

Riverside Energy Park

Applicant's response to Thames Water's Written Summary of Oral Submissions Made at Hearings

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1 Applicant's response to Thames Water's Written Summary of Oral Submissions Made at Hearings

1.1 Introduction

- 1.1.1 Thames Water Utilities Limited ("TWUL") has made a submission at Deadline 3 providing a summary of the oral submissions made by TWUL at the Issue Specific Hearing on environmental matters on 5 June 2019 and at the Issue Specific Hearing on the draft Development Consent Order (dDCO) held on 6 June 2019.
- 1.1.2 Section 1.2 of this response provides the Applicant's response to the submissions made by TWUL on environmental matters.
- 1.1.3 Section 1.3 of this response provides the Applicant's response to the submissions made by TWUL on the dDCO.

1.2 Applicant's response to Thames Water Utilities Limited's submissions on environmental matters

- 1.2.1 Thames Water Utilities Limited (TWUL) has submitted a summary of its oral case put forward at the Issue Specific Hearing on Environmental Matters on 5 June 2019. This considered a number of matters raised in TWUL's Relevant Representation and Written Representation.
- 1.2.2 TWUL commented on the following topics relating to the TWUL's managed Crossness Local Nature Reserve (LNR):
- Visual impacts and the visitor experience, including in relation to TWUL's legal duties;
 - Effects from construction in isolation and in-combination, particularly in respect of use of the consented 'Data Centre' site as the Main Temporary Construction Compound and the Data Centre operationally;
 - Shading effects;
 - Effects on breeding and wintering birds;
 - Lighting and noise effects;
 - Nitrogen deposition from the Anaerobic Digestion plant; and
 - The Applicant's approach to biodiversity offsetting.
- 1.2.3 These matters are addressed below. It should be noted that many of these were either addressed in the Applicant's own **Oral Summaries for the Issue Specific Hearing on Environmental Matters (8.02.19, REP3-027)** submitted at Deadline 3 or were the subject of submissions by the Applicant at Deadline

3 and TWUL may not have been party to this information at the time of drafting their summary. This information is not necessarily repeated in full in this response which instead provides a summary of the responses from Deadline 2 and 3.

Submission in response to Agenda Item 5

- 1.2.4 The Applicant welcomes the supportive comments in respect of the Electrical Connection being removed from the Crossness LNR.
- 1.2.5 Likely significant environmental effects arising from the inclusion of the Data Centre site, being the Borax Fields, as part of the Main Temporary Construction Compound are reported in the **Environmental Statement Supplementary Report (6.6, REP2-044)** submitted at Deadline 2 which concludes that all effects are Not Significant. TWUL provides no explanation for its assertion that potential effects will be significant and the Applicant strongly disagrees with this assertion. It should also be noted that the Data Centre site has planning permission for the construction and use of data centres, whereas the Proposed Development is only seeking a temporary construction compound on the site.
- 1.2.6 The Applicant addresses TWUL's comments in respect of visual impacts and visitor experience at **Paragraph 5.3.14-5.3.15** and **5.3.30-5.3.34** in the **Applicant's Response to Written Representations (8.02.14, REP3-022)** submitted at Deadline 3. This includes reference to **Table 9.8** in **Chapter 9 Townscape and Visual Impact Assessment (TVIA)** of the **ES (6.1, REP2-021)** which summarises the potential townscape and visual effects of the Proposed Development on Crossness LNR during construction and operation. As the REP site is within an existing industrial area close to the river, embedded mitigation would seek to take account of adjacent land uses and existing industrial townscape character. The buildings and stack(s) would be seen as a new feature in the context of other industrial buildings, other existing vertical elements such as wind turbines and other stacks. In terms of the visitor experience, Crossness LNR is already set in this urban industrial–river landscape setting and was originally established as part of the mitigation measures for the TWUL sludge treatment facility which is immediately adjacent to Crossness LNR. Therefore, existing industrial buildings are already sighted in views out of the reserve.
- 1.2.7 In addition, as described in **Paragraph 5.3.31** in the **Applicant's responses to Written Representations (8.02.14, REP3-022)**, it is likely that any visitors would be focussed on undertaking ecologically related activities within the nature reserve itself rather than on the views of surrounding built development. Whilst there would be some reduction of openness when looking northwards, due to new built form, openness is maintained and the Crossness LNR would not be enclosed. This includes taking into consideration the consented and once built Data Centre, which is located to the east of Crossness LNR.

- 1.2.8 The Crossness LNR is a nature reserve and green space set within an existing active urban area and existing views out from the LNR to the east already look to existing industrial buildings and structures. The LNR clearly provides 'green relief' from the existing surrounding urban context and the associated noise and activity of this area. The Proposed Development, if consented, would not alter that 'green relief' function and it is considered unlikely that there would be a loss of educational opportunities or that residents and visitors would be unable to benefit from the educational opportunities afforded by the species and habitats present there.
- 1.2.9 Section 3 of the Water Industry Act 1991 applies to proposals being promoted by TWUL, not by third parties. In relation to such proposals relating to TWUL's undertaking, TWUL is under a duty to further the conservation and enhancement of natural beauty and the conservation of flora and fauna. This is similar to an electricity undertaker's duty under the Electricity Act 1989. Accordingly, the Applicant will not place TWUL in breach of section 3 or section 5 of the Water Industry Act 1991 (which relates to giving practical guidance to relevant undertakers with respect to any of the matters under section 3).
- 1.2.10 Whilst TWUL states in its 'Summary of the oral case put forward at the Issue Specific Hearing on Environmental Matters' that there is likely to be a significant cumulative effect from REP and the Data Centre, no evidence is provided to support such a statement. The Applicant's evidence demonstrates the contrary: the potential cumulative effects of the Data Centre and REP have been assessed and are reported in each technical chapter of the ES, this is further illustrated in Appendix A.4, which states the likely overlap of the construction and operation of the Data Centre and REP and that a cumulative assessment is required. In addition, the **Environmental Statement Supplementary Report (6.6, REP2-044)** submitted at Deadline 2, provides an assessment of the potential cumulative effects of the revised location of the Main Temporary Construction Compound and the construction and operation of the Data Centre (considered to be undertaken both consecutively or concurrently, as Scenario 1 and Scenario 2 respectively). The findings of the assessment are that there are no likely significant effects, including to the openness of the Crossness LNR, as otherwise stated by TWUL. Furthermore, following a request by the Examining Authority ("ExA") for the Applicant to provide a view on the weight to be attached to the Crossness Local Nature Reserve ("LNR") as Metropolitan Open Land ("MOL") at the Issue Specific Hearing on Environmental Matters on 5 June 2019, the Applicant has submitted a Note on MOL at Deadline 4 titled **Metropolitan Open Land – Analysis of whether the policy on Green Belt in the National Policy Statement applies to Metropolitan Open Land in respect of the Proposed Development (8.02.41)**.
- 1.2.11 Whilst TWUL refers to shading effects, it does not provide any reasoning as to why the **Applicant's Report on Shading Effects to Crossness Local Nature Reserve (8.02.10, REP2-061)** submitted at Deadline 2, and updated at Deadline 3 (**8.02.10, REP3-019**), or the conclusions set out in **Paragraph**

11.9.33 of Chapter 11 Terrestrial Biodiversity of the **ES (6.1, REP2-023)**, should not be considered appropriate. Nor does it provide its own shading assessment to evidence its assertions. The **Applicant's Report on Shading Effects to Crossness Local Nature Reserve (8.02.10, REP3-019)** illustrates that the shadows from the Main REP Building are at their largest extent across Crossness LNR just after dawn as the sun rises in the east, casting shadows to the west. As the sun moves higher in the sky during the morning, the shadows quickly move across Crossness LNR, and the extent of shading reduces. The modelling demonstrates that shadows are no longer cast on Crossness LNR by around early to mid-morning (with the exact times varying throughout the year). The shading images demonstrate that shading to Crossness LNR from REP will be at its greatest extent around dawn, when the intensity of the sun is at its lowest, and therefore has the lowest influence on plant growth. The Applicant continues to conclude, based on the evidence, that the effects from shading to Crossness LNR will be Not Significant.

- 1.2.12 Furthermore, the updated **Applicant's Report on Shading Effects to Crossness Local Nature Reserve (8.02.10, REP3-019)** underpins the conclusion of the ES in that *"...whilst there is potential for some minor changes in the botanical assemblage in these areas as a result of shading, this is considered to be unlikely. Therefore, effects from shading to Crossness LNR of County/Metropolitan importance, and Erith Marshes SINC of Local conservation importance, will be Not Significant"*.
- 1.2.13 An assessment of the potential effects of construction, operation and decommissioning of the Proposed Development on bird assemblage is presented in **Paragraph 11.13.6-11.13.8, Chapter 11 Terrestrial Biodiversity** of the **ES (6.1, REP2-023)** and concludes that no significant residual effects will arise. These findings are supported by Natural England in the agreed **SOCG (8.01.05, REP2-051)**.
- 1.2.14 Noise modelling and assessments were undertaken at a location in Crossness LNR, near to the south west corner of the West Paddock. This central location was chosen to demonstrate predicted noise levels at a representative location within the LNR, which would be relevant to a number of different ecological receptors in different locations within the LNR. The calculations of construction noise were undertaken in accordance with BS5228:2009 'Code of practice for noise and vibration control on construction and open sites'. The modelling identified a change in sound level at the representative location within Crossness LNR during construction, from 52dB to 62dB. Sound levels in the region of 50-60dB are typical of sound levels in most urban locations (including parks) situated in the vicinity of transportation infrastructure. During baseline surveys, lapwings were identified as breeding in the West Paddock. It is considered that if the habitat is currently suitable for breeding lapwing, as it is in the West Paddock, then lapwing will be resilient to reasonable levels of disturbance. Furthermore, the **Code of Construction Practice (CoCP)** as secured through **Requirement 11** of the **Draft DCO (dDCO) (3.1, REP3-003)** will control potential noise and potential visual disturbance of the Proposed Development during construction.

- 1.2.15 The area surrounding the Proposed Development currently contains numerous perching structures for avian predators such as existing buildings, pylons, and gantries. The addition of the REP building will not provide a perching resource for predators which are not already present in close proximity to Crossness LNR, and therefore increased predation of lapwing is considered unlikely.
- 1.2.16 In line with standard industry guidance, an assessment of the potential effects on breeding birds against the existing baseline at the site has been undertaken and these effects have been found to be Not Significant. In the context of the existing development around the LNR, TWUL's current management regime of the reserve has been successful in improving biodiversity and there appears to be no justification as to why the Proposed Development, adjacent to the north-eastern boundary of the LNR, would prevent further improvement. Potential effects on biodiversity in Crossness LNR, arising from the Proposed Development, have been demonstrated to be Not Significant and so the Applicant does not consider that further monitoring of breeding or wintering birds is required or justified in these circumstances.
- 1.2.17 As set out in the **Applicant's Response to Written Representations (8.02.14, REP3-022)** submitted at Deadline 3, the Applicant received a copy of the main body of the Section 106 agreement ('s106') dated 21st July 1994, in relation to the TWUL sludge treatment facility, on 10th June 2019. It is understood that the obligations on TWUL are set out in Schedule 2 to the s106 which have been requested but not, as yet, provided by TWUL. Notwithstanding this, the potential effects on this designated area are Not Significant (**Paragraph 11.9.2, Chapter 11 Terrestrial Biodiversity of the ES (6.1, REP2-023)**), and therefore the biodiversity value of Crossness LNR will not be adversely affected by REP. Accordingly, it follows that there can be no conflict with the s106 as: (a) there are no direct effects on the TWUL-managed Crossness LNR; and (b) the potential indirect effects are also not significant. In any event, as the Applicant is not "building" or directly impacting on the land bound by the s106, there can be no breach of the s106 or its objectives. Section 106 agreements do not operate in that way.
- 1.2.18 In light of the above, most notably that the potential effects of the Proposed Development on Crossness LNR are Not Significant in respect of terrestrial biodiversity, the Applicant considers that a Requirement to undertake monitoring of breeding and wintering birds would not be necessary, reasonable or proportionate.
- 1.2.19 TWUL asserts that net lighting levels would increase, however no basis is provided by TWUL to support this assertion or challenge the assessment findings that all potential effects on terrestrial biodiversity during construction, operation and de-commissioning would be Not Significant. **Paragraph 11.9.27, Chapter 11 Terrestrial Biodiversity of the ES (6.1, REP2-023)** states that:

"Light spill from the REP site could affect adjacent designated areas adjacent including Crossness LNR, Belvedere Dykes SINC, River Thames and Tidal

Tributaries SINC, and Erith Marshes SINC. The Outline Lighting Strategy sets out the approach for lighting design which has been prepared in consultation with an ecologist in accordance with standard guidance to ensure effects to designated areas from light spill are avoided or minimised. A Full Lighting Design will be a DCO Requirement and will be in accordance with the Outline Lighting Strategy. Therefore, effects from lighting on these sites of County/Metropolitan and Local conservation importance are Not Significant.”

- 1.2.20 Furthermore, **Paragraph 11.10.18 Chapter 11 Terrestrial Biodiversity** of the **ES (6.1, REP2-023)**, sets out the operational cumulative assessment, which included the consented operational Data Centre, and the mitigation proposed within the **Outline Lighting Strategy (Section 15.4, Chapter 15 of the ES (6.1, APP-052))**, which provides that lighting within REP will be designed with reference to current best practice for bats and lighting, and therefore no cumulative effects are anticipated. Compliance with the **Outline Lighting Strategy** is secured pursuant to **Requirement 16** of the **dDCO (3.1, REP3-003)**.
- 1.2.21 The barn owl box on Norman Road is approximately 50m from an existing dual carriageway (Eastern Way) to the south, which creates its own noise and lighting environmental effects. The box is over 100m from the Main Temporary Construction Compound and over 600m from the main REP site. Construction activities will not give rise to the loss of barn owl breeding sites or loss of any key foraging habitats. Lighting for REP will be managed through measures set out in the **Outline CoCP (7.5, REP3-012)** and **Appendix K.3** of the **ES, Outline Lighting Strategy (6.3, APP-096)**, secured through **Requirement 11** and **Requirement 16** of the **dDCO (3.1, REP3-003)**, respectively, which ensure that effects will be addressed through adherence to industry standard guidance. Through these measures, and those set out in the **Outline Biodiversity Landscape Mitigation Strategy (OBLMS) (7.6, REP3-014)**, there will not be any significant increase in effects to barn owls, above the existing background levels, arising from the Proposed Development through lighting or disturbance.
- 1.2.22 As set out in **Paragraph 11.9 Chapter 11 Terrestrial Biodiversity** of the **ES (6.1, REP2-023)**, construction or operation of REP will not sever any obvious bat commuting routes, and habitat links for bats moving through the wider landscape will be maintained. The measures set out above to ensure lighting will comply with industry standards, will ensure there will be no significant effects to commuting and foraging bats from light spill.
- 1.2.23 In response to TWUL's Written Representation (**REP2-092**), the Applicant responded in respect of noise levels at **Paragraphs 5.3.55-5.3.59** of the **Applicant's response to Written Representations (8.02.14, REP3-022)** submitted at Deadline 3. The submission states that, due to the resilience of birds nesting within the habitats towards the margins of the REP site, the potential effects on breeding birds from disturbance will be of low magnitude, temporary and localised to the REP site and its immediate surroundings and that potential construction disturbance will not affect the long-term distribution

and abundance of the assemblage of breeding birds within the study area or its nature conservation importance.

1.2.24 As stated above, the noise modelling and assessments were undertaken at a location in Crossness LNR, near to the south west corner of the West Paddock. This central location was chosen to demonstrate predicted noise levels at a representative location within the LNR, which would be relevant to a number of different ecological receptors in different locations within the LNR. The calculations of construction noise were undertaken in accordance with BS5228:2009 'Code of practice for noise and vibration control on construction and open sites'. The modelling identified a change in sound level at the representative location within Crossness LNR during construction, from 52dB to 62dB. Sound levels in the region of 50-60dB are typical of sound levels in most urban locations (including parks) situated in the vicinity of transportation infrastructure. During baseline surveys, lapwings were identified as breeding in the West Paddock. It is considered that if the habitat is currently suitable for breeding lapwing, as it is in the West Paddock, then lapwing will be resilient to reasonable levels of disturbance.

1.2.25 The Applicant addresses potential effects arising from proximity of the Anaerobic Digestion plant to Crossness LNR in the **Applicant's response to Written Representations (8.02.14, REP3-022)** at **Paragraphs 4.1.36 and 4.1.37**. This confirms that the effects would occur to marginal habitats in the immediate vicinity of the REP site - consisting of tall ruderal, semi-improved grassland, and scrub - which are not of high botanical diversity. Potential effects are therefore predicted to be Not Significant. Notwithstanding that there is no reason, in assessment terms, to reduce the modelled reasonable worst-case emissions from the Anaerobic Digestion plant, the Applicant has considered further mitigation measures. The Applicant has selected selective catalytic reduction, in combination with ammonia reagent, as the preferred technology choice for abatement of NOx from the CHP engine. The Applicant therefore confirms that a new Requirement will be inserted in the **dDCO (3.1)** submitted at Deadline 5.

1.2.26 TWUL asserts that the Applicant has not adequately taken into account the potential cumulative biodiversity effects of the REP proposals with the permitted Data Centre, although no explanation or evidence is provided by TWUL as to why this is considered to be the case. A cumulative assessment was conducted and included the construction and operation of the consented Data Centre, and potential effects to breeding birds. In light of the mitigation measures included within the **CoCP** and **OBLMS** which are secured through **Requirement 11** and **5**, respectively of the **dDCO (3.1, REP3-003)**, and the small areas of habitat used by birds that will be affected by REP, the findings of this assessment concluded that cumulative effects to breeding birds would be Not Significant. The assessment also concluded all other cumulative terrestrial biodiversity effects would be Not Significant.

1.2.27 The Applicant has committed to delivering an off-site compensation package which will address the net loss of biodiversity value across the Proposed Development and will replace the Open Mosaic Habitat in a like-for-like

manner. As stated in the Applicant's **Oral Summaries for the Issue Specific Hearing on Environmental Matters (Section 222.2) (8.02.19, REP3-027)**, as part of this exercise, the Environment Bank is examining sites in the local area, considering factors such as: proximity to the habitat to be lost; whether a site can contribute to green infrastructure; what habitats can be created; and if there is sufficient biodiversity uplift. The offset Open Mosaic Habitat is a principal component in the design and the Environment Bank is looking for a site(s) that can deliver this type of habitat.

1.2.28 The Applicant submitted the **Biodiversity Offset Delivery Framework (8.02.25, REP3-031)** at Deadline 3. This identifies the mechanics of the process by which an offset solution would be provided, including:

- Minimum of 10% biodiversity net gain;
- A site or sites to be identified which is suitable for the creation of the habitat of principal importance, being Open Mosaic Habitat;
- To be located within the wider vicinity of the Proposed Development; ideally within 15km and within the local authority area; and
- To be located in an area which enhances Green Infrastructure or contributes to a local Biodiversity Opportunity Area.

1.2.29 The report acknowledges that *"...not all sites will be suitable or appropriate for each offset requirement, and so the Environment Bank undertakes discussions for potential new offset opportunities with land agents, land surveyors, private landowners, non-governmental organizations and local charities"*. Whilst the Applicant would be willing to consider local opportunities, in discussion with LBB, the suitability of a proposed site or sites lies at the heart of the offset delivery process such that it is considered that the concern raised by TWUL would not occur. The existing biodiversity value of the site(s) will be a key factor, and sites with low or no biodiversity value will be most appropriate in order to provide the required biodiversity offset. Delivering the offset at a single site would be the preferred option, but it is acknowledged that this may not be possible, and a number of sites may be required. The biodiversity value of the site (or sites) will be calculated using a biodiversity metric, and which ever option is taken forward the required biodiversity offset units will be provided.

1.3 Applicant's response to Thames Water Utilities Limited's submissions on the draft Development Consent Order

1.3.1 TWUL has made a submission at Deadline 3 providing a summary of the oral submissions made by TWUL at the Issue Specific Hearing on the draft Development Consent Order (dDCO) held on 6 June 2019.

1.3.2 The submission sets out that TWUL does not have any comments on the Requirements in **Schedule 2** of the **dDCO (3.1, REP3-003)** at this stage and that the parties (TWUL and the Applicant) are in discussions on the mitigation

measures in relation to the environmental impacts upon the Crossness Nature Reserve.

- 1.3.3 TWUL has made initial contact with the Applicant on its proposed bespoke protective provisions which go further than the general protective provisions found in **Part 2 of Schedule 2** of the **dDCO (3.1, REP3-003)**.

Schedule 2 of the dDCO

- 1.3.4 The Applicant confirmed at **Paragraph 5.3.99** of the Applicant's response to **TWUL's Written Representation (8.02.14, REP3-022)** that it considers that the measures outlined in the **Outline Code of Construction Practice (7.5, REP2-046)** (secured under **Requirement 11** of the **dDCO (3.1, REP3-003)**) are sufficient to ensure that there is no residual significant adverse effects. In addition, the Applicant considers that the **Outline Biodiversity Landscape Mitigation Strategy (7.6, REP3-014)** (secured under **Requirement 5** of the **dDCO (3.1, REP3-003)**) which secures both the offsetting and the minimum 10% biodiversity net gain, together with the pre-commencement strategy required to be submitted under **Requirement 4** of the **dDCO (3.1, REP3-003)**, provide adequate ecological mitigation and off-setting for the Proposed Development. The Applicant is willing to discuss these documents further with TWUL if TWUL considers that is helpful.

Protective Provisions

- 1.3.5 The Applicant received bespoke protective provisions from TWUL on 18 June 2019. The Applicant is in the process of reviewing the draft protective provisions and will contact TWUL in relation to its proposals with the aim of reaching an agreement with TWUL before the end of the Examination.