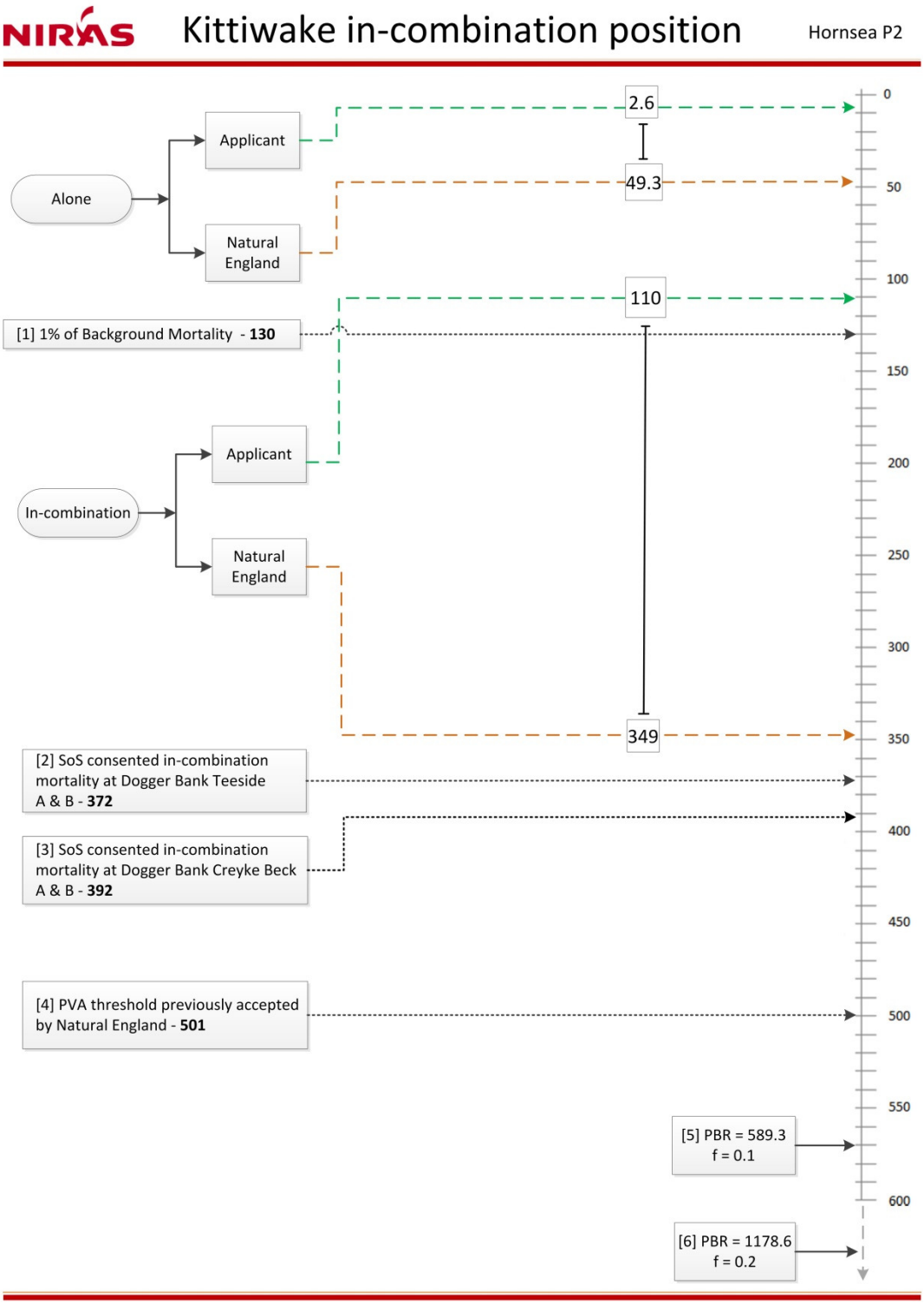
Unhelpfully for this Examination, Natural England are also unable or unwilling to identify a level of kittiwake mortality in-combination which it could accept would not have an adverse effect on the integrity of the SPA or pSPA. The Applicant may be able to theorise that the number sits somewhere between 49 kittiwake and 349 kittiwake (being Natural England's respective Project alone (which has been confirmed by Natural England to cause no AEoI) and in-combination figures), but the fact that Natural England have previously advised in recent decisions that 500 is a sustainable threshold highlights the illogicality, inconsistency and over precaution being taken in their approach on this Application.

The Applicant considers that it has provided a well-reasoned and scientifically robust assessment on the impact of the Project on kittiwake alone and in-combination. The Applicant has highlighted where the arguments advanced by Natural England are overly precautionary at various Deadlines within the Project's Examination (see in particular Appendix DD of the Applicant's response to Deadline IV). The Applicant's assessment is clearly summarised at Appendix F to its response to Deadline VI. The Applicant submits that this assessment (which is consistent in its ultimate conclusions with the other lawful and well-reasoned Appropriate Assessments carried out by the Secretary of State) should form the basis of any decision in this case.

If, on the other hand, the Secretary of State is minded, despite the above comments, to follow the emerging Natural England arguments (or indeed the arguments of the RSPB), and find that an adverse effect on the integrity of the SPA or pSPA cannot be ruled out on that basis, the Applicant would submit the following points:

1. This would be a major departure from a series of previous Secretary of State decisions on exactly the same issue, as explained above;
2. The Applicant could not reasonably, when preparing its application in the light of those decisions, and the Natural England advice which informed them, have expected to be facing the possibility of a conclusion of an in-combination AEoI. Accordingly, it would not be reasonable for the Applicant to have prepared and submitted a case pursuant to Article 6(4) of the Habitats Directive regarding overriding public interest. This is not a situation where, as with various port developments, part of a Natura 2000 site is being built over and it is accepted in advance that an AEoI will occur;
3. As already explained, the Applicant has faced a moving target throughout this Examination. It has necessarily focussed its efforts on seeking to understand the major changes in Natural England's position which have only become apparent part way through the Examination, to establish whether, even on the revised approach, it would be possible to avoid a conclusion of AEoI, even though the Applicant fundamentally disagrees with Natural England's revised approach;
4. Having reached the final stages of the Examination without having achieved that, the Applicant is faced with a situation where Natural England is taking a position the Applicant can have had no reasonable expectation would transpire at the start of the Examination, by a very considerable margin that puts the Project at clear risk of refusal;
5. The Applicant has, it believes, every reason to expect that the Secretary of State will want to be consistent in her decision making with previous decisions reached after careful deliberation of precisely the same issues. This would point towards the Secretary of State not following Natural England's advice, as has happened before on offshore wind decisions, and which the Secretary of State is perfectly entitled to do, and granting the DCO;
6. If, however, the Secretary of State is minded to follow Natural England's revised approach despite previous decisions and a legitimate expectation of consistency in decision making, then as a matter of fairness and natural justice, the Applicant must be given a formal opportunity at that stage to make submissions regarding the tests under Article 6(4) of the Habitats Directive with a view to the DCO being granted on an overriding public interest basis;
7. Should this arise, it is essential that any such submissions be made in the light of the detailed conclusion which the Secretary of State has reached in relation to in-combination effects, as the level of that effect is at the heart of the balancing exercise which the overriding public interest test requires. This would require a formal release of that conclusion in an Appropriate Assessment coupled with an opportunity to make submissions regarding the invoking of Article 6(4) in the light of that conclusion. It would not be reasonable to expect the Applicant to make submissions regarding Article 6(4) during the Examination on a speculative basis.

Figure 1: Hornsea Project Two kittiwake collision estimates alone and in-combination with other projects compared to advised sustainable thresholds and previously consented predictions of mortality.



Notes on Figure 1:

Figure 1 includes a number of thresholds and consented levels of in-combination kittiwake mortality (apportioned to FFC pSPA) against which the respective positions of the Applicant and Natural England can be compared. Threshold [1] is the 1% threshold of background mortality for FFC pSPA population of kittiwake. This has been calculated using a pSPA population of 89,040 individuals (Natural England, 2014) and a mortality rate of 0.146 (Horswill and Robinson, 2015). 1% of background mortality is widely used to define a threshold below which impacts are considered to be insignificant, for example, it is used in offshore wind farm applications to screen Likely Significant Effects (LSE) on bird populations

The second value [2] indicates the level of in-combination mortality previously calculated for the pSPA population of kittiwake at the consented Dogger Bank Teesside A&B offshore wind farm project which was considered to result in no Adverse Effect on the Integrity of the pSPA by Natural England.

The third value [3] indicates the level of in-combination mortality previously calculated for the pSPA population of kittiwake at the consented Dogger Bank Creyke Beck A&B offshore wind farm project which was considered to result in no Adverse Effect on the Integrity of the pSPA by Natural England.

The fourth [4] value is the Population Viability Analysis (PVA) threshold that has previously been considered to be acceptable in terms of no Adverse Effect on Site Integrity by Natural England for previous consented projects, including Dogger Bank Teesside A&B.

The fifth [5] and sixth [6] thresholds represent the Potential Biological Removal (PBR) values calculated assuming *f* values of 0.1 (previously advocated by Natural England) and 0.2 (advocated by the Applicant for Hornsea Project One). These values have been updated since previous submissions to take account of recent published data on age at first breeding and survival rates (Horswill and Robinson, 2015).

References

Horswill, C. and Robinson, R.A., 2015. *Review of Seabird Demographic Rates and Density Dependence.* Peterborough: JNCC,

Natural England, 2014. *Departmental Brief. Proposed extension to Flamborough Head and Bempton Cliffs Special Protection Area and renaming as Flamborough and Filey Coast potential Special Protection Area (pSPA).* Natural England.