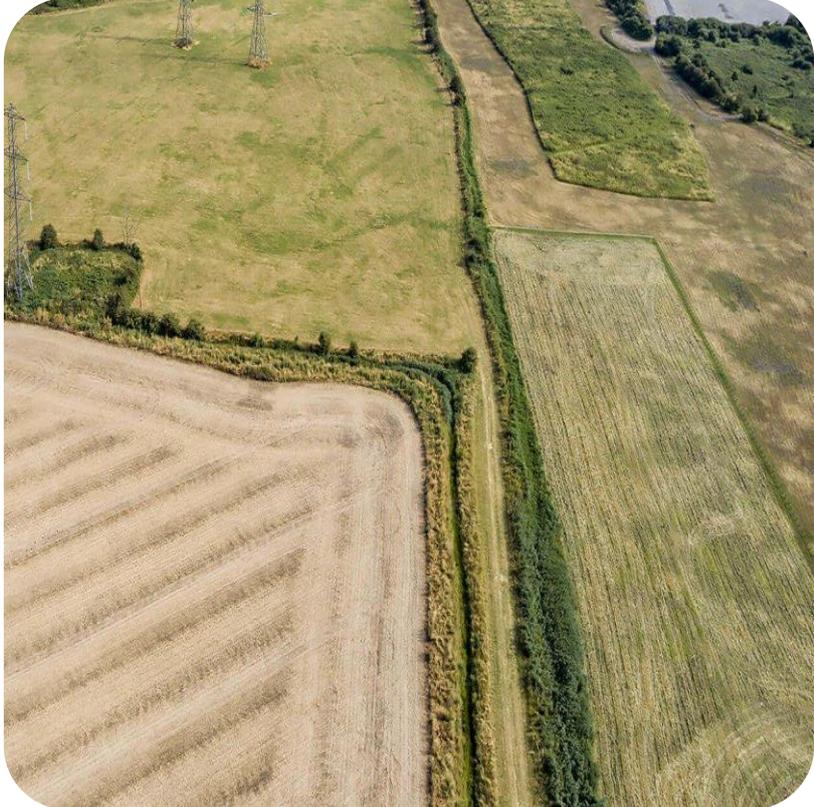




ES Addendum: Assessment of Causeway Decommissioning

Thurrock Flexible Generation Plant

Revision 0, November 2020



1 INTRODUCTION

1.1 Purpose of this document

- 1.1.1 This document is an addendum to the Environmental Statement (ES) submitted with the Thurrock Flexible Generation Plant Development Consent Order (DCO) application in May 2020. The purpose of this addendum is to provide information about the potential environmental effects of decommissioning the causeway.
- 1.1.2 In the application as submitted the causeway was proposed to be retained as a permanent structure and was therefore assessed on that basis in the ES. However, in light of the comments made by a number of interested parties in relevant representations, the Applicant has taken the decision that the causeway will be decommissioned – either at the end of the flexible generation plant’s operating lifetime, or potentially sooner if a suitable alternative means of access becomes available (as set out in the DCO requirements below).
- 1.1.3 It is therefore necessary to assess the potential environmental effects of this decommissioning activity. The assessment has been written as an addendum to the ES and draws from the assessments of the causeway construction activity in the ES, which are considered to be a good representation of decommissioning activities and effects given the uncertainties of making predictions for works that may occur several decades hence.

1.2 Causeway decommissioning works

- 1.2.1 The causeway will be decommissioned in accordance with the two DCO requirements set out below.
- 1.2.2 A Causeway Decommissioning Plan would be produced to detail the works and environmental management at the time, but in summary, decommissioning of the causeway would involve the removal of the security gate, concrete slabs and stone gabion foundations comprising the causeway structure. The permanent sea wall would be reinstated in place of the access gate. The mudflat area beneath the causeway and barge berthing pocket would refill through natural accretion. The stone from the causeway is likely to be repurposed for coastal defence works elsewhere and therefore likely to be removed by barge; whether by barge or road vehicle the transport requirements would be no greater than in construction.
- 1.2.3 Causeway decommissioning activities are therefore expected to give rise to types of potential impact that are similar to construction and which would be no greater in terms of magnitude or duration.

Review of access for abnormal indivisible loads.

- 17.—(1) Within five years from the date of final commissioning of the Work 1, the undertaker must submit a report of the review of access options for transportation of abnormal indivisible loads (AIL) to or from Work 1 in writing to the relevant planning authority.
- (2) If a permanent, feasible and economic alternative to use of the causeway to be constructed as Work 10 for AIL access is identified in the report submitted under sub-paragraph (1), then the undertaker must
- (a) submit applications for any consents required for that alternative AIL access within 6 months of the date of the submission of the review, and
 - (b) advise the relevant planning authority of the outcome of any applications under this sub-paragraph which were not determined by relevant planning authority within five business days of the undertaker being notified of that outcome.
- (3) Where all the consents required to create and/or use alternative AIL access are granted, the causeway to be constructed as Work 10 and the changes to the sea-defence wall to

be carried out as Work 11 must be decommissioned in accordance with requirement 18(3).

- (4) (a) Where the review undertaken under sub-paragraph (1) does not identify a permanent, feasible and economic alternative to use of the causeway to be constructed as Work 10 for AIL access, or the necessary consents to create or use such an access are not granted, then the undertaker must carry out a subsequent review within five years of the later of;
- (i) the submission of the review under sub-paragraph (1); or
 - (ii) the undertaker notifying the relevant planning authority of the refusal of consent under sub-paragraph 2(b);
- (b) where the review undertaken under this sub-paragraph identifies an environmentally acceptable, permanent, feasible and economic alternative to use of the causeway to be constructed as Work 10 for AIL access which was not identified in the previous review, sub paragraphs (2), (3) will apply as if the report had been submitted under sub-paragraph (1),
- (c) Where a subsequent review undertaken under this sub-paragraph does not identify a permanent, feasible and economic alternative to use of the causeway to be constructed as Work 10 for AIL access, then a further review will be required at each five year interval as if the subsequent review had been submitted under sub-paragraph (1).
- (5) In this requirement, a permanent, feasible and economic alternative means:
- (a) that the alternative route is available and will remain so for the flexible generation plant's operating lifetime;
 - (b) that transport of AIL via the alternative route is feasible and practicable, taking into account factors including but not limited to the physical characteristics of the AILs and the route (such as load limits and clearance), the agreement of landowners and having all of the consents required to create and/or use the alternative route; and
 - (c) that the alternative route costs no more than 10% more than the cost of shipment from the port of delivery, berthing and unloading at the causeway.

Causeway Decommissioning Plan.

18.—(1) Where in accordance with requirement 17(3), the causeway to be constructed as Work 10 is to be decommissioned, the undertaker must, within 6 months of the undertaker receiving all of the consents for which applications were made under requirement 17(2), submit a causeway decommissioning plan to the relevant planning authority for approval in consultation with the Environment Agency and PLA.

(2) Where Work 1 permanently ceases operation and no Causeway decommissioning plan has previously been approved under this requirement, the undertaker must, within 6 months of the operation of Work 1 ceasing, submit a causeway decommissioning plan to the relevant planning authority for approval.

(3) The causeway decommissioning plan must include:

- (a) a description of the decommissioning works and methods for Works 10 and 11;
- (b) a description of environmental management measures to be employed;
- (c) details of the reinstatement of the sea defence wall altered as part of Work 11;
- (d) details of the restoration of mudflat habitat; and
- (e) a timetable for implementation.

(4) Decommissioning of Works 10 and 11 must be carried out in accordance with the approved causeway decommissioning plan.

2 ENVIRONMENTAL EFFECTS

2.1 Landscape, visual resources and historic environment

- 2.1.1 The temporary adverse effects of visual disturbance to views, landscape character and heritage assets' settings during decommissioning activity would be no greater than assessed for construction.
- 2.1.2 The long-term effect of removing the causeway would be neutral, reverting the effects of its introduction as assessed for the operational phase of the development.
- 2.1.3 There would be no potential for impact on marine archaeology as the decommissioning activity would occur on the area already affected by causeway construction.

2.2 Land use, agriculture and socio-economics

- 2.2.1 The decommissioning activity would cause a temporary impact on use of the public right of way at the causeway head due to plant crossing it. This would have no greater effect than assessed for construction and would be managed under the Causeway Decommissioning Plan using similar methods as during construction.

2.3 Onshore ecology

- 2.3.1 Decommissioning work would have the same potential for temporary adverse impact on wintering birds, due to disturbance, as assessed for the construction work. As set out in the Habitats Regulations Assessment Report (HRAR), additional wintering bird surveys would be undertaken prior to decommissioning to inform the Causeway Decommissioning Plan, and if surveys indicate a significant change to the level of bird use of the foreshore in the vicinity of the causeway, an updated HRAR would be produced, and where necessary may involve restrictions on works during some or all of the winter period. Any necessary mitigation would be confirmed through the updated HRAR and Causeway Decommissioning Plan at the time

2.4 Marine environment

- 2.4.1 This assessment is provided in Section 4.3 of the revised ES Chapter 17: Marine Environment.

2.5 Traffic and transport

- 2.5.1 The temporary effects of HGV and worker trip generation from deconstruction would be no greater than assessed for construction of the causeway, with a similar volume of material and plant to be transported. The traffic generation effects would be less than for construction of the flexible generation plant as a whole.
- 2.5.2 Deconstruction traffic would be managed through similar good practice measures as those set out in the Construction Traffic Management Plan for construction, in consolidation with the highways authority and affected landowners. Details would be provided through the Causeway Decommissioning Plan.

2.6 Noise and vibration, air quality and human health

- 2.6.1 The temporary effects on air quality and at noise- and vibration-sensitive receptors would be no greater than assessed for construction of the causeway. Similar plant, working methods and programme are expected for deconstructing the causeway as for constructing it.
- 2.6.2 HGV trip generation from deconstruction would likewise be no greater than construction, as set out above, and therefore air pollution, noise and health effects from road traffic would be no greater.

2.7 Hydrology, flood risk and climate change

- 2.7.1 The effects of decommissioning would be no greater than assessed for construction. As with construction works, good practice management measures (similar to those set out in the Code of Construction Practice) to avoid pollutant spillage resulting in watercourse contamination would be required and these would be set out through the Causeway Decommissioning Plan.
- 2.7.2 Removal of the access gate and restoration of the permanent sea defence wall will need to match the standard of flood protection offered by the sea wall at the time, which would be confirmed through the Causeway Decommissioning Plan. There would therefore be no adverse effect on flood risk or increased effect due to climate change.

2.8 Geology, hydrogeology and ground conditions

- 2.8.1 The effects of decommissioning would be no greater than assessed for construction. As with construction works, good practice management measures (similar to those set out in the Code of Construction Practice) to avoid pollutant spillage resulting in ground contamination would be required and these would be set out through the Causeway Decommissioning Plan.

2.9 Shipping and navigation

- 2.9.1 The temporary impact of barge movements (if any are required) would have no greater effect than assessed for construction in the Shipping and Navigation Risk Assessment, as no greater number of barges would be needed. Details of any vessel movements and a further assessment of shipping/navigation risks, if required, would be provided through the Causeway Decommissioning Plan.

2.10 Conclusion

- 2.10.1 In conclusion, no significant adverse effects due to the activity of decommissioning of the causeway are predicted. The process would require similar activities to the construction phase, as assessed in the ES, and would be subject to good practice environmental management and mitigation measures to be developed through a Causeway Decommissioning Plan to discharge the applicable DCO requirement at the time.

2.11 Mitigation commitments

- 2.11.1 The Causeway Decommissioning Plan with the details of mitigation, management and monitoring measures as set out in DCO requirement 18 is an additional environmental mitigation commitment to those listed in APP-083, ES Volume 6, Appendix 2.1: Mitigation, Enhancement and Monitoring Commitments. This addendum should therefore be read together with Appendix 2.1.