



# Thurrock Power Ltd Comments on RIES

Deadline 7



# 1 THURROCK POWER LTD COMMENTS

- 1.1.1 This document provides the Applicant's comments on the Report on the Implications for European Sites (the RIES, PD-018). The comments focus on Section 3 and Section 4 of the RIES, which deal in detail with Likely Significant Effects and Adverse Effects on Integrity.

RIES Section	Applicant's Comment
<b>3</b>	<b>LIKELY SIGNIFICANT EFFECTS</b>
<b>3.1</b>	<b>LSE for the Thames Estuary and Marshes SPA and Ramsar Sites</b>
<p>3.1.1 NE [RR-022] disputed that the following sites had not been included in the Applicant's screening assessment:</p> <ul style="list-style-type: none"> <li>Swanscombe Marine Conservation Zone (MCZ);</li> <li>Upper Thames Estuary recommended MCZ (rMCZ); and</li> <li>Mucking Flats and Marshes Site of Special Scientific Interest (SSSI) as Functionally Linked Land (FLL) to the Thames Estuary and Marshes SPA and Ramsar site.</li> </ul> <p>3.1.2 NE [RR-022] was not satisfied with the lack of assessment of features of interest of the Swanscombe MCZ and Upper Thames Estuary rMCZ and that impacts had not been assessed to interest features of the Mucking Flats and Marshes Site of Special Scientific Interest (SSSI).</p> <p>3.1.3 The ExA [PD-006] postponed the Preliminary Meeting Part 2, in order to allow the Applicant's HRA to be updated to include an assessment of effects on MCZs and all FLL to identified sites (including Mucking Flats and Marshes SSSI as a component of the Thames Estuary and Marshes SPA/Ramsar).</p> <p>3.1.4 The Applicant did not consider that either SSSIs or MCZs should be included in the HRA screening assessment as separate sites to be assessed and highlighted at Procedural Deadline C [PDC-001] that both SSSI and MCZ designations are not defined in the Regulations as designations that are required to be assessed. A screening of potential impacts to Swanscombe MCZ was included in an update to ES Chapter 17: Marine Environment (section 4.4 of [PDC-019]). NE subsequently confirmed there was no potential for impacts to the Swanscombe MCZ and it did not need to be included in the HRA assessment and that since the Upper Thames Estuary rMCZ did not progress to notification it is no longer relevant to the examination [REP2-097].</p> <p>3.1.5 The Applicant confirmed [AS-047] that the mudflats in Zone G (causeway construction zone) are functionally linked to the Thames Estuary and Marshes SPA/Ramsar and have been assessed as such in the HRA</p>	<p>In response to the ExA's additional written questions (ExQ3) in relation to HRA matters, NE have advised that there is not predicted to be an adverse effect on the integrity of the Thames Estuary and Marshes SPA and Ramsar sites as a result of the Project [REP6-025].</p> <p>Specifically NE stated:</p> <p><i>"We wish to make it clear to the Examining Authority that in our opinion, the project will be detrimental to the interests of the Thames Estuary &amp; Marshes SPA and Ramsar site, albeit if pressed, there is a marginal case that the project would not have an adverse effect on site integrity.."</i></p> <p>NE's advice was made in light of the additional analysis of impacts to Zone G in the context of the SSSI as a component of the SPA/Ramsar sites [AS-048].</p>

RIES Section	Applicant's Comment																								
Report. Additionally, the Applicant provided an assessment [AS-048] of impacts to Zone G in the context of the SSSI as a component of the SPA/Ramsar sites to support the conclusions of the HRA report that there would be no LSE on interest features from habitat loss of FLL. The ExA is awaiting a response from NE on this assessment.																									
<b>3.2 LSE for the Thames Estuary and Marshes SPA and Ramsar Sites</b>																									
<p>3.2.1 The HRA discussion in section 6 [APP-040] screened in the following impact pathways to features of the Thames Estuary and Marshes SPA / Ramsar sites:</p> <ul style="list-style-type: none"><li>• Water Quality;</li><li>• Hydrological Changes; and</li><li>• Disturbance (noise and visual) from use of the Zone G causeway during construction on Avocet features. This was inconsistent with the screening matrix for the sites, which screened this impact out and included decommissioning.</li></ul> <p>3.2.2 NE [RR-022] stated that whilst it agreed with the impacts taken forward to an assessment of AEOI, it did not consider that the list of impacts was sufficiently comprehensive. NE did not expand on this point stating that it would be undertaking further review of the application and submitting further responses at the Written Representation stage.</p> <p>3.2.3 The Applicant submitted an updated HRA [PDC-039] to reflect changes relating to a change request [AS-012] and to address the highlighted discrepancies by the ExA and concerns of NE. This included an update of the screening and integrity matrices to address inconsistencies so that the following impacts were screened in/out for further assessment:</p> <p><b>Table 3.1 Agreement with SNCBs on Impacts Screened in for further assessment and AEOI conclusions</b></p> <table><tr><th>Sites:</th><th colspan="5">Thames Estuary and Marshes SPA and Ramsar</th></tr><tr><td>Receptors</td><td>Hydrological Changes</td><td>Water Quality</td><td>Disturbance during construction and decommissioning</td><td>Disturbance during operation</td><td>Direct Loss or Damage of Habitats Used by Interest Species</td></tr><tr><td>All features</td><td>Yes<sup>1</sup></td><td>Yes<sup>1</sup></td><td>No<sup>2</sup></td><td>No<sup>4</sup></td><td>No<sup>5</sup></td></tr><tr><td>Ringed Plover, Avocet (SPA only), Redshank and Dunlin</td><td>Yes<sup>1</sup></td><td>Yes<sup>1</sup></td><td>Yes<sup>3</sup></td><td>No<sup>4</sup></td><td>No<sup>5</sup></td></tr></table> <p>1. NE [RR-022] agreed this impact should be taken forward for further assessment and agreed with the conclusion of no AEOI</p>	Sites:	Thames Estuary and Marshes SPA and Ramsar					Receptors	Hydrological Changes	Water Quality	Disturbance during construction and decommissioning	Disturbance during operation	Direct Loss or Damage of Habitats Used by Interest Species	All features	Yes <sup>1</sup>	Yes <sup>1</sup>	No <sup>2</sup>	No <sup>4</sup>	No <sup>5</sup>	Ringed Plover, Avocet (SPA only), Redshank and Dunlin	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>3</sup>	No <sup>4</sup>	No <sup>5</sup>	<p>The points of disagreement set out by NE regarding disturbance impacts during operation and direct loss of habitat have been addressed and comments are provided by the Applicant in detail in the sections below.</p>
Sites:	Thames Estuary and Marshes SPA and Ramsar																								
Receptors	Hydrological Changes	Water Quality	Disturbance during construction and decommissioning	Disturbance during operation	Direct Loss or Damage of Habitats Used by Interest Species																				
All features	Yes <sup>1</sup>	Yes <sup>1</sup>	No <sup>2</sup>	No <sup>4</sup>	No <sup>5</sup>																				
Ringed Plover, Avocet (SPA only), Redshank and Dunlin	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>3</sup>	No <sup>4</sup>	No <sup>5</sup>																				



## THURROCK POWER LTD COMMENTS ON GRAVESHAM BOROUGH COUNCIL DEADLINE 4 SUBMISSION

RIES Section	Applicant's Comment
<p>2. No SNCBs contested this, only specific features</p> <p>3. NE [PDD-012] agreed this should be taken forward for further assessment but did not agree there would be no AEOL</p> <p>4. NE [PDD-012] disagreed disturbance during operation should be screened out; see section 3.3 below</p> <p>5. NE [RR-022 and PDD-012] disagreed that direct habitat loss should be screened out; see section 3.4 below</p>	
<h3>3.3 Disturbance Impacts during Operation</h3>	
<p>3.3.1 Impacts from the use and presence of the causeway during operation are screened out in paragraphs 5.1.79 to 5.1.82 of the HRA Report [REP2- 022] on the basis that the causeway would only be used in exceptional circumstances where large plant items would need to be replaced and there are low peak counts recorded in the foreshore wintering bird surveys [PDC-033].</p> <p>3.3.2 NE expressed [RR-022] that the causeway may cause disturbance / displacement during operation through its presence and requested that this should not be discounted.</p> <p>3.3.3 In support of its assessment the Applicant referenced the Waterbird Disturbance Mitigation Toolkit (WDMT) at Deadline 2 [REP2-056] as evidence that Ringed Plover, Dunlin and Redshank would forage &lt;50m from plant during construction. The Applicant [REP2-056] argued that disturbance would be less during operation than during construction (due to use only in exceptional circumstances for maintenance) and that disturbance would be minimal given the low number of birds recorded in the vicinity of the causeway and on this basis, this impact is not likely to cause a significant effect during operation on these features and is therefore screened out. This was also the conclusion reached for Avocet as the Applicant [REP2-056] referenced conservation objective 4 which is to 'Maintain the size of the non-breeding population at a level which is above 283' and reiterated that the assessment in the HRA (paragraphs 6.4.16 to 6.4.30) states that the SPA population will be maintained above this number in the medium-long term despite the construction impacts of the Proposed Development. Therefore, as disturbance during construction will be less than that at operation, operational disturbance impacts can be screened out.</p> <p>3.3.4 NE [REP2-097, REP4-012, REP5-026] proceeded to contest and discuss with the Applicant the methodology for assessing the number of birds affected which underpins the conclusion to screen out operational disturbance impacts. It considered that the assessment was not proportionate in assessing the number of 'bird days' lost</p>	<p>In response to the ExA's additional written questions (ExQ3) in relation to HRA matters, NE have advised that there is not predicted to be an adverse effect on the integrity of the Thames Estuary and Marshes SPA and Ramsar sites as a result of the Project [REP6-025].</p> <p>NE's advice was made in light of the additional analysis of impacts to Zone G in the context of the SSSI as a component of the SPA/Ramsar sites [AS-048].</p> <p>In the Applicant's submission [AS-048], section 4.3 concludes that there would be no AEOL (adverse effect on integrity) from operational impacts. This implies that the long-term effect during operation (presence) of the causeway has been screened in as a likely significant effect, although this was not explicitly stated in those terms in the original HRAR. The HRAR and screening matrices have therefore been updated to reflect this updated position, for the avoidance of any doubt.</p> <p>The Applicant suggests that the final sentence of paragraph 3.3.3 of the RIES contains an error, and should state: "Therefore, as disturbance during <del>construction</del> <b>operation</b> will be less than that at <del>operation</del> <b>construction</b>, operational disturbance impacts can be screened out."</p>

RIES Section	Applicant's Comment
<p>in the context of the whole SPA/Ramsar sites and that a more localised assessment should be undertaken to assess the number of bird days lost in the context of the Mucking Flats and Marshes SSSI as a component of the SPA/Ramsar.</p> <p>3.3.5 Whilst the Applicant disagreed with NE's proposed methodology highlighting that this was not in line with the Habitats Regulations, it submitted [AS-048] an assessment of 'bird days' lost in the context of the Mucking Flats and Marshes SSSI as a component of the Thames Estuary and Marshes SPA/Ramsar sites and concluded that whether the bird days lost are assessed in the context of the SSSI or the whole SPA/Ramsar, the impact is not likely to cause a significant effect and is therefore screened out. A response is awaited from NE on this document.</p>	
<p><b>3.4 Direct Loss of Habitats</b></p>	
<p>3.4.1 The Applicant [APP-040] concluded in paragraphs 5.1.5, 5.1.21 and 7.2.4 there would be no direct habitat loss impact pathway to features of the Thames Estuary and Marshes SPA and Ramsar sites on the basis that surveys of FLL found no evidence that SPA features were present on land to be lost as a result of the Proposed Development.</p> <p>3.4.2 NE [RR-022] disputed screening out this impact as the assessment of impacts to FLL had only been undertaken for onshore habitats whereas it considered that the intertidal area between Coalhouse Fort and Tilbury Fort where the proposed causeway is located (Zone G) is also FLL. NE highlighted that the Applicant's Foreshore Wintering Birds Surveys (2019- 2020) [APP-094] recorded Dunlin, Redshank and Ringed Plover features, and in particular, high numbers of Avocets, within the causeway area (Zone G) between November and March and therefore, the conclusion that these features are not present on FLL is not supported. NE anticipate that habitat loss would arise due to direct loss of mudflats from the causeway structure and from accretion influenced by the causeway [RR-022].</p> <p>3.4.3 The Applicant submitted an updated HRA Report [REP2-022] to acknowledge this area as FLL (paragraphs 5.1.6 to 5.1.20). The HRA Report screened out direct loss of habitats as an impact pathway for the Thames Estuary and Marshes sites features in paragraph 5.1.20 on the basis that the mudflat is located outside of the SPA and is only a small proportion of the available habitat resource in the context of the SPA/Ramsar site (1.5% temporary loss of FLL during construction and 0.37% long-term loss during operation over 35 years). It considers that losses of mudflat</p>	<p>The Applicant wishes to clarify the evolution of the HRAR.</p> <p>The paragraphs in [APP-040] cited by the ExA in 3.4.1 related to the question of whether terrestrial (farmland) habitats comprised FLL only, and do not relate to the foreshore.</p> <p>Impacts on foreshore FLL were assessed in [APP-040] in paras 5.1.6 – 5.1.11, which referred to the intertidal wintering bird surveys undertaken by the Applicant and discussed the presence of Avocet in this area. Direct loss of habitat was screened out as an impact because of the small area of habitat affected and the low numbers of birds present, but this was not meant to imply that the foreshore did not comprise FLL. Assessment of disturbance impacts on Avocet was taken forward for appropriate assessment in [APP-040] Section 6.4.</p> <p>Following comments from NE [RR-022] it was agreed to undertake further assessment disturbance impacts on three other species highlighted by NE (ringed plover, dunlin and redshank) in addition to</p>

**THURROCK POWER LTD COMMENTS ON GRAVESHAM BOROUGH COUNCIL DEADLINE 4 SUBMISSION**

RIES Section	Applicant's Comment
<p>from sediment accretion would be reversed once the causeway is decommissioned.</p> <p>3.4.4 NE [PDD-012] does not agree this impact should be screened out of the assessment and argues that this has potential to undermine the objective to maintain and restore 'The extent and distribution of the habitats of the qualifying features' as the Proposed Development does not provide mitigation to achieve 'no net loss'. It references the NECR205 and NECR206 research reports and their principles to support the significance of these impacts.</p> <p>3.4.5 NE expressed concern that the assessment used to screen out direct loss of habitat impacts made a comparison of the effects of the Proposed Development against the baseline of the whole SPA/Ramsar site and that whilst this is technically correct, it is disproportionate and easily demonstrates the number of birds and habitat affected are very small. It considers a more localised assessment i.e. in the context of bird numbers within the Mucking Flats and Marshes SSSI as a component of the SPA) would be appropriate.</p> <p>3.4.6 NE confirms that whilst the area of FLL to be lost is not expected to be &gt;1% of the available FLL, it does not agree that the long-term loss of FLL would not cause a LSE on features of the Thames Estuary and Marshes SPA and Ramsar sites [REP5-026] but states that progress is being made towards a Statement of Common Ground.</p> <p>3.4.7 The ExA [PD-015] requested that the Applicant update the impact of habitat loss in the HRA screening assessment to include consideration of how and to what extent the mudflats support features of the Thames Estuary and Marshes SPA/Ramsar referencing the RSPB and Lydd Airport v. SSCLG and SST (2014) case which cites the importance of FLL. The ExA highlighted that the fact the mudflat is located outwith the SPA is not sufficient reasoning to exclude an effect and would not be consistent with caselaw.</p> <p>3.4.8 The Applicant [REP2-056 and REP5-007] challenged the need for a more localised assessment stating that it was not a legal requirement and maintained that its approach and conclusions in relation to the conservation objectives and scale of assessment was correct and that the impact of direct habitat loss should be screened out. It drew on NECR205 [REP3-009] to support its position that effects on FLL do not by definition constitute LSE and therefore it does not automatically require impacts on FLL to be taken forward for appropriate assessment.</p>	<p>avocet, and to provide more detail of the assessment of habitat loss in the context of mudflat habitats inside and outside the SPA.</p> <p>Following the Applicant's provision of the additional analysis requested by NE [AS-048], further correspondence with NE was undertaken via email. In an email dated 10/06/21, prior to NE's submission of [REP6-025], NE concluded that there was no LSE from habitat loss at either the SSSI or SPA level resulting from the causeway &amp; berth pocket, or from the causeway, berth pocket and potential saltmarsh accretion area combined, where the habitat loss remained below 1% of the respective study area in each case (whether SSSI or SPA). NE sought clarification on the size of area lost, and the Applicant clarified in emails to NE dated 10/06/21 and 11/06/21 that the habitat loss remained below 1% in each case, as has been set out in Table 21 of [AS-048].</p> <p>In response to the ExA's additional written questions (ExQ3) in relation to HRA matters, NE have advised that there is not predicted to be an adverse effect on the integrity of the Thames Estuary and Marshes SPA and Ramsar sites as a result of the Project [REP6-025].</p> <p>NE's advice was made in light of the additional analysis of impacts to Zone G in the context of the SSSI as a component of the SPA/Ramsar sites [AS-048].</p>

RIES Section	Applicant's Comment
<p>3.4.9 The Applicant [AS-048] in support of the HRA [REP2-022] screening assessment undertook a further assessment to demonstrate that direct habitat loss as a result of the causeway is &lt;1% of the available mudflat resource both for the whole SPA/Ramsar sites and at a local scale (in the context of Mucking Flats SSSI only) and therefore not likely to cause a significant effect on SPA/Ramsar features. A response is awaited from NE on this document.</p>	
<p><b>4 ADVERSE EFFECTS ON INTEGRITY</b></p>	
<p><b>4.1 Conservation Objectives</b></p>	
<p>4.1.1 The conservation objectives for all of the European sites taken forward to an assessment of AEOL and discussed in this section of the RIES were provided by the Applicant with their DCO application (section 4 of [REP2- 022]). The sites, features and impacts taken forward for the AEOL assessment are listed in Table 3.1 in section 3 of this RIES. NE dispute the conclusion of the HRA in that there would be no AEOL on features of the Thames Estuary and Marshes SPA and Ramsar sites as a result of noise and visual disturbance during construction and decommissioning.</p> <p>4.1.2 NE agreed [RR-022 and REP4-012] with the conclusion that with appropriate surface water features and pollution control safeguards in place, there will be no adverse effects on the integrity of the Thames Estuary and Marshes SPA and Ramsar on water quality and from hydrodynamics subject to the mitigation being agreed through an appropriate strategy and delivery secured through the DCO.</p> <p>4.1.3 It is important to note that the Marine Management Organisation deferred comments relating to HRA matters to NE [REP2-085].</p>	<p>In response to the ExA's additional written questions (ExQ3) in relation to HRA matters dealing with noise and visual disturbance during construction and decommissioning, NE have advised that there is not predicted to be an adverse effect on the integrity of the Thames Estuary and Marshes SPA and Ramsar sites as a result of the Project [REP6-025].</p> <p>NE's advice was made in light of the additional analysis of impacts to Zone G in the context of the SSSI as a component of the SPA/Ramsar sites [AS-048].</p>
<p><b>4.2 Methodology of Assessment</b></p>	
<p>4.2.1 The HRA Report [APP-040] section 6.4 concludes no AEOL on Avocets during construction on the basis that causeway construction would occur outside sensitive months (November – March inclusive) and use of the causeway during construction would dock and depart barges during high tide when mudflats are covered and Avocets are not present. Additionally, Avocets disturbed during low tide have a large availability of mudflat habitat in the surrounding area and the number of birds with potential to be displaced is small.</p>	<p>In response to the ExA's additional written questions (ExQ3) in relation to noise thresholds, NE advised that a threshold of 3dB increase in background noise should be used as the trigger point for the 'likely significant effect' test. NE also advised that the disturbance zones specified by the Applicant in the assessment for avocet and ringed plover were applicable.</p>

RIES Section	Applicant's Comment
<p>4.2.2 NE [RR-022] disagreed with this conclusion as Avocets had high peak counts in Zone G in the foreshore wintering bird surveys [APP-094]. It stated that discussions were ongoing and part of the application was yet to be reviewed so some comments were withheld.</p> <p>4.2.3 The ExA requested an update to the HRA [APP-040] to address inconsistencies between the discussion and the matrices and footnotes. The Applicant provided updated HRA reports [PDC-039; REP2-022] to address these issues.</p> <p>4.2.4 The Applicant's updated assessment [REP2-022] of noise and visual disturbance effects on wintering birds using the intertidal zone (zone G) during construction (section 6.4) and decommissioning (section 7.4) includes Dunlin, Redshank and Ringed Plover as affected features and concludes that there would be no AEOI. This is based on the number of 'bird days' lost due to disturbance in the context of the whole SPA/Ramsar sites and the sensitivity of the birds to disturbance.</p> <p>4.2.5 NE [PDD-012] states that construction will take approximately six months, which combined with barge deliveries to the causeway means that the Proposed Development cannot entirely avoid months where SPA features are present in peak counts. As this is likely to affect a proportion of the SPA's bird population, it recommends that a commitment is included in Register of Environmental Actions and Commitments (REAC) to preferentially avoiding the most sensitive months.</p> <p>4.2.6 NE disputes the threshold used for assessment of noise disturbance and the assessment methodology underpinning the AEOI assessment by comparing the loss of bird days in the context of the whole of the SPA/Ramsar sites and states that whilst this is technically correct, it is disproportionate and easily demonstrates the number of birds and habitat affected are very small. It considers a more localised assessment i.e. bird days in the context of the Mucking Flats and Marshes SSSI as a component of the SPA would be appropriate. NE [REP5-026] is seeking internal specialist advice on noise thresholds and will respond in due course.</p> <p>4.2.7 The Applicant [REP2-056 and REP5-007] challenged that a more localised assessment is not a legal requirement of the Habitats Regulations and maintained that its approach and conclusions were correct. Based on the conclusion of no AEOI, the Applicant considers a commitment to specific mitigation measures is not required in the REAC [REP2-056].</p>	<p>In response to the ExA's additional written questions (ExQ3) in relation to HRA matters dealing with noise and visual disturbance during construction and decommissioning, NE have advised that there is not predicted to be an adverse effect on the integrity of the Thames Estuary and Marshes SPA and Ramsar sites as a result of the Project [REP6-025].</p> <p>NE's advice was made in light of the additional analysis of impacts to Zone G in the context of the SSSI as a component of the SPA/Ramsar sites [AS-048].</p>



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<p>4.2.8 The Applicant [AS-048] in support of the HRA [REP2-022] conclusions of no AEOL undertook a further assessment to demonstrate the number of bird days lost in the context of Mucking Flats SSSI only as a result of disturbance during construction and decommissioning. The number of bird days lost as a percentage of the SSSI are reported as follows using peak counts to assess a worst-case scenario:</p> <ul style="list-style-type: none"> <li>• Ringed Plover – 3.69% (2.13% of whole SPA/Ramsar);</li> <li>• Redshank – 1.03% (0.11% of whole SPA/Ramsar);</li> <li>• Dunlin – 0.36% (0.29% of whole SPA/Ramsar); and</li> <li>• Avocet – 2.58% (1.87% of whole SPA/Ramsar).</li> </ul> <p>4.2.9 Based on this assessment, the Applicant reiterated that it considered the conclusions of the HRA [REP2-022] to be sound and that there would be no AEOL as a result of disturbance during construction or decommissioning due to such a small number of features being affected. A response is awaited from NE on this assessment and conclusion.</p>	
<p><b>4.3 Meteorological and Seasonal Differences</b></p>	
<p>4.3.1 NE [PDD-012] asked that the HRA recognises the varying importance of habitats during periods of severe weather and all areas should not be assessed as having equal value to SPA birds. The Applicant [REP2-056] requested NE provide evidence to support this.</p> <p>4.3.2 NE responded [REP2-096] stating that whilst it could not provide formal evidence, this property of the habitats should be self-evident for estuary systems at a landscape scale due to the open nature and exposure of the habitat to various weather conditions and anecdotal evidence should support features seeking more favourable conditions available.</p> <p>4.3.3 The Applicant [REP3-009] reiterated that whilst the estuary may provide various habitats for wintering birds at different times depending on weather conditions, it does not make it possible to quantify the importance of FLL in absence of evidence that it is favoured by birds in harsh conditions.</p> <p>4.3.4 NE [REP5-026] states that the importance of the inner estuary areas during severe weather means a precautionary approach should be applied to the winter surveys as recent winters have been average / milder and therefore figures may not be fully representative. The Applicant responded [AS-047; AS-048] stating that bird surveys were undertaken based on standard accepted</p>	<p>NE's latest submission to the ExA's additional written questions (ExQ3) did not specifically respond to points regarding variation in bird distribution in the Thames Estuary during severe weather conditions. However, in relation to HRA matters, NE have advised that there is not predicted to be an adverse effect on the integrity of the Thames Estuary and Marshes SPA and Ramsar sites as a result of the Project [REP6-025].</p>

**THURROCK POWER LTD COMMENTS ON GRAVESHAM BOROUGH COUNCIL DEADLINE 4 SUBMISSION**

RIES Section	Applicant's Comment
<p>methodologies and reiterated the point made previously that it is not possible to quantify the importance of FLL in the absence of evidence that it is favoured by birds in harsh conditions. It notes that the species that are features of the designated sites are recorded in low numbers and are increasingly tolerant of passive disturbance. No agreement has been reached on this matter.</p>	
<p><b>4.4 Causeway as a Permanent Feature</b></p>	
<p>4.4.1 NE confirms [PDD-012] that it considers a conclusion of no AEOI can be reached so long as the causeway is not permitted as a permanent structure. However, as the causeway has potential to remain for up to 35 years (the lifetime of the Proposed Development), it is arguable this is beyond the limit of what could be considered 'temporary'.</p> <p>4.4.2 NE [RR-022] and EA [RR-013] believe that the causeway should not be a permanent feature beyond the lifetime of the Proposed Development and that there was not enough information to justify its permanence in relation to potential accretion rates, prolonged effects on hydrodynamics, use of the structure by birds and control mechanisms of the causeway beyond the lifetime of the Proposed Development.</p> <p>4.4.3 The Applicant [PDC-001] explained the causeway was the only means of access for Abnormal Indivisible Loads (AIL) deliveries of the largest construction components and therefore it is essential to the viability of the Proposed Development during its lifetime (although not beyond) should any repair or replacement of the largest components be needed.</p> <p>4.4.4 In response, the Applicant submitted a change request [AS-012] on 20 April 2021 which included a material amendment to the submitted DCO to the access arrangements of AILs via the causeway. The Applicant updated the DCO [PDC-009] to commit to decommissioning the causeway (with production and submission of a decommissioning plan) at the end of the project lifetime (35 years) or sooner should alternative road options be identified. Requirements 17 and 18 of the revised DCO secure a 5-yearly review of a permanent, feasible and economic alternative to the causeway for AIL deliveries.</p> <p>4.4.5 In light of this change to the DCO, the Applicant submitted an updated HRA [PDC-039; REP2-022] to include an assessment of decommissioning impacts on European features, a revised ES Chapter 17 Marine Environment [APP-066] to include an assessment of effects from decommissioning the causeway and an assessment of</p>	<p>The Applicant notes NE's response to the ExA's additional written questions (ExQ3) in relation to HRA matters, setting out that there is not predicted to be an adverse effect on the integrity of the Thames Estuary and Marshes SPA and Ramsar sites, but expressing clear preference for an alternative land-based access for AILs [REP6-025]:</p> <p><i>"We wish to make it clear to the Examining Authority that in our [NE] opinion, the project will be detrimental to the interests of the Thames Estuary &amp; Marshes SPA and Ramsar site, albeit if pressed, there is a marginal case that the project would not have an adverse effect on site integrity. Clearly under these circumstances, an alternative access for AIL should be pursued and secured to avoid impacts if possible."</i></p> <p>Regarding RIES para 4.4.5, the Applicant refers to [AS-047], its response to Natural England's [REP5-026], which confirms in point 5 that further information about the causeway conceptual design and decommissioning was submitted at Deadline 5 [REP5-016], which confirms that the decommissioning process would be undertaken using similar work and plant and over a similar timescale as the construction work.</p> <p>The effect of the decommissioning phase, therefore, would be an impact of broadly similar scale to the effect</p>

**THURROCK POWER LTD COMMENTS ON GRAVESHAM BOROUGH COUNCIL DEADLINE 4 SUBMISSION**

RIES Section	Applicant's Comment
<p>causeway decommissioning [PDC-012]; impacts were anticipated to be similar to those at construction. NE [PCC-012] welcomed these submissions and the EA stated its satisfaction with the wording of Requirements 17 and 18. NE [REP5-026] suggest that decommissioning impacts may not be similar to those during construction noting the debate surrounding the ease of causeway decommissioning at Issue Specific Hearing 1. The Applicant offered to expand on this in due course; a response is awaited [EV-013; EV-014].</p> <p>4.4.6 The Applicant [EV-013] expressed a preference for an on-land access as an alternative to the causeway and this is still being actively pursued [AS- 048] but none had been identified as feasible at the time of publishing this RIES. NE [REP5-026] are in support of a less harmful alternative access.</p>	<p>assessed for the construction of the causeway. Given that the HRAR concludes no AEOI for causeway construction, the same conclusion is reached for causeway decommissioning.</p>
<p><b>4.5 Summary</b></p>	
<p>4.5.1 NE continue to dispute no AEOI on features of the Thames Estuary and Marshes SPA/Ramsar as a result of noise and visual disturbance impacts during construction and decommissioning on the basis that it disagreed with the methodology of assessment, specifically, noise thresholds and bird days/scale of assessment and use of FLL dependent on meteorological conditions. The Applicant provided an updated assessment of bird days in the context of the Mucking Flats and Marshes SSSI [AS-048] which is pending review and comment from Interested Parties.</p>	<p>In response to the ExA's additional written questions (ExQ3) in relation to HRA matters, NE have advised that there that there is not predicted to be an adverse effect on the integrity of the Thames Estuary and Marshes SPA and Ramsar sites as a result of the Project [REP6-025].</p> <p>NE's advice was made in light of the Applicant's submission of additional analysis of impacts to Zone G in the context of the SSSI as a component of the SPA/Ramsar sites [AS-048].</p>