Application by National Grid Electricity Transmission Plc for an Order granting Development Consent for the Richborough Connection Project

Planning Inspectorate Reference No: EN020017 Richborough Connection Project

Representation No. 14

Assessment of Bird Collision Risk submitted by South East Water

Assessment of Bird Collision Risk – Broad Oak Reservoir and the RCP

1 This note has been written by Emma Goddard; Head of Environment at South East Water.

2 It is well documented that many reservoirs across the country are notified Sites of Special Scientific Interest (SSSI) and in some cases Special Protection Areas (SPA) on the basis of their waterfowl / over-wintering bird populations. In some cases these reservoirs become important for large numbers of birds in a short space of time. For example, Abberton Reservoir in Essex (completed in 1941) was designated a SSSI due to its importance for birds only 14 years after its completion in 1955, the site is now an SPA due its European importance for birds.

3 Similarly, our own reservoir at Arlington in East Sussex became a SSSI due to its over wintering widgeon populations in 1985, only 14 years after its construction. Arlington can hold up to 10,000 widgeon during the winter months (1% of the UK population).

4 Both reservoirs were built and designed without the raft of environmental legislation that is present today. As a result, the proposed reservoir at Broad Oak has been designed to ensure it accommodates environmental legislation. In turn, compared to reservoirs built and designed without this legislation in place, in the long term, the reservoir at Broad Oak will provide wider opportunities for wildlife.

5 The proposed reservoir at Broad Oak will provide a variety of open water, wetland, fen and marsh habitats all of which will form important habitat features for a variety of bird species. Amongst the species likely to utilise the newly created habitats available at Broad Oak will be divers, grebes, ducks, geese, swans, coots and gulls. **All of these bird species are know to be prone to collisions where power lines occur in close proximity to water bodies.**

6 Such species are often present in large numbers during the winter when they overwinter on reservoir sites. They also utilise open water habitat as stop off points during Spring and Autumn migration/passage. It is during these times when bird populations are at their highest that there are high levels of risk associated with power lines that are immediately next to water bodies. The reason for this is that many of these species find it difficult to navigate around power lines as they descend onto open water bodies. **This results in an increased risk of collision if electricity lines are in an open landscape or close to surface water**.

7 This is the case at Abberton Reservoir, where a power line lies between the western end of the reservoir and an arable field. In 2006, *Frost*[1] documented that the area suffered highest mortality

[1] Frost D. (2008) The use of 'flight diverters' reduces mute swan *Cygnus olor* collision with power lines at Abberton Reservoir, Essex, England. *Conservation Evidence*, 5, 83-91

rates in mute swan during late winter and spring when swans fly from feeding areas to and from the reservoir crossing the route of the power lines. Collisions were also recorded in the same area for cormorant, gadwall, tufted duck and grey heron.

8 The current proposed route of the RCP lies very close to the proposed reservoir at Broad Oak. At the 36m AOD level, the RCP runs along the side of the reservoir (within 250m) for one kilometre. In addition to this, the RCP crosses the river diversion corridor for the Sarre Penn, over sailing this area for 605m.

9 In relation to bird collision risk, there is a higher risk where power lines are in close proximity and/or over water bodies or river crossings. Also, if lines are on main flight lines in and out of both breeding and overwintering water bodies.

10 The winter period is a bigger risk for bird strike, as high concentrations of birds can be subject to significant collision.

11 Within the reservoir area there are currently two overhead power lines. One, a 400 KV line, will remain after the reservoir has been constructed. This runs perpendicular to the reservoir; 500m of it is within 250m of the 36m AOD top water level reservoir. This line does not either cross or over sail the reservoir.

12 The second is a 132KV line, which will be undergrounded as part of the reservoir scheme design, and, as a result, will pose no risk for bird strike.

13 Along the eastern and southern aspects of the proposed reservoir, for a total distance of 1km, the proposed RCP will present a risk of bird collision for birds utilising the available habitats at the proposed reservoir. The risk of bird collision has not been assessed as part of the Environmental Assessment for the RCP. The Applicant has not provided an assessment of the environmental effects of the RCP on birds that will utilise the available habitats at the proposed reservoir either in terms of the impacts of the RCP in isolation or in combination with the existing 400kv overhead line. It is South East Water's view that this is a significant omission and is a failure by the Applicant to comply fully with the requirements of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009. The risks described need to be fully understood, and mitigation clearly identified and remedied, to ensure that both infrastructure projects can be delivered within the same corridor.

14 Further, an understanding of both the level of risk to birds, and the necessary mitigation measures, should be available to the Examining Authority. If bird risk is such that a planning permission for the reservoir could not be granted unless a section of the RCP were undergrounded in order to satisfy the planning authority and Natural England that significant

environmental impacts that would result from construction of the reservoir could be adequately mitigated, South East Water should not have to address such risk when it prepares its planning application for the reservoir and subsequently meet the costs of undergrounding. The prospect of such risk arising should be fully assessed and understood in the context of the environmental impact assessment for the RCP carried out by the Applicant.