Dogger Bank Teesside A&B draft ES October 2013

Consultation response by North Sea RAC (NSRAC)

The NSRAC, one of seven Regional Advisory Councils within Europe, is a membership organization established in 2004 under the auspices of the Common Fisheries Policy to provide greater stakeholder involvement in fisheries management at regional level. The NSRAC prepares and provides advice on the management of fisheries in the North Sea on behalf of its members - fisheries organisations and other stakeholders including environmental organisations. This is done with the general aim of attaining the sustainable management of fisheries, incorporating an ecosystem-based approach and based on the precautionary principle.

The NSRAC's response addresses Chapters 4, 5, 11 and 15 (and their respective appendices). As our feedback on Chapters 4, 5 and 15 is closely related, we deal first with these in order before addressing Chapter 11.

Ch 4, App A: Cumulative Impact Assessment

The cumulative impact assessment on fisheries does not currently address proposed management measures for fisheries within the Dogger Bank SAC. We would expect this to represent a significant additional impact upon fishing activity in the area.

Ch 5: Project Description

We consider that fisheries access should be considered in promoting safe fisheries access in determining the layout of infrastructure for each project alongside other considerations.

We welcome the adoption of an approach to bury of export cables wherever possible (3.9.13). We would highlight that exposed cables or poorly installed protective measures present a safety and snagging risk to fishing activities and not just a risk to damaging the cable.

The project description(3.9.15) mentions that it is anticipated that some places it will not be possible to bury a cable and therefore we suggest that these areas are identified in the Environmental Statement so that a clearer picture can be obtained on where potential risks may exist. Burial risk should be assessed to the extent possible within the ES and not left for elaboration as a post consent procedure.

The fishing industry should be consulted on any post consent risk assessments and cable burial and cable crossing proposals.

Fisheries access should also be considered with respect to inter-array and platform cabling arrangements alongside other relevant considerations, where the objective is to minimise risk to both cable and fishing activity (3.8.6). The ES (Chapter 5) does not appear to define a policy to bury these cables, though we assume that will be the case.

Post-installation trawl surveys or equivalent should be employed in areas where cable burial has taken place, to verify that the cable assets are over-trawlable.

Any disposal of spoil from seabed preparation and drilling should only be done in ways that do not present risk to fishing activity in the area. This matter does not seem to be currently considered (3.6.1).

Ch 15: Commercial Fisheries

The approach to assessing impact significance for fisheries is based upon a qualitative assessment of the proportion of fishing grounds affected by the projects.

We acknowledge that publically available data sources do not allow assessments to take into account the degree to which the individual fishing grounds of particular fishing businesses are affected.

However we consider that:

- Impact significance should clearly acknowledge that individual fishing businesses may be affected to greater levels than are possible to be assessed due to data limitations.
- Loss of fishing grounds as a proportion of available fishing grounds is not the only factor that should be considered as far as impact significance is concerned. It is also necessary to consider the ability of fisheries to continue within the sites during construction, operation and decommissioning.
- We believe such an approach is necessary in order to fulfil the provisions of the UK Marine Policy Statement and the draft East England Marine plans with respect to supporting co-existence with fisheries and to ensure that adequacy of the environmental statement is achieved.
- Accordingly, we consider that measures to minimise or mitigate for the potential loss of access to the sites are not sufficiently well defined. Indeed, for the majority of fisheries nothing is currently proposed as outlined in the commercial fisheries chapter. We consider this to be insufficient for the purpose of seeking development consent and that an appropriate scheme of mitigation should be defined towards

achieving coexistence. This should focus on elements of design and construction methods that would maximise the scope for fishing to safely continue within the site as well as operational protocols.

- Of all of the fisheries operating in the vicinity of the site, seine netting is highly unlikely to be able to continue within an operational wind farm. We welcome mention that proactive mitigation will be sought with those effected and would suggest these matters are progressed in a timely manner before planning consent is sought.

With respect to data representation, it is not clear from the data representation of fishing activity derived from VMS what density of VMS means (e.g. 2 hourly VMS pings within a defined unit area averaged per year?). This should be explained.

Ch 11 and Apps A-B: Marine & Coastal Ornithology

These comments focus on seabirds and in particular collision risk and displacement/barrier effects. We present detail (1-4 below) on these and other concerns.

Our preliminary conclusions are that it cannot be ruled out that there is a risk of significant adverse effect arising from:

- collision for DBT A&B alone for Kittiwake from FHBC[1] SPA
- collision for DBT A&B in combination for Gannet from FHBC and Forth Islands SPAs
- collision for DBT A&B in combination for Kittiwake from FHBC and the Farne Islands SPAs
- collision for DBT A&B in combination for populations of Great black-backed Gull and Lesser black-backed Gull
- in combination effects of displacement/barrier effects on Guillemot, Razorbill, Puffin (Little Auk and White-billed Diver)

1) <u>Collision Risk Modelling</u>

Although Option 1 with the same avoidance rates is appended, the use of Band Option 3 (aka the extended model) is not appropriate. Whilst this model may offer some advantages, these are more than countered by several fundamental problems:

- The lack of empirical data to validate the collision risk model for seabirds.
- Unknown error associated with flight height estimation during data gathering is compounded by the modelling to 1m bandwidths.
- The 98% avoidance rate applied with Option 3 was originally calculated for Option 1. Avoidance rate is a correction factor accounting for variability in several biological parameters and is considered by Band to be model-specific. Our understanding is

[1] Note that the Applicant has referred to the Flamborough and Filey Coast pSPA rather than the existing Flamborough Head and Bempton Cliffs SPA. The pSPA extends further north and out to sea, but the citation includes fewer Kittiwakes than the existing SPA. The developer ought to assess against the existing SPA, because the pSPA hasn't even been formally consulted upon as yet.

that the appropriate avoidance rate for Option 3 is likely to be lower as Option 3 already accounts for some of the incorporated variability. The extended model is the subject of considerable debate, which has prompted a review and further work, commissioned by Marine Scotland and due to deliver by the end of March 2014. The group carrying out this work includes the BTO. Until this work is complete, Option 3 has to be considered to be "work in progress."

- Collision risk predictions obtained from Option 3 are substantially lower than those obtained from Option 1, inappropriately so if a lower avoidance rate correction is applicable.
- 99% avoidance rate for gannets is based on data primarily from birds migrating/non-breeding season and may not apply to breeding birds. Given the current understanding for breeding seabirds, we consider the more precautionary avoidance rate of 98% should be applied as an indicative value for gannets (at least for the breeding season), as for other species, until empirical data improve the evidence base.

Until there is a better evidential base for the collision risk model in general, and the extended Band model has been peer-reviewed, in combination with the calculation of an appropriate avoidance rate, we are unhappy with the application of Option 3 alone. Currently, we suggest that the assessment should use either Option 1 and 98%, thereby facilitating cumulative impact assessment, or present both Options 3 and 1 across a range of avoidance rates. We acknowledge that Option 1 has been presented, in an appendix, but not carried forward into the assessment.

2) Gannet Avoidance rates

The assessment is based on the use of a generic avoidance rate of 98%, with 99% for gannet. While the use of 98% is supported in the text by reference to guidance (SNH, 2010) and a review (Cook *et* al, 2012), the use of 99% for gannet is not, nor is it justified in the supporting text, except by reference to the Triton Knoll application. It is our position that 98% should remain the default avoidance rate for gannet, as stated in SNH (2010) and Cook *et al* (2012) until empirical evidence is available to justify a change applicable to breeding as well as non-breeding seasons.

3) Displacement and Barrier Effects

The additive mortality arising from displacement and barriers is unknown (CEH displacement study, Forth & Tay, Searle et al. in prep.). Reduced breeding productivity is most likely to be the proximate effect of displacement/barriers, for adult seabirds. Whilst expecting that generally long-lived adults will abandon a breeding attempt to safeguard their own survival to make another breeding attempt in another year, there may be consequences for body condition into the winter and knock-on effects for overwinter survival, as borne out by the CEH work. CEH individual based models indicate that effects on adult and chick survival increased when the distance between the SPA colony and wind farm were smallest, and the main effect driving survival was the cost of the barrier effect rather than displacement *per se*. The CEH study is a preliminary, but valuable, step in improving our understanding of

displacement and barrier effects. In presenting the matrices of displacement x mortality, at least the relative sensitivity for each species can be assessed, although the matrices in Appendix 10 present predictions for the whole year, rather than distinguishing breeding/non-breeding totals.

4) Potential Biological Removal

Potential Biological Removal (PBR) is not appropriate for ascertaining sustainable levels of "harvest" (which we also consider a pejorative term in the context of this ES). The major concern is that PBR is unvalidated. PBR was developed for setting fishery bycatch limits, or for its application for setting hunting bag limits. PBR is predicated on a feedback loop to modify "harvesting" rates iteratively, if necessary. Once wind turbines are erected, there will be limited scope for modifying "take" if it is not sustainable.

Overall, while PBR can be useful for assessment purposes to identify possible threats to seabirds from a particular human activity, uncertainties mitigate against its application in a management context to set levels of allowable loss from a population. This constraint derives directly from Article 5 of the Birds Directive (EU 2009) which requires Member States to take measures prohibiting the "deliberate killing or capture [of birds] by any method". Legal guidance is that this is invoked even for activities where there is a prior presumption that mortality is likely to occur as a result of the activity, even if that activity does not deliberately set out to kill birds.