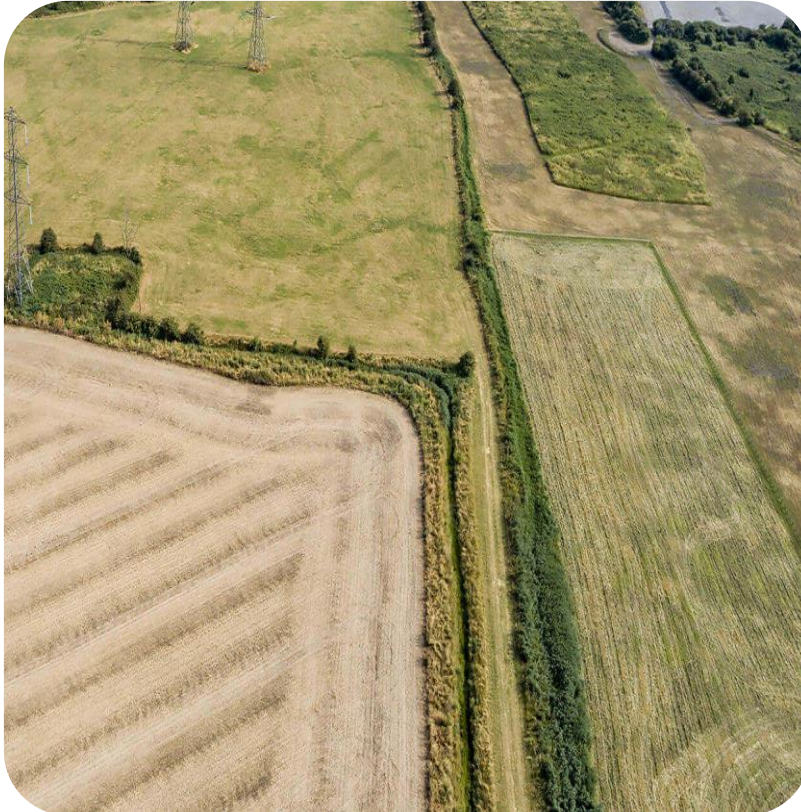
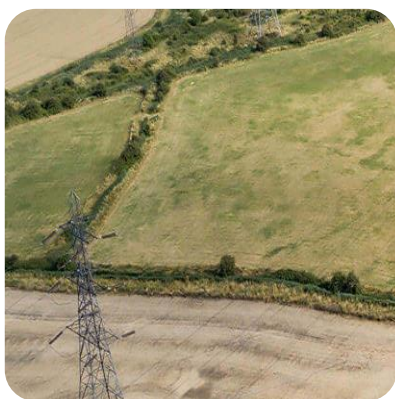


# Thurrock Power Ltd Comments on Natural England Procedural Deadline D Submission

## Deadline 2



## 1 INTRODUCTION

- 1.1 This document sets out Thurrock Power Ltd's comments on Natural England's Procedural Deadline D submission (PDD-012) in the table overleaf. In addition to the responses, information is also provided on where in existing or updated documents these issues are covered.
- 1.2 Thurrock Power Ltd has previously made comments on points raised by Natural England in its Discretionary Advice Service (DAS) letter dated 21/10/20. The DAS letter and Thurrock Power Ltd's responses are included among the correspondence submitted at Deadline C (within Section 2 of PDC-001).

Subject		Number	Comment in PDD-012	Thurrock Power Ltd Response
Updated Habitats Regulations Assessment	General comments	1a	<p>Our overall observation and concern is that the HRA has assessed the effects of the project against a baseline of the whole of the Thames Estuary &amp; Marshes SPA bird population (for each relevant species) and the whole of the available habitat (within SPA and functionally linked land). The relatively small area of habitat affected by the project when compared to the overall resource therefore easily demonstrates that the number of birds and available habitat affected is very small (1.5% of the available functionally linked land and 0.05% of the total mudflat resource), however Natural England has advised in our DAS advice letter dated 21st October 2020 that in our view it is more appropriate for the HRA assessment to consider (alongside whole SPA numbers) a more local context (i.e. bird numbers within the Mucking Flats &amp; Marshes SSSI component of the SPA).</p> <p>The report also seems to assume that the presence of the causeway (and associated fencing etc.) will have no other affect on the ability of the remnant to function as it once did – in our view the displacement effect caused by the presence of the causeway should not be discounted.</p> <p>Whilst technically the approach taken in the HRA may be correct, our advice is that there has to be an assessment of effects at a more local level (such as component SSSIs) alongside this.</p> <p>Without this, there could be many areas within large SPAs (such as the Thames Estuary &amp; Marshes SPA) with additional functionally linked habitat, which if assessed in isolation are dismissed as marginal contributors to the SPA population, and thereby allowing multiple local projects resulting in permanent impacts successively eroding the capacity for the SPA to achieve and maintain favourable conservation status (i.e. ‘death by a thousand cuts’), which is clearly undesirable. We suggest that the HRA is revised accordingly, in particular the calculation of ‘bird days’ and the baseline available resource against which losses are compared.</p>	<p>As previously noted in our response (pages 44-54 of PDC-001) to Natural England’s DAS letter (pages 37-43 of PDC-001), we consider that our approach to the assessment of impacts on the SPA is correct, which appears to be acknowledged by Natural England in this response (“<i>Whilst technically the approach taken in the HRA may be correct</i>”). We maintain that it is not appropriate or a legal requirement to assess the significance of impacts on SPA birds at a scale below that of the SPA population as a whole.</p> <p>In relation to the displacement effect caused by the presence of the causeway when it is not being built or in use, studies examining the passive effects of structures on foraging birds are limited. However, we would note the following:</p> <p>The Waterbird Disturbance Mitigation Toolkit (WDMT) states that Ringed Plover, Dunlin and Redshank will forage extremely close to plant (&lt;50m) during construction works. It is highly unlikely that the disturbance effect of the causeway when it is not being constructed or in use would be any greater than the effect from its construction or use, and would very likely be less. Given this and the low numbers of birds recorded using the area in the vicinity of the causeway, we conclude that there would be no Adverse Effect on Integrity (AEOI) from the presence of the causeway itself for these species.</p> <p>Avocet are not included in the WDMT, but again we consider that it is highly unlikely that the passive effect of the causeway would be any greater than when it is in use or being constructed. The passive effect of the causeway would, therefore, be similar or less than the effect predicted for construction / operation, just operating over a longer time period. Therefore, for the same reasons presented in the HRAR (PDC-039) (paragraphs 6.4.16 - 6.4.30), the SPA population will be maintained above 283 individuals (the number on the SPA citation) in the medium-long term even if there is some displacement of birds from the vicinity of the causeway, and again no AEOI is concluded.</p> <p>With regards to the issue of multiple local projects resulting in permanent impacts (‘death by a thousand cuts’), firstly the causeway will not be permanent (it will be removed after 35 years if not sooner) and secondly this scenario would be dealt with via the in-combination assessment of the HRAs for any future projects resulting in permanent losses of functionally linked land. This is because Regulation 63 of the Conservation of Habitats and Species Regulations 2017 requires an appropriate assessment of the implications of any projects that are likely to have significant effects on a European site, either alone or in combination with other projects.</p>
		1b	The HRA also needs to recognise the contribution of specific areas of the SPA under certain environmental conditions, i.e. that the inner estuary areas are more important during periods of severe weather where more sheltered areas are sought. The HRA appears to have assessed all areas as having equal value to SPA birds.	We are not aware of any evidence which suggests that the area affected by the causeway is of greater importance during periods of severe weather. If such evidence is available, please can this be provided by Natural England.
	Construction of the causeway	1c	We note that the causeway will take ~6 months to construct, and that this cannot entirely avoid months where SPA birds can be expected to be present in significant numbers. Whilst we appreciate that there may be uncertainties regarding the availability of barges and precise timings of delivery of plant to site, in our view the bird numbers in the areas affected are significant enough to require specific mitigation such as that set	The Applicant’s position is that specific mitigation measures are not required to avoid an AEOI because of the Applicant’s conclusion (in paragraph 6.4.65 of the Habitats Regulation Assessment Report (ref PDC-039)) that there will be no adverse effect on the integrity of the SPA due to the construction of the causeway.



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			out in paragraph 6.4.66. We suggest that a REAC commitment could be worded to commit the developer to preferentially avoid the most sensitive months, alongside the other measures described.	
	Construction phase use of the causeway	1d	We note the sequencing of events proposed and the flexibility sought around the phasing of batch deliveries. Again, in our opinion REAC commitments could be worded to commit the developer to preferentially avoid the most sensitive months.	See response to 1c above.
	Operation Phase Retention of the Causeway	1e	The causeway is proposed to be retained for the life of the project (design life 35 years). As described above, our preference is that the losses described are set within a more local context (i.e. component SSSI), and that as a result the direct medium-term loss of available habitat should not be screened out from Appropriate Assessment (ref. paragraph 5.1.20).	We refer back to our previous response (1a) on the appropriate scale at which impacts on SPA birds should be assessed.
	Consideration of the Longevity of Mudflat Loss	1f	<p>Notwithstanding the above comments about the presentation of the HRA and its AA, Natural England has given further consideration to the loss of the available resource as functionally linked land to the SPA / Ramsar site. In advising on the significance of this issue, we have been mindful of the Natural England research report NECR206: 'Temporary effects: How the longevity of effects has been considered in respect of plans and projects affecting European sites – a review of authoritative decisions'. We have also had in mind NECR205 'Small-scale effects: How the scale of effects has been considered in respect of plans and projects affecting European sites - a review of authoritative decisions' and, although that report relates to direct losses of European sites, which does not apply in this case, the principles are nevertheless helpful. The NECR206 report identifies several factors which should be considered when assessing these effects, including in particular:</p> <ul style="list-style-type: none"> <li>- whether the effect can be fully undone / made good;</li> <li>- the spatial scale of the effect in the short term; and</li> <li>- measures to return the area to a comparable level of ecological functionality.</li> </ul> <p>In this context, we note that:</p> <ul style="list-style-type: none"> <li>- The effect can be fully undone, by complete removal of the causeway structure (and this is proposed by the project);</li> <li>- The spatial scale (noting earlier comments) has not yet been demonstrated to be insignificant at an appropriate scale; and</li> <li>- Mudflat habitats generally are more resilient and better able to recover effectively from disruption. The natural redistribution of sediments can for example be evidenced from the creation of new areas of inter-tidal habitats.</li> <li>- Finally, the minimum life span of the project is stated as 35 years, which is arguably beyond the limit of what could be considered 'temporary' (noting the case studies in the above report), and the Inspector will need to reach a view on this point.</li> </ul>	<p>We refer back to our previous response on the appropriate scale at which impacts on SPA birds should be assessed.</p> <p>While the Applicant acknowledges that the maximum lifetime of the causeway is longer than the standard definition of 'temporary' in EIA terms, the fact remains that the causeway will be removed at 35 years if not before, and therefore the impact from the causeway, while potentially lasting for the long term, is not a permanent impact.</p> <p>Natural England has acknowledged in its response that (a) the effect of the causeway can be fully undone; (b) the mudflat habitat in question is resilient and better able to recover from disruption; and (c) the loss of available habitat is "medium term". Natural England's point regarding the appropriateness of the spatial scale only holds weight if the argument set out in relation to the assessment of impacts at a local scale is correct, which the Applicant submits it is not – and indeed Natural England has acknowledged that the Applicant has followed the technically correct approach in this regard. Therefore, taking the factors that Natural England considers to be relevant in assessment of the longevity of effects, the Applicant is of the view that (following the conclusions of the Natural England research report NECR206) the effects can be regarded as "strictly temporary" and capable of being fully undone and therefore would be unlikely to represent an adverse effect on the integrity of the European site.</p> <p>Natural England refer to the research report NECR205, although as they acknowledge, that report relates to direct losses of habitats within designated sites which does not apply in this case. However, a report of relevance not referenced in their response is NECR207 '<i>Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects - a review of authoritative decisions</i>' (<a href="http://publications.naturalengland.org.uk/file/6572958821646336">http://publications.naturalengland.org.uk/file/6572958821646336</a>).</p> <p>This report reviews a number of cases where temporary or permanent loss of or disturbance to functionally linked land of terrestrial and coastal SPAs occurred. The case studies reviewed include several examples where no LSE was concluded as a result of losses of FLL where small numbers of birds were affected, or where the amount of habitat loss was small relative to the extent of available habitat elsewhere.</p>
	Consideration of the Longevity of Mudflat Loss	1g	The report assessed temporary effects on European sites directly, rather than as in this case to functionally linked land, and this also has had a bearing on our advice. We note for example, that the Supplementary Advice Package to the SPA Conservation	The European case of <i>Waddenzee</i> (C-127/02) is authority for the principle that where a project has an effect on a European site but it is not likely to undermine the conservation

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			<p>Objectives includes an 'extent objective' for notified features: 'maintain the extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding / wintering period.' As far as we can see, the Supplementary Advice has not been consistently referred to within the HRA, and it is not clear to Natural England at the time of writing how the habitat figures for example at paragraphs 5.1.14 (and following) compare with those specified in the Objectives, and how the discrepancy can be accounted for. Further, no mitigation which provides alternative habitat is offered by the project which would maintain a 'no net loss' position – the HRA relies upon the case that the reduction in habitat is too small to be significant.</p> <p>Furthermore, of the five species assessed in detail in the HRA (avocet, black-tailed godwit, dunlin, redshank and ringed plover), redshank, dunlin and ringed plover all have 'restore' population objectives, which further leans against the loss of forage resource in this area of functionally linked land. We cannot see that the project has been assessed against this objective<sup>1</sup>.</p>	<p>objectives, it cannot be considered likely to have a significant effect on the site concerned.</p> <p>The conservation objective refers to maintaining the extent of suitable habitat necessary "to support the feature for all necessary stages of the non-breeding / wintering period". As we have assessed in the HRAR (PDC-039) for Avocet (6.4.16 - 6.4.30), the short-medium term loss of mudflat would not affect the overall ability of the SPA to support this designated feature, and therefore our position is that there would not be an impact on this conservation objective.</p> <p>With regards to the 'restore population' objectives for redshank, dunlin and ringed plover, the assessment presented in paragraphs 6.4.31 – 6.4.59 of the HRAR (PDC-039) shows that numbers of these birds present in the likely zone of influence of the causeway are very low or very sporadic, and on that basis it is not considered that the construction, use or presence of the causeway would significantly affect the populations of these species.</p> <p>The conservation objective to "maintain the extent, distribution and availability of suitable habitat (either within or outside the site boundary)" cannot be used to protect all potentially functionally linked land everywhere outside the site boundary regardless of whether that land makes a significant contribution to the maintenance of the SPA populations or not. To do so would effectively afford equal protection to land outside the SPA as within its boundary, which is not the intent of the relevant legislation.</p> <p>The assessment presented in the HRAR (ref PDC-039) indicates that the long-term loss of mudflat for the causeway represents a very small percentage of the available habitat and on that basis it is concluded that the loss of FLL land would not result in a significant effect on integrity.</p> <p>We would also refer to the NECR207 report on the consideration of functionally linked land, which includes examples of projects where no LSE was concluded when small losses of or disturbance to FLL occurred.</p>
		1h	<p>To date when providing our advice to the developer, we have advised that the causeway should be retained for a shorter period of time to allow for construction and then removed (preferably in the order of 5 years), however we understand that this is not possible, due to the potential for delivery of replacement engines throughout the life of the project.</p> <p>Linked to this, is whether there are alternative transport options for the delivery of abnormal indivisible loads (AILs), and in this respect we note the proposed REAC commitment to review these at intervals. The Inspector will need to reach a view on whether or not the terms of the review are reasonable, which may bring forward the removal of the causeway and shorten the reduction in available habitat for SPA interest features.</p>	Noted.
		1i	<p>In summary, we do have concerns regarding the updated HRA report, notably the sole use of 'whole SPA' figures which overlooks the local contribution and importance of the area affected, and the screening out of direct habitat loss of functionally linked land (paragraph 5.1.20), which in our view should be taken to Appropriate Assessment. In our view therefore, the conclusions of the HRA have yet to be fully justified, however</p>	<p>We refer to our previous response about the appropriate scale against which impacts on SPA birds should be assessed, We maintain that the analysis presented in the HRAR (ref PDC-039) is sufficiently robust and that its conclusions are justified.</p>

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			<p>overall we consider that a case for 'no adverse effect on site integrity' could be made, so long as the causeway structure is not regarded by the competent authority as being a permanent structure.</p> <p>If it is concluded that the causeway is a 'permanent' structure, then the project would appear to undermine the conservation objective to maintain the extent of habitat needed to support the interest features (some with population 'restore' objectives) and therefore Appropriate Assessment would be required for this effect, and mitigated accordingly.</p>	As noted above, the causeway will not be a permanent structure and therefore all impacts associated with the causeway can and will be fully reversed when the causeway is decommissioned. The decommissioning of the causeway is secured through requirement 18 of the dDCO and the decommissioning plan to be submitted and approved under that requirement must include details of the restoration of mudflat habitat. The Applicant proposes to add Natural England as a consultee for this aspect of the requirement.
ES Addendum: Assessment of Causeway Decommissioning (Nov. 2020)		2	In light of the emphasis placed upon the temporary nature of the causeway and the need for confidence in the recoverability of the habitats affected, we have also reviewed the Causeway Decommissioning report (November 2020). We note and support the REAC commitment for the production of a 'Causeway Decommissioning Plan'. In view of the likely effects arising to functionally linked land, Natural England should be added to the list of consultation bodies under paragraph 18(1). Whilst there will be a generally reliance upon natural accretion as the means to restore the mudflat habitat, we welcome the need to detail the mudflat restoration works at paragraph 3(d). We also support the need for updating the bird surveys to inform the decommissioning works programme, at paragraph 2.3.1.	Noted.
Restrictions on Public Access to the Causeway (Nov. 2020)		3	It is also critical that the causeway is secured from unauthorised use, and we note the submission of the additional report 'Restrictions on Public Access to the Causeway.' In our view, it is a key aspect of the project to prevent, monitor and enforce where necessary the use of the causeway for purposes other than that which would be permitted. We therefore welcome the attempts made by the developer to address these concerns, and note the proposed fencing / gate arrangements. It is not clear to Natural England however how (with reference to paragraph 1.2.3) significant unauthorised use would become apparent to Thurrock Power Ltd., as no monitoring is proposed and we understand the facility will be largely unmanned. To improve the effectiveness of this document, in our view further information should be provided which outlines what efforts will be made to find out whether any unauthorised access or use is being made. This might include periodic proactive contact with the relevant river authorities to discuss and test whether the measures proposed are being effective in their purpose.	<p>Noted. The following has been added at paragraph 1.2.3 of the Restrictions on Public Access to the Causeway document (PDC-053). That document has also now been appended to the Design Principles Statement (APP-140) (rather than being a separate document), with which the detailed design of the authorised development must comply in accordance with requirement 4 of the dDCO.</p> <p><i>"Thurrock Power Ltd will make periodic proactive contact with the relevant river authorities to discuss and test whether the access restriction measures are working effectively or any unauthorised access is occurring."</i></p>
Other comments		4a	We note that the developer disagrees with our advice with respect to noise impact thresholds (ref. page 6 of the response to our DAS advice letter). As may be appropriate, we may provide further comments on this point in due course if helpful, however for the sake of expediting this delayed response letter, we have not covered this specific issue further at this time.	Noted.
		4b	In addition, our initial views on the in-combination section of the HRA report indicate that further assessment may be required. The prolonged displacement of birds due to Thurrock Flexible Power Generation acting in-combination with the Lower Thames Crossing jetty usage is concluded by the applicant (paragraph 7.2.9) as not likely to affect the integrity of the European site. As is described above, this again relies upon there being large areas of alternative habitat available elsewhere for displaced birds, however we would again note the 'maintain' habitat extent objective (including for functionally linked land) and the 'restore' objective for some of the species affected. In our view the conclusions reached need further justification, including with reference to appropriate local context (i.e. the Mucking Flats & Marshes SSSI component of the SPA).	We refer to our previous response about the appropriate scale against which impacts on SPA birds should be assessed. We maintain that the analysis presented in the HRAR (ref PDC-039) is sufficiently robust and that its conclusions are justified.