

ENVIRONMENTAL STATEMENT -VOLUME 3 - APPENDIX 18.5 (CLEAN)

Cumulative Assessment Matrix

Drax Bioenergy with Carbon Capture and Storage

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations, 2009 – Regulation 5(2)(a)

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1. **CUMULATIVE ASSESSMENT MATRIX**

- 1.1.1. **Table 1.1** presents the assessment of cumulative impacts with the Proposed Scheme.
- 1.1.2. Information provided in **Table 1.1** below represents likely significant effects of the Proposed Scheme with third party developments using publicly available information available at the time of conducting the assessment.

Table 1.1 - Cumulative Assessment Matrix – Construction and Operation

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
Air Qu	ality				
1	EN010081 Eggborough CCGT	Permitted EIA Development	Operation: Air quality modelling of cumulative impacts reported in Chapter 6 (Air Quality) has incorporated operational emissions associated with Eggborough CCGT. The modelled results have demonstrated that cumulative emissions in the With Proposed Scheme and other projects scenario will have no significant effect on local air quality with respect to human health. For ecological receptors, the cumulative impact assessment has identified the potential for significant effects in relation to ammonia concentrations and nitrogen and acid deposition at a number of statutory and non-statutory designated sites within the operational study area.	Mitigation applied to the Proposed Scheme Main Stack to reduce potential impacts relating to acid deposition attributed to the With Proposed Scheme scenario emissions only. Cumulative emissions modelling also incorporated the mitigated emissions. Specifically, the Main Stack mitigation applied to the With Proposed Scheme scenario was: Reduce SO ₂ emissions by 40%, applied to the two BECCS Biomass Units; Increase exit temperature of flue gases from the BECCS units to 103°C.	Operation: Without and with Proposed Scheme mitigation, the potential for significant effects on a number of statutory and nonstatutory designated sites could not be screened out. The results of the cumulative impact assessment were passed to the Project Ecologist to determine whether or not there is a likely significant effect. The outcomes of this analysis are reported in the ecology cumulative assessment below, and in Section 4.3 of the Habitats Regulations Assessment Report (APP-185, to be updated at Deadline 2).
3	2022/0711/EIA Scotland to England Green Link 2 (SEGL2) Project	Submitted, not decided	Construction: Potential for some temporal overlap in construction activities, with the potential to generate dust emissions and associated local air quality impacts. Provided that each project implements appropriate dust mitigation measures, applied via a CEMP or similar, there will be no significant air quality effects.	Appropriate construction mitigation measures to be implemented for the Proposed Scheme are detailed in Chapter 6 (Air Quality) and Appendix 6.2. Provided that the SELG2 project implements appropriate measures during the construction phase, there will be no significant air quality effects.	Construction: Neutral (not significant)
4	EN010114 Keadby 3 Low Carbon Gas Power Station	Submitted EIA development	Operation: Air quality modelling of cumulative impacts reported in Chapter 6 (Air Quality) has incorporated operational emissions associated with Keadby 3. The modelled results have demonstrated that cumulative emissions from the Proposed Scheme and other projects will have no significant effect on local air quality with respect to human health.	Mitigation applied to the Proposed Scheme Main Stack to reduce potential impacts relating to acid deposition attributed to the With Proposed Scheme scenario only. Cumulative emissions modelling also incorporated the mitigated emissions. Specifically, the Main Stack mitigation	Operation: Without and with Proposed Scheme mitigation, the potential for significant effects on a number of statutory and nonstatutory designated sites could not be screened out. The results of the cumulative impact assessment were passed

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			For ecological receptors, the cumulative impact assessment has identified the potential for significant effects in relation to ammonia concentrations and nitrogen and acid deposition at a number of statutory and non-statutory designated sites within the operational study area.	applied to the With Proposed Scheme scenario was: ~ Reduce SO ₂ emissions by 40%, applied to the two BECCS Biomass Units; ~ Increase exit temperature of flue gases from the BECCS units to 103°C.	to the Project Ecologist to determine whether or not there is a likely significant effect. The outcomes of this analysis are reported in the ecology cumulative assessment below, and in Section 4.3 of the Habitats Regulations Assessment Report (APP-185, to be updated at Deadline 2).
6	NY/2022/0027/SCO Barlow Ash Mound, North West of Drax Power Station	Scoping	Construction: Potential for some temporal overlap in construction activities, with the potential to generate dust emissions and associated local air quality impacts. Provided that each project implements appropriate dust mitigation measures, applied via a CEMP or similar, there will be no significant air quality effects.	Appropriate construction mitigation measures to be implemented for the Proposed Scheme are detailed in Chapter 6 (Air Quality) and Appendix 6.2 and secured as part of the CEMP required by DCO Requirement. Provided that the Barlow Ash Mound project implements appropriate measures during the construction phase, there will be no significant air quality effects.	Construction: Neutral (not significant)
7	2022/0358/FULM: Resubmission of 2021/0120/FULM Development of a Horticultural Facility for indoor farming and agri- tech	Submitted awaiting decision	Construction: Potential for some temporal overlap in construction activities, with the potential to generate dust emissions and associated local air quality impacts. Provided that each project implements appropriate dust mitigation measures, applied via a CEMP or similar, there will be no significant air quality effects. Operation: The impacts of the proposed energy centre (photovoltaics, small boiler, backup generators) on human and ecological receptors were assessed by the developer. The potential for cumulative impacts is limited to receptors in Camblesforth. Maximum cumulative NO2 concentrations are well below the objectives (<10µg/m³) for the protection of human health and the cumulative impact is of negligible significance. Outside of Camblesforth, the impacts of the energy centre are imperceptible and, in the context of incombination impacts on ecological sites, de minimis.	Appropriate construction mitigation measures to be implemented for the Proposed Scheme are detailed in Chapter 6 (Air Quality) and Appendix 6.2 and secured as part of the CEMP required by DCO Requirement. Provided that the other project implements appropriate measures during the construction phase, there will be no significant air quality effects. No additional mitigation required for cumulative operational impacts with this development beyond that already proposed for the Proposed Scheme: - Reduce SO ₂ emissions by 30%, applied to all four Biomass Units;	Construction: Neutral (not significant) Operation: Neutral (not significant)

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				- Increase exit temperature of flue to 103°C.	
8	2020/1357/FULM Development of an energy storage facility, Land off New Road, Drax	Permitted development	Construction: Potential for some temporal overlap in construction activities, with the potential to generate dust emissions and associated local air quality impacts. Provided that each project implements appropriate dust mitigation measures, applied via a CEMP or similar, there will be no significant air quality effects.	Appropriate construction mitigation measures to be implemented for the Proposed Scheme are detailed in Chapter 6 (Air Quality) and Appendix 6.2 and secured as part of the CEMP required by DCO Requirement. Provided that the energy storage project implements appropriate measures during the construction phase, there will be no significant air quality effects.	Construction: Neutral (not significant)
47	20/01774/TIPA Energy from Waste Plant, Land northwest of Sandall Stones Road, Kirk Sandall, Doncaster	Permitted development	Operation: Air quality modelling of cumulative impacts reported in Chapter 6 (Air Quality) has incorporated operational emissions associated with Eggborough CCGT. The modelled results have demonstrated that cumulative emissions in the With Proposed Scheme and other projects scenario will have no significant effect on local air quality with respect to human health. For ecological receptors, the cumulative impact assessment has identified the potential for significant effects in relation to ammonia concentrations and nitrogen and acid deposition at a number of statutory and non-statutory designated sites within the operational study area.	Mitigation applied to the Proposed Scheme Main Stack to reduce potential impacts relating to acid deposition attributed to the With Proposed Scheme scenario emissions only. Cumulative emissions modelling also incorporated the mitigated emissions. Specifically, the Main Stack mitigation applied to the With Proposed Scheme scenario was: - Reduce SO ₂ emissions by 40%, applied to the two BECCS Biomass Units; - Increase exit temperature of flue gases from the BECCS units to 103°C.	Operation: Without and with Proposed Scheme mitigation, the potential for significant effects on a number of statutory and nonstatutory designated sites could not be screened out. The results of the cumulative impact assessment were passed to the Project Ecologist to determine whether or not there is a likely significant effect. The outcomes of this analysis are reported in the ecology cumulative assessment below, and in Section 4.3 of the Habitats Regulations Assessment Report (APP-185, to be updated at Deadline 2).

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
49	2021/1089/FULM Development of an battery storage facility, Land off Hales Lane, Drax	Permitted development	Construction: Potential for some temporal overlap in construction activities, with the potential to generate dust emissions and associated local air quality impacts. Provided that each project implements appropriate dust mitigation measures, applied via a CEMP or similar, there will be no significant air quality effects.	Appropriate construction mitigation measures to be implemented for the Proposed Scheme are detailed in Chapter 6 (Air Quality) and Appendix 6.2 and secured as part of the CEMP required by DCO Requirement. Provided that the battery storage project implements appropriate measures during the construction phase, there will be no significant air quality effects.	Construction: Neutral (not significant)
92	22/02118/STPLFE Construction of a relief road from Thorpe Road to Station Road, and construction of an industrial unit.	Submitted, awaiting decision	Operation: Potential for localised cumulative impacts on Barn Hill SSSI and Humber SAC due to traffic emissions. Over the Humber Estuary SAC, modelled cumulative impacts increase from 0.5% to 0.6% of critical load for nitrogen deposition and can be screened as not significant. Modelled cumulative impacts on Barn Hill SSSI increase from 1.8% to 3.6% of critical load for acid deposition. These increases decrease with distance from the roadside. The cumulative effects are considered within the Ecology section.	Given the spatially limited potential for impacts, no additional mitigation required above that identified within Chapter 6 (Air Quality) . Cumulative emissions modelling (excluding this development) incorporated the mitigated Proposed Scheme emissions. Specifically, the Main Stack mitigation applied to the With Proposed Scheme scenario was: - Reduce SO ₂ emissions by 30%, applied to all four Biomass Units; - Increase exit temperature of flue to 103°C.	Operation: See ecology section
102	EN070006 Humber Low Carbon Pipelines	Scoping Report and PEIR submitted.	Construction: Potential for some temporal overlap in construction activities, with the potential to generate dust emissions and associated local air quality impacts. Provided that each project implements appropriate dust mitigation measures, applied via a CEMP or similar, there will be no significant air quality effects.	Appropriate construction mitigation measures to be implemented for the Proposed Scheme are detailed in Chapter 6 (Air Quality) and Appendix 6.2. Provided that the Low Carbon Pipeline project implements appropriate measures during the construction phase, there will be no significant air quality effects.	Construction: Neutral

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3	2022/0711/EIA SEGL2 (Scotland to England Green Link 2) project	Submitted, awaiting decision	Construction: The cumulative effects will be influenced by the construction of the underground cable, if there are works simultaneous with the Project. For instance, receptor Wren Hall is within less than 50m to the construction activities of this development, therefore, noise arising from the excavation and trenching techniques are likely to be dominant. The cumulative effects are expected to be Moderate. Operation: Cumulative effects expected to be Neutral.	Best Practicable Means for construction. Noise mitigation at source for Drax BECCS equipment during operation.	Construction: Effects arising from the construction of the underground cable will be dominant. The cumulative residual effects are expected to be Slight Adverse (not significant). Operation: Cumulative effects expected to be Neutral.
6	NY/2022/0027/SCO Barlow Mound recovery of ash resource	Scoping	Construction: A Scoping Opinion was published in April 2022. It indicates that Selby DC EHO is content with the methodology proposed for construction noise and vibration assessment. A construction assessment will be undertaken in accordance with BS5228. There is potential for adverse effects at Barlow. The cumulative effects are expected to be low with mitigation in place. Operation: A Scoping Opinion was published in April 2022. It indicates that Selby DC EHO is content with the methodology proposed for operational noise assessment. There is potential for effects at Barlow, which are expected to be low with mitigation in place. An operational noise assessment will be undertaken in accordance with BS4142.	Best Practicable Means for construction. Noise mitigation at source for Barlow Mound recovery equipment during operation. Noise mitigation at source for Drax BECCS equipment during operation.	Construction: The cumulative residual effects are expected to be Slight Adverse (not significant), subject to confirmation in the proposed development's ES. Operation: The cumulative residual effects are expected to be slight adverse (not significant), subject to confirmation in the scheme's ES.
7	2022/0358/FULM: Resubmission of 2021/0120/FULM Development of a Horticultural Facility for indoor farming and agri- tech	Submitted, awaiting decision	Construction: There is no assessment of construction noise and vibration supporting the planning application. Using professional judgement it has been assumed that there will be temporary effects however these would be managed by the applicant for ID7. Noise effects during construction for the Proposed Scheme alone are not significant. Operational: The Noise Impact Assessment, dated March 2022, presents an assessment in accordance with BS4142:2019. This indicates that the impact at the nearest sensitive receptors will be Negligible during operation of the project.	Construction: Best Practicable Means for construction for development ID7 and the Proposed Scheme. A CEMP, that will include noise mitigation, will be produced for the Proposed Scheme and approved by the LPA. It is the responsibility of the applicant for ID7 to ensure the construction noise levels for that project do not generate a significant adverse effect. Operation: It is the responsibility of the applicant for ID7 to ensure the operation noise levels for that project do not generate a significant adverse effect and of the LPA to include conditions, as	Construction: Moderate adverse (significant) at the nearest sensitive receptors south west of the development, dominated by this project (ID7) instead of the Proposed Scheme. It is assumed that the applicant for ID7 will ensure that mitigation is implemented to reduce construction noise levels to a level that does not generate a significant adverse effect in which case the magnitude of the effect would reduce. Assuming the adoption of the previous planning conditions (prior to the application being submitted) including mitigation measures (Condition

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				appropriate, to ensure this is achieved. Noise mitigation for ID7 includes noise control at source for roof plant as well as noise barriers to be constructed from continuous overlapped closed boards with a nominal surface density of 15 kg/m². The Noise Impact Assessment suggests that there will be a negligible impact during operation. Noise mitigation at source for Drax BECCS equipment during operation. The Applicant is committed to meet noise limits at the noise sensitive receptors and also at 5m from the equipment as stipulated in Schedule 2 Requirement 17 of the dDCO.	16), in addition to the use of Best Practicable Means for construction, the effects could be expected to be temporary and slight (not significant); Operational: Slight adverse (not significant). The noise levels reported in the Noise Impact Assessment suggest that the impact will be Negligible during operation of the project.
8	2020/1357/FULM Development of an energy storage facility	Permitted development	Construction: There is low potential for adverse cumulative effects. Operational: Condition 16 requires rating levels to be no greater than +5dB compared to background noise levels. There is low potential for adverse cumulative effects.	Best Practicable Means for construction. Noise mitigation at the development to comply with Condition 16. Noise mitigation at source for Drax BECCS equipment during operation.	Construction: Low potential for cumulative effects. The cumulative residual effects are expected to be Slight Adverse (not significant). Operational: Condition 16 requires rating levels to be no greater than +5dB compared to background noise levels. Low potential for cumulative effects. The cumulative residual effects are expected to be Neutral.

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9	2021/0348/SCN Five wind turbines	Screening request, EIA required	Construction: There is low potential for cumulative effects during construction. Operational: There is low potential for cumulative effects during operation. However, a noise assessment should be prepared with a methodology agreed with the EHO.	Best Practicable Means for construction. Implement mitigation advice on a noise assessment report for this development. Noise mitigation at source for Drax BECCS equipment during operation - as secured by a dDCO requirement.	Construction: Low potential for cumulative effects. The cumulative residual effects are expected to be Slight Adverse (not significant). Operational: Low potential for cumulative effects. The cumulative residual effects are expected to be Slight.
10	2021/0788/EIA Development of a ground-mounted solar farm	Permitted development	Construction: There is no assessment of construction noise and vibration supporting the planning application. Using professional judgement it has been assumed that there would be temporary effects however these will be managed by the applicant for ID10. Noise effects during construction for the Proposed Scheme alone are not significant. Operational: The Noise Impact Assessment, dated February 2021, presents an assessment in accordance with BS4142:2019. The Applicant responded comments from the EHO at Selby DC in August 2021. This indicates that the impact at the nearest sensitive receptors will be low with mitigation in place.	Construction: Best Practicable Means for construction for ID10 and the Proposed Scheme. A CEMP, that will include noise mitigation, will be produced for the Proposed Scheme and approved by the LPA. It is the responsibility of the applicant for ID10 to ensure the construction noise levels for that project do not generate a significant adverse effect. Operation: Noise mitigation to comply with agreed noise limits for this development. Mitigation for ID10 includes 3m high acoustic barriers to be of a close-boarded construction, with no gaps and a minimum mass per square metre of 10 Kg/m². It has assumed, for the purposes of this assessment, that the proposed noise mitigation measures will reduce noise to a level that will not result in a significant noise effect however it will be the responsibility of the applicant for ID7 to ensure the operation noise levels for that project do not generate a significant adverse effect and of the LPA to include conditions, as appropriate, to ensure this is achieved.	Construction: Moderate adverse (significant) at the nearest sensitive receptors south west of the development, dominated by this project (ID10) instead of the Proposed Scheme. It is assumed that the applicant for ID10 and LPA will ensure that mitigation is implemented to reduce construction noise levels to a level that does not generate a significant adverse effect in which case the magnitude of the effect would reduce. Operational: Slight adverse (not significant). The noise levels reported in the response to the EHO suggest that this project (ID 10) will dominate the noise climate at the nearest sensitive receptors west of the development during operation of both projects. The applicant for ID10 has agreed on noise mitigation with Selby DC and it has been assumed that this will reduce noise levels to a level that is not significant resulting in a slight adverse (not significant) effect.

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
				Noise mitigation at source for Drax BECCS equipment during operation. The Applicant is committed to meet noise limits at the noise sensitive receptors and also at 5m from the equipment as stipulated in Schedule 2 Requirement 17 of the dDCO.	

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
12	2020/0994/FULM Drax Demolition of Flue Gas Desulphurisation (FGD) Plant	Permitted development	Construction: Due to the phasing of ID12, the demolition of absorber units 4, 5, and 6 to be carried out before the Proposed Scheme, and the demolition of Absorber Units 1, 2 and 3 to be carried out after construction of the Proposed Scheme so no significant cumulative construction effects are anticipated. Operation: With mitigation implemented for both schemes, there is low potential for cumulative effects with demolition of ID12 absorber units 1, 2 and 3 alongside operation of the Proposed Scheme.	Noise mitigation at source for Drax BECCS equipment during operation. The Applicant is committed to meet noise limits at the noise sensitive receptors and also at 5m from the equipment as stipulated in Schedule 2 Requirement 17 of the dDCO. Demolition for ID12 will be carried out in line with Condition 03 of the Decision Note.	Construction: N/A Operation: Low potential for cumulative effects.
20	2019/0458/OUTM Residential development for up to 40 custom built dwellings	Submitted, not decided	Construction: Due to size of the development and likely programme. There is low potential for cumulative effects. Operational: Due to likely number of vehicle movements during operation of this development, there is low potential for cumulative effects.	Best Practicable Means for construction. Noise mitigation at source for Drax BECCS equipment during operation.	Construction: Low potential for cumulative effects. The cumulative residual effects are expected to be Neutral. Operational: Low potential for cumulative effects. The cumulative residual effects are expected to be Neutral.
49	2021/1089/FULM Development of a battery storage facility	Permitted development	Construction: There is low potential for cumulative effects. Operational: There is low potential for cumulative effects. The noise assessment report No. 102592-2, December 2021, indicates that an assessment was undertaken based on BS4142 and that there are no significant effects expected from the development.	The development includes a 4.5 m noise barrier to reduce noise levels at the nearest receptor. Noise mitigation at source for Drax BECCS equipment during operation.	Construction: Low potential for cumulative effects. The cumulative residual effects are expected to be Neutral. Operational: Low potential for cumulative effects. The cumulative residual effects are expected to be Slight.

2022/1257/FULM **Construction: Moderate adverse 75** Submitted. Construction: There is no assessment of construction noise Construction: awaiting decision and vibration supporting the planning application. It has been (significant) at the nearest Best Practicable Means for ID75 and Battery storage system assumed that there will be temporary effects however these sensitive receptors south west of and associated works the Proposed Scheme. A CEMP, that will be managed by the applicant for ID75. Noise effects during the development, dominated by will include noise mitigation, will be construction for the Proposed Scheme alone are not this project (ID75) instead of the produced for the Proposed Scheme Proposed Scheme. It is assumed significant. and approved by the LPA. that the applicant for ID75 and Operation: The Noise Impact Assessment, dated August 2022, It is the responsibility of the applicant LPA will ensure that mitigation is presents an assessment in accordance with BS4142:2019. for ID75 to ensure that construction implemented to reduce This indicates that the impact at the nearest sensitive noise levels for that project do not construction noise levels to a level receptors on Barlow Road are likely to receive an adverse generate a significant adverse effect. that does not generate a impact, depending on the context. A 6m noise barrier has been significant adverse effect in which Operation: proposed for the development and Selby District Council case the magnitude of the effect Environmental Health officer confirmed that "I am satisfied with Mitigation for ID75 will include the site would reduce. the assessment and the proposed noise mitigation measure of will include 6m high acoustic barriers installing 6m high acoustic barriers that will be a solid, sealed Operation: Slight adverse (not which should a propriety absorptive construction, containing no gaps or holes and will have a significant). The noise levels acoustic barrier, with a solid sealed minimum mass per unit area of 15kg/m². I am also satisfied reported in the Noise Impact construction, containing no holes or with the positioning of these acoustic barriers." Assessment suggest that this gaps and a minimum mass per unit project (ID75) will dominate the area of 15 kg.m-2. It also includes that noise climate at the nearest the site ground it dropped by 1m and sensitive receptors during that the absorptive acoustic barrier operation of both projects. should be at the "higher" ground level. However, with the 6m high noise It has been assumed, for the barrier in place it has been purposes of this assessment, that the assumed that levels would be proposed noise mitigation measures reduced to not significant. It will be will reduce noise to a level that will not the responsibility of the applicant result in a significant noise effect for ID75 and the LPA (via noise however it will be the responsibility of conditions) to ensure that noise the applicant for ID75 to ensure the levels do not result in a significant operation noise levels for that project effect. do not generate a significant adverse effect and of the LPA to include conditions, as appropriate, to ensure this is achieved. Noise mitigation at source for Drax BECCS equipment during operation. The Applicant is committed to meet noise limits at the noise sensitive receptors and also at 5m from the equipment as stipulated in Schedule 2 Requirement 17 of the dDCO.

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99	21/02915/STPLF Erection of two industrial units for B8 and E(g) use, incorporating two storey office block for associated business use, with associated works	Submitted, awaiting decision	Construction: There is no assessment of construction noise and vibration supporting the planning application. Using professional judgement it has been assumed that there would be temporary effects however these will be managed by the applicant for ID99. Operation: The Noise Impact Assessment, dated September 2022, presents an assessment indicating that the noise impact during the operation of the development would be low.	Construction: Best Practicable Means for ID99 and the Proposed Scheme. A CEMP, that will include noise mitigation, will be produced for the Proposed Scheme and approved by the LPA. Operation: Noise mitigation at source for Drax BECCS equipment during operation. The Applicant is committed to meet noise limits at the noise sensitive receptors and also at 5m from the equipment as stipulated in Schedule 2 Requirement 17 of the dDCO. 3m noise barrier along the west boundary of ID99.	Construction: Moderate adverse (significant) at the nearest sensitive receptors south west of the development, dominated by this project (ID99) instead of the Proposed Scheme. It is assumed that the applicant for ID99 and LPA will ensure that mitigation is implemented to reduce construction noise levels to a level that does not generate a significant adverse effect in which case the magnitude of the effect would reduce. Operation: Negligible.
100	22/01930/STPLF Erection of 14 industrial/warehouse units (Use Classes E g(ii) and (iii), B2 and B8) and use of land as an EV charging station	Submitted, awaiting decision	Construction: There is no assessment of construction noise and vibration supporting the planning application. Using professional judgement it has been assumed that there would be temporary effects however these will be managed by the applicant for ID100. Operation: There is no assessment of operational noise supporting the planning application. As there are no sensitive noise receptors in the vicinity of ID100 it is anticipated there would be negligible cumulative noise effects.	Construction: Best Practicable Means for construction for ID100 and the Proposed Scheme. A CEMP, that will include noise mitigation, will be produced for the Proposed Scheme and approved by the LPA. Operation: Noise mitigation at source for Drax BECCS equipment during operation. The Applicant is committed to meet noise limits at the noise sensitive receptors and also at 5m from the equipment as stipulated in Schedule 2 Requirement 17 of the dDCO.	Construction: Moderate adverse (significant) at the nearest sensitive receptors south west of the development, dominated by this project (ID100) instead of the Proposed Scheme. It is assumed that the applicant for ID100 and LPA will ensure that mitigation is implemented to reduce construction noise levels to a level that does not generate a significant adverse effect in which case the magnitude of the effect would reduce. Operation: Negligible.

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102	EN070006 Humber Low Carbon Pipelines	Scoping Report and PEIR submitted.	Construction: Consultation with Selby DC on Table 12.2 of the published PEIR outlines that any cumulative impacts related to Drax's BECCS project should be considered. It is noted that this has not been presented in the PEIR, however, the PEIR acknowledged that it will be prepared for the ES. It is noted that there are open cut trenching activities proposed at Drax. Sensitive receptors near BECCS may be subject to a cumulative effect. Using professional judgement it has been assumed that there would be temporary effects however these will be managed by the applicant for ID102. It is also noted that the construction period for ID102 is anticipated to be 2024-2026, which is shorter than that for the Proposed Scheme (2024-2029). Operation: The PEIR advises that operational noise from the AGI would be infrequent. Additionally, an AGI has already been assessed for the Proposed Scheme (only one would be in operation for the Proposed Scheme / ID102).	Construction: Best Practicable Means for construction for the Proposed Scheme and ID102. A CEMP, that will include noise mitigation, will be produced for the Proposed Scheme and approved by the LPA. ID102 will also produce a CEMP that will include noise mitigation measures including noise barriers at sensitive receptors, as appropriate. Operation: Noise mitigation at source for Drax BECCS equipment during operation. The Applicant is committed to meet noise limits at the noise sensitive receptors and also at 5m from the equipment as stipulated in Schedule 2 Requirement 17 of the dDCO.	Construction: Temporary slight adverse (not significant), subject to confirmation of the effects in the scheme's ES. It is assumed that the applicant for ID102 and LPA will ensure that mitigation is implemented to reduce construction noise levels to a level that does not generate a significant adverse effect. This could be done through management of the programme. Operation: Negligible.
Ecolog	ay T	I		I	
1	EN010081 Eggborough CCGT	Permitted EIA development	Construction: No cumulative effects are predicted during construction. Operation: The only potential cumulative impact pathway identified is for increased cumulative air quality impacts on designated sites. Operational emissions in the With Proposed Scheme scenario could be additive with those from Development 1. This would result in increased nitrogen and acid deposition, and elevated concentrations of nitrous oxides (NOx), sulphur dioxide (SO ₂) and ammonia (NH ₃) at designated sites relative to operation of the Proposed Scheme alone. Cumulative air quality modelling is presented in Section 6.12 of Chapter 6 (Air Quality) of the ES (APP-042). It should be noted that the air quality modelling does not consider cumulative air quality impacts on a project by project basis, rather it provides modelled outputs for the Proposed Scheme plus all other relevant emitting developments. The assessment presented below is based on dispersion modelling	Construction: none required Operation: operational emissions control measures from the Proposed Scheme.	Operation: N/A Operation: Cumulative residual effects are expected to be neutral, not significant for all sites, apart from Barn Hill Meadows SSSI for which a minor magnitude, long term, reversible, and therefore potentially significant effect at a National level is predicted.

of the operational emissions of the Proposed Scheme plus operational emissions from Developments 1, 4, 47, and 92. It is neither helpful or realistic to assess the operational emissions of the Proposed Scheme plus Development 1 only.

The detailed ecological assessment of cumulative air quality effects (pre-mitigation) on European Sites is presented in Table 3.14 of the **Habitats Regulations Assessment Report** (APP-185; to be updated for Deadline 2). The HRA Report identifies the potential for Likely Significant Effects arising from cumulative air quality impacts (acid deposition) in relation to Lower Derwent Valley SAC, Lower Derwent Valley Ramsar, and Thorne Moor SAC. In addition, the HRA Report identifies the potential for Likely Significant Effects arising from cumulative air quality impacts (nitrogen deposition) in relation to Thorne Moor SAC. The 1% screening criterion is exceeded for these European Sites and pollutants. No exceedances of the 1% screening criterion are predicted for other pollutants or for other European Sites. These effects have been considered in detail in the Appropriate Assessment section (Section 4) of the HRA Report (APP-185).

The HRA Report considers measures to mitigate (reduce) the impacts and effects of operational emissions in the With Proposed Scheme scenario on ecological receptors. These emission control measures act to reduce the concentration of SO₂ and NH₃ in the exhaust plume from the Main Stack. The temperature of emissions from the Main Stack is also increased. This increases the buoyancy of the gas leaving the Main Stack, which increases the dispersion of the plume. These measures reduce the concentrations / rate of deposition of pollutants onto European Sites and other ecological receptors. These measures are described in full in Appendix 5 to the Applicant's Responses to Examining Authorities First Written Questions, Revised Emissions Abatement Technical Note (document reference 8.9.5)

With these mitigation measures applied, the 1% air quality screening criterion is exceeded for the following European Sites and pollutants:

- Lower Derwent Valley SAC and Ramsar 1.6% of Critical Load for acid deposition;
- Thorne Moor SAC 1.5% of Critical Load for acid deposition and 1.3% of Critical Load for nitrogen deposition.

There are no exceedances for any other European Sites or any other pollutants.

The cumulative air quality impacts are not predicted to lead to perceptible effects to Lower Derwent Valley SAC and Ramsar, or to Thorne Moor SAC. This is due to the low magnitude of the cumulative impact that has been modelled; the series of conservative assumptions underpinning the air quality modelling, in particular assuming full load operation of all developments considered in the cumulative air quality modelling which in reality is extremely unlikely to occur; evidence from literature reviews; and the significant overall reductions in emissions of SO2 from Drax Power Station (and other sources) as a contributor to acidification in recent decades. The detailed analysis of these factors is presented in Section 4.3 of the HRA Report (APP-185).

Cumulative air quality effects are also relevant to a number of other statutory nationally designated sites. With the emissions control measures described above applied, the 1% air quality screening criterion is exceeded for the following nationally designated sites and pollutants:

- ∼ Lower Derwent Valley National Nature Reserve 1.6%;
- Breighton Meadows SSSI 1.6% of Critical Load for acid deposition;
- Derwent Ings SSSI 1.4% of Critical Load for acid deposition;
- Barn Hill Meadow SSSI 3.6% of Critical Load for acid deposition (with 1.8% of this impact driven by Development 92); and
- Thorne Moor SSSI 1.5% of Critical Load for acid deposition and 1.3% of Critical Load for nitrogen deposition.

Breighton Meadows SSSI and Derwent Ings SSSI are both underpinning SSSI for the Lower Derwent Valley SAC, SPA, and Ramsar. The Air Pollution Information System (APIS) (Air Pollution Information system, undated) identifies no features of Breighton Meadow SSSI as being more sensitive to air quality impacts than the SAC qualifying interests.

As such, the analysis for Lower Derwent Valley SAC and Ramsar also applies to Breighton Meadows SSSI. Therefore, no perceptible ecological effects to SSSI site features are predicted. For Derwent Ings SSSI, a number of features are recorded in the SSSI citation, that are not qualifying interests of the Lower Derwent Valley SAC and Ramsar. These are also reflected in the APIS site-relevant Critical Loads information (Air Pollution Information System, undated). The site-relevant Critical Loads information on APIS indicates that the Critical Loads and Critical Levels used for assessment of the Lower Derwent Valley SAC remain conservative for assessment of effects on Derwent Ings SSSI.

For example, APIS identifies golden plover as a feature of interest for the SSSI. APIS identifies habitats used by this species including 'moss and lichen dominated mountain summits' and 'raised and blanket bogs', which have nitrogen deposition Critical Load ranges of 5 – 10 kgN/ha/yr. A Critical Load range of 5 – 10 kgN/ha/yr suggests that these habitats are more sensitive to nitrogen deposition than the habitat (low and medium altitude hay meadows) which has been used for modelling nitrogen deposition impacts on Derwent Ings SSSI. This habitat has a Critical Load range of 20 – 30 kgN/ha/yr. A Critical Load of 20 kgN/ha/yr has been used for the purposes of the air quality modelling.

'Moss and lichen dominated mountain summits' and 'raised and blanket bogs', do not exist within or adjacent to Derwent Ings SSSI. As such, it is not appropriate to complete air quality modelling on the basis of these habitat types. Golden plover using Derwent Ings will be primarily associated with the flood plain (meadow) habitats present.

APIS also identifies that freshwater habitats are a relevant habitat for a number of the bird species associated with the SSSI. APIS identifies that there is 'no comparable habitat with established critical load class'. APIS goes on to state, in relation to this habitat type that 'These systems are often P [phosphorous] limited (or N [nitrogen] /P co-limiting), therefore decisions should be taken at a site specific level...'. A Technical Note was produced investigating N/P limitation of the River Derwent and River Ouse for the Drax Repower Scheme, which is provided as Appendix 6 of the HRA Report (APP-194). The work reported in this Technical Note identified that both the River Derwent and the River Ouse were P-limited rather than N-limited. That is to say, the ratio of N:P in each river suggested that additional inputs of nitrogen would have a very limited effect, as phosphorous was the limiting macronutrient.

In light of the above, the use of a 20 kgN/ha/yr Critical Load remains appropriate. The analysis for Lower Derwent Valley SAC and Ramsar is therefore also considered applicable to Derwent Ings SSSI. Therefore, no perceptible ecological effects to SSSI site features are predicted.

There is no air quality information for Lower Derwent Valley National Nature Reserve (NNR) available on the APIS website, as APIS does not hold information on any NNR. There is also no citation information for Lower Derwent Valley NNR which identifies specific interest features as are identified for the European Sites and SSSI. Within 15 km of the Main Stack, almost all of the Lower Derwent Valley NNR is within the boundary of the Lower Derwent Valley SAC / SPA and Ramsar, and therefore also within the Breighton Meadows and Derwent Ings SSSI (the Lower Derwent Valley NNR also overlaps with the boundaries of other SSSI, but these are all beyond 15 km from the Main Stack and therefore not relevant to the assessment of operational air quality effects). The assessment of effects on the Lower Derwent Valley SAC and Ramsar and Breighton Meadows and Derwent Ings SSSI are therefore considered applicable to Lower Derwent Valley NNR. Therefore, no perceptible effects to the NNR are predicted.

Thorne, Crowle and Goole Moors SSSI, is an underpinning SSSI for Thorne Moor SAC and SPA. The Air Pollution Information System (APIS) (Air Pollution Information System, Undated) identifies no features of Thorne, Crowle, and Goole Moors SSSI as being more sensitive to air quality impacts than the SAC qualifying interests. As such, the analysis for Thorne Moor SAC also applies to Thorne, Crowle and Goole Moors SSSI. Therefore, no perceptible ecological effects to SSSI site features are predicted.

Barn Hill Meadows SSSI has Critical Loads assigned on APIS for 'low and medium altitude hay meadows'. These have a Critical Load range of 20-30 kgN/ha/yr. A conservative Critical Load of 20 kgN/ha/yr has therefore been used. There are two Critical Loads for acid deposition available, one for 'acid grassland', and one for 'calcareous grassland (using base cation)' (Air Pollution Information System, undated). The acid grassland Critical Load for acid deposition has been used, as this is the most sensitive to acid deposition and therefore is conservative.

The air quality modelling for Barn Hill Meadows SSSI predicts no cumulative exceedance of the screening criterion for nitrogen deposition, with a maximum impact equivalent to 0.4% of Critical Load (see Appendix 5 to the Applicant's Responses to Examining Authorities First Written Questions, Revised Emissions Abatement Technical Note (document reference 8.9.5)). The maximum modelled acid deposition rate is equivalent to 3.6% of Critical Load. The cumulative air quality impacts are considered to have potential to trigger significant adverse effects to Barn Hill Meadows. A significant proportion of the cumulative impact (~50%) is generated by Development 92, which generates an impact that exceeds 1% of critical load by itself. Detailed analysis for Barn Hill Meadows SSSI is presented against Development 92 of this table, given the proportion of the impact driven by that development.

The air quality modelling for non-statutory designated sites identifies cumulative exceedances for nitrogen deposition for several Local Wildlife Sites (LWS) and Sites of Importance for Nature Conservation (SINC). Predicted impacts that exceed the 1% screening criterion for nitrogen deposition (as per the updated modelling in Appendix 5 to the Applicant's Responses to Examining Authorities First Written Questions, Revised Emissions Abatement Technical Note (document reference 8.9.5) are as follows:

- Common Plantation SINC 1.5% of Critical Load;
- Disused Railway Embankment SINC 1.3% of Critical Load;
- Barmby-On-The-Marsh LWS- 1.4% of Critical Load;
- ~ Cobble Croft Wood SINC 1.5% of Critical Load;
- Hagg Green Lane SINC 1.7% of Critical Load;
- Barlow Common SINC 1.7%; and
- Sand Pitt Wood and Barffs Close Plantation SINC 1.7% of Critical Load.

The cumulative air quality impacts are not predicted to lead to perceptible effects to locally designated sites. This is due to the low magnitude of the cumulative impact that has been modelled; the series of conservative assumptions underpinning the air quality modelling, in particular assuming full load operation of all developments considered in the cumulative air quality modelling which in reality is extremely unlikely to occur; and evidence from literature reviews. The detailed analysis of these factors is presented in Section 4.3 of the HRA Report (APP-185, to be updated at Deadline 2), with these factors also relevant to these SINCs and LWSs.

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			In light of the above assessment, including consideration of Proposed Scheme mitigation measures, cumulative air quality effects on designated sites are predicted to be negligible and therefore neutral (not significant) during operation, with the exception of Barn Hill Meadows SSSI, for which effects are predicted to be of minor magnitude, long term, reversible, and therefore potentially significant at a National level, on a precautionary basis.		
3	2022/0711/EIA SEGL2 (Scotland to England Green Link 2) project	Submitted, awaiting decision	Information has been obtained from the Ecology Chapter of the Environmental Statement, the Shadow Habitats Regulations Assessment Report, and the planning application consultation response from Natural England for Development ID3. The western limit of the High Voltage Direct Current (HVDC) cable is at the eastern boundary of the existing Drax Power Station Site, with a convertor station proposed in an agricultural field to the east of New Road. There is a minor overlap with the Order Limits for the Proposed Scheme in the far east of the existing Drax Power Station Site. The HVDC cable would be installed under the River Ouse downstream of the confluence of Carr Dike (which flows under the existing Power Station Site) with the River Ouse. The convertor station would result in permanent landtake of habitats east of the existing Drax Power Station site and to the south of the Eastern Laydown Area. There would also be temporary loss, disturbance, and fragmentation of habitats for the HVDC cable. The permanent landtake for the convertor station and the temporary effects of construction for the HVDC cable could lead to disturbance / loss of habitats for protected and notable species. This could include temporary disturbance of fish, bird, and otter populations associated with designated sites within the ZoI of the Proposed Scheme, including National Network Sites and SSSI. Construction is predicted to take place between 2024 – 2029, so would overlap with proposed timescales for construction and operation of the Proposed Scheme. There is potential for significant cumulative effects on the following Important Ecological Features (IEF) during Construction: Disturbance/disruption of bird and otter populations associated with European Sites and SSSI (including areas	The Applicant has proposed mitigation measures for predicted significant effects on IEF in Section 8.10 of Chapter 8: Ecology (APP-044) and embedded within the design of the Proposed Scheme. With these measures in place, the Proposed Scheme's effects on IEF are considered to be nugatory and could not contribute to significant cumulative effects on the following IEF during Construction or Operation: Migratory fish species (lamprey) using the River Ouse, that are associated with the Humber Estuary SAC and Ramsar site and the River Derwent SAC; and Otter, including those associated with the River Derwent SAC and other designated sites. Both the Proposed Scheme and ID3 propose to deliver 10% Biodiversity Net Gain (BNG). It is considered that this will address any significant cumulative effects of temporary and permanent loss of IEF habitats. This enhanced habitat provision is also expected to address any cumulative construction disturbance and habitat loss / disruption on bats and birds (incombination with standard good practice measures contained in each	Construction: Not Significant Operation: Not Significant

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			of habitat used by those species outside the boundaries of the designated sites); Temporary loss and/or disturbance of minor watercourses for cable installation, with affected watercourses in the vicinity of the Proposed Scheme potentially used by the population of otters associated with the River Derwent SAC and Lower Derwent Valley SAC and underpinning SSSIs; Loss and disturbance of farmland in the vicinity of the Proposed Scheme that could be used by wintering birds associated with the Lower Derwent Valley SPA and Ramsar and/or the Humber Estuary SPA and Ramsar and underpinning SSSI (functionally-linked land). The majority of habitat loss would be short term and temporary, associated with installation of the HVDC cable. There would be minor permanent habitat loss from the arable field where the convertor station would be located east of Drax Power Station; Cumulative temporary IEF habitat loss, disturbance, and fragmentation; and Additive disturbance of protected and notable species (not forming part of National Network Sites and SSSI populations), primarily bat and bird populations affected by construction of the Proposed Scheme and construction/operation of ID3. There is potential for significant cumulative effects on the following IEF during Operation: Permanent loss of habitat (arable farmland) at the site of the proposed convertor station additive with permanent habitat loss from the Proposed Scheme; Permanent loss of habitat which may be used by wintering birds at the site of the proposed convertor station being additive with temporary loss of habitat for wintering birds associated with the Eastern Laydown Area; Disturbance of protected and notable species (primarily bats and birds) by lighting associated with operation of the convertor station, being additive with operational lighting from the Proposed Scheme.	Project's CEMP). A Register of Environmental Actions and Commitments (REAC) has been produced for the Proposed Scheme (document reference 6.5, revision 05). The actions and commitments within the REAC would be secured by requirements in the DCO and would include a requirement for a Construction Environmental Management (CEMP) to be produced for the Proposed Scheme. The application for the Proposed Scheme is accompanied by a Lighting Strategy (APP-184), which sets out measures to minimise adverse environmental effects of lighting on the environment. The Ecology chapter of the ES for ID3 also identifies the need for careful lighting design at the convertor station. With these measures in place significant cumulative lighting disturbance of bats and birds is expected to be mitigated. In addition, the Ecology chapter of the ES for ID3 confirms that a suite of avoidance and mitigation measures will be implemented during construction of that scheme. These will support avoidance, minimisation, and mitigation of ID3's impacts on ecological receptors.	

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			The effects of the Proposed Scheme itself in terms of functionally-linked land that triggered LSE are very minor, comprising hedgerow planting within the Habitat Provision Area only. There would be no spatial overlap with ID3. The hedgerow planting in the Habitat Provision Area is not predicted to lead to any material change in the suitability of this area for otter or SPA/Ramsar/SSSI bird species.		
			In addition, mitigation has been proposed for the Proposed Scheme (see paragraph 4.1.4 of the HRA Report, APP-185, to be updated at Deadline 2) that would require hedgerow planting in the Habitat Provision Area to be timed to be completed at the end of the wintering bird season (March in any calendar year).		
			Depending on the detailed construction timings for ID 3 (which are not known but would likely be between 2024 2029), it is possible that the East Construction Laydown Area of the Proposed Scheme could be in use whilst construction activities for the ID 3 convertor station and adjacent sections of HVDC cable are ongoing / have been completed. This would increase the cumulative loss of farmland habitats to the east of the existing Drax Power Station.		
			Should this potential overlap occur, it is considered unlikely to significantly worsen the effects of the Proposed Scheme alone on SPA / Ramsar / SSSI bird species. This is because;		
			 The wintering bird surveys completed for the Proposed Scheme recorded no SPA/SSSI species in the East Construction Laydown Area; 		
			 The East Construction Laydown Area would be reinstated following construction, i.e. 2029 at the latest; 		
			The habitat enhancements proposed to the north of the East Construction Laydown Area (see Figure 1 of the Outline Landscape and Biodiversity Strategy (APP-181) would increase the potential suitability of this area for SPA / Ramsar / SSSI bird species; and		
			 Habitats within and adjacent to ID3's onshore works have been determined to be of low importance for SPA/Ramsar/SSSI bird species, with this finding agreed to by Natural England. 		

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			In relation to otter, the Proposed Scheme will have very minor effects on functionally-linked land, that are not expected to materially affect use of that land by otter. These effects are therefore not expected to combine appreciably with those of ID3, particularly given that the majority of ID3's impacts would be temporary, associated with the HVDC cable route where crossing watercourses and adjoining land. In addition, the Ecology chapter of the ES for ID3 confirms that a range of mitigation measures including pre-construction surveys for otter will be implemented during implementation of that scheme. It is also confirmed that ID 3 will implement standard good practice environmental mitigation, including the provision of an Ecological Clerk of Works for sensitive water crossings, pre-construction repeat surveys for otter, and, if required, micro-siting of the cable route to avoid key otter habitat features, e.g. holts if present. In addition, surveys for ID3 did not record any holts within or adjacent to the ID3 scheme in advance of the planning application being submitted. Natural England have agreed with the mitigation measures proposed.		
4	EN010114 Keadby 3 CCGT	Permitted DCO development	Construction: No cumulative effects are predicted during construction. Operation: Assessment as per Development ID 1 (Eggborough CCGT).	Construction: none required Operation: operational emissions control measures from the Proposed Scheme.	Construction: N/A Operation: Cumulative residual effects are expected to be neutral, not significant.
5	EN010094 Ferrybridge D CCGT	Scoping	Construction: No cumulative effects are predicted during construction. Operation: The only potential cumulative impact pathway identified is for increased cumulative air quality impacts on designated sites. The Air Quality modelling (see Chapter 6 (Air Quality) of Volume 1 of the ES (document reference 6.1.6) identifies that no modelling data was available that could be used to model the effects of Development 5. As such this cannot be considered in the cumulative air quality modelling. Furthermore, it is noted that there is considerable uncertainty that development 5 will actually come forward, with development 5 having made no public announcements since	Construction: none required Operation: operational emissions control measures from the Proposed Scheme.	Construction: N/A Operation: Cumulative residual effects are expected to be neutral, not significant.

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			2018. Development 5 is therefore unlikely to be operational or consented (and thus itself requiring an in-combination assessment and judgement to be made) prior to operation of the Proposed Scheme. It will therefore be necessary for Development 5 to factor the Proposed Scheme into their cumulative assessment of air quality effects.		
6	NY/2022/0027/SCO Barlow Ash Mound, recovery of ash resource	Scoping	Development 6 involves proposals for the mining and reclamation of ash from the 'Barlow Mound'. Barlow Mound has been used and remains in use for the disposal of ash generated by combustion of biomass at the Drax Power Station Site. Following reclamation of ash, the site would be restored. Development 6 is located approximately 40m west of the Proposed Scheme. Barlow Mound is known to support a range of habitats and protected and notable species, having been subject to a long-term programme of ecological monitoring and management by Drax. An EIA Scoping Report has been submitted to SDC, but no assessment of the potential ecological effects of Development 6 is yet available other than identification of potential impact pathways and high level mitigation principles. As such it is not possible to assess cumulative effects on ecology in detail. The EIA Scoping Report for Development 6 identifies that mining of Barlow Mound would be ongoing for approximately twenty years followed by landscape and habitat restoration works. As such, there is potential for ash mining and restoration works to be ongoing during both construction and operation of the Proposed Scheme. Given the proximity of Development 6 to the Proposed Scheme with habitat connectivity between the two, cumulative ecological effects could arise between the two. Effects could be adverse, for example increased potential for disturbance and displacement of protected species. Equally, effects could be positive in the long term, through combined delivery of Biodiversity Net Gain. The potential for in-combination (cumulative) effects between Development 6 and the Proposed Scheme has been considered in Section 4.3 of the Habitats Regulations Assessment Report (APP-185, to be updated at Deadline 2) in relation to European Sites. This predicts no adverse effects on the integrity of any European Site as set out below in the	Provision of habitat creation and enhancement, as per the Outline Landscape and Biodiversity Strategy; Precautionary measures to minimise risk of incidental mortality and disturbance during construction, for badger, birds, bats, and reptiles; Implementation of mitigation measures by Development 6 (details TBC).	Construction: Residual effects are predicted to be significant at up to a District level Operation: Residual effects are predicted to be neutral.

analysis of potential cumulative effects for European Sites and relevant underpinning SSSI.

The effects of the Proposed Scheme itself in terms of functionally-linked land that triggered LSE as identified in the HRA Report are very minor, comprising hedgerow planting within the Habitat Provision Area only. There would be no spatial overlap with Development 6. The hedgerow planting in the Habitat Provision Area is not predicted to lead to any material change in the suitability of this area for otter or SPA/Ramsar/SSSI bird species.

In addition, mitigation has been proposed for the Proposed Scheme (see paragraph 4.1.4) that would require hedgerow planting in the Habitat Provision Area to be timed to be completed at the end of the wintering bird season (March in any calendar year).

Depending on the detailed construction timings for Development 6 (which are not known, but would likely be between 2024 - 2039), it is possible that the East Construction Laydown Area of the Proposed Scheme could be in use whilst construction activities for the Development 3 convertor station and adjacent sections of HVDC cable are ongoing / have been completed. This would increase the cumulative loss of farmland habitats to the east of the existing Drax Power Station.

Should this potential overlap occur, it is considered unlikely to significantly worsen the effects of the Proposed Scheme alone on SPA / Ramsar / SSSI bird species. This is because;

- The East Construction Laydown Area would be reinstated following construction, i.e., 2029 at the latest; and
- The habitat enhancements proposed to the north of the East Construction Laydown Area (see Figure 1 of the Outline Landscape and Biodiversity Strategy (APP-181) would increase the potential suitability of this area for SPA / Ramsar / SSSI bird species.

It is also possible that the Proposed Scheme and Development 6 could lead to increased cumulative visual disturbance of SPA/Ramsar/SSSI bird species. The current red line boundary for Development 6 is shown on Figure 02 of the Development 6 EIA Scoping Report. The proposals for habitat measures in the Off-site Habitat Provision Area are shown on Figure 1 of the Outline Landscape and Biodiversity Strategy (APP-181). Based on these sources of information an existing band of dense scrub and tree cover would be maintained between

the existing / proposed open habitats (i.e. grassland) in the offsite Habitat Provision Area and Development 6. This would provide visual screening between Development 6 and the Off-Site Habitat Provision Area.

Barlow Mound is known to support a range of wildlife, having been subject to ecological monitoring by Drax for a number of years. Barlow Mound supports extents of woodland plantation and grassland habitats, with hedgerows, waterbodies and scattered scrub also present. Barlow Mound also supports breeding and wintering birds, populations of water voles, and a large number of badger setts. A small population of grass snake has also been recorded. Surveys for great crested newts in 2021 found no evidence of the species.

As set out in the EIA scoping report for Development 6, there is therefore the potential for ecological effects on these habitats and species during the proposed ash reclamation works. There is no potential for significant cumulative effects on water voles or great crested newts. In the case of water voles, this is because the Proposed Scheme is predicted to have no effects whatsoever on water voles. In the case of great crested newts, this is because the surveys for Development 6 found no evidence of great crested newts.

The combined habitat loss arising from the Proposed Scheme and Development 6 would be greater than the habitat loss arising from either development alone. As such there is the potential for cumulative effects to be more significant than those of either development alone. The Proposed Scheme includes a habitat creation and enhancement measures to address habitat loss and support the delivery of biodiversity net gain, as set out on **Figure 1** of the **Outline Landscape and Biodiversity Strategy** (APP-181). Cumulative habitat loss arising from the Proposed Scheme combined with Development 6 is predicted to remain significant at a local scale during construction, but with the impacts of the Proposed Scheme becoming non-significant as created and enhanced habitats mature during the operational stage.

There is limited potential for cumulative impacts on grass snake (or other reptile) populations recorded at Development 6, in the event that these also make use of habitats in the north of the Drax Power Station Site. The mitigation measures for the Proposed Scheme, as set out in **Section 8.10** of **Chapter 8** (Ecology) of Volume 1 of the ES (APP-044) would provide appropriate mitigation for the Proposed Scheme. Providing Development 6 implements suitable mitigation measures in

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			relation to the known population of grass snakes, significant cumulative effects should be avoided. There is also potential for cumulative effects on populations of bats and breeding and wintering birds (species not qualifying interests of statutory designated sites). Effects could arise due to the combined effects of loss of habitats and noise and visual disturbance from the Proposed Scheme and Development 6, should construction of the Proposed Scheme coincide with implementation of Development 6. These effects are considered to remain significant at up to a District scale (birds) and Local scale (bats) during construction. With implementation of the mitigation measures for bats and breeding and wintering birds, as set out in Section 8.10 of Chapter 8 (Ecology) of Volume 1 of the ES (APP-044), the effects of the Proposed Scheme are predicted to be positive at a Local level, for both bats and breeding and wintering birds. As such, there is no prospect of the Proposed Scheme contributing to negative cumulative effects on bat and bird populations during operation.		
7	2022/0358/FULM: Resubmission of 2021/0120/FULM Development of a Horticultural Facility for indoor farming and agri- tech	Submitted, awaiting decision	Construction: no significant cumulative effects are predicted. Operation: The impacts of the proposed energy centre (photovoltaics, small boiler, backup generators) on ecological receptors were assessed by the developer for ID7. The potential for cumulative impacts is limited to receptors in Camblesforth, where no ecological receptors are located. Outside of Camblesforth, the impacts of the energy centre are imperceptible and, in the context of potential for in-combination impacts and effects on ecological sites, <i>de minimis</i> .	None required	Construction: N/A Operation: Cumulative residual effects are expected to be neutral, not significant.
9	2021/0348/SCN 5 Wind turbines	Screening Request, EIA required	Development 9 would involve the erection and subsequent operation of five wind turbines. Development 9 is located approximately 1.9km west of the Proposed Scheme. An EIA Screening request was issued to SDC in March 2021, with SDC issuing an EIA Screening Opinion in June 2021 confirming an ES is required. The response from the NYCC Planning Ecologist identifies that they consider Development 9 needs to consider potential impacts on bird species associated with designated sites including the Lower Derwent Valley SPA / Ramsar and other SPA sites. The NYCC ecologist identifies	Provision of habitat creation and enhancement, as per the Outline Landscape and Biodiversity Strategy;	Residual effects are predicted be non-significant during construction and operation for all IEF.

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			that a shadow HRA and bird survey information should be submitted with any planning application for Development 9.		
			No other environmental information was available for Development 9.		
			Development 9 will be located approximately 1.9 km from the Proposed Scheme and may affect bird populations associated with designated sites in the ZoI of the Proposed Scheme. It could therefore potentially contribute to cumulative ecological effects on these receptors with the Proposed Scheme.		
			Given the distance between Development 9 and the Proposed Scheme (1.9 km), Development 9 is not predicted to lead to any displacement of birds from areas of land within or adjacent to the Proposed Scheme, where displacement from the Proposed Scheme could take place. As such, effects would be spatially separated.		
			There is however potential for effective loss of farmland habitats that could be used by wintering birds associated with the Lower Derwent Valley SPA and Ramsar and/or the Humber Estuary SPA and Ramsar, due to displacement of those birds in response to the presence of wind turbines. Such effects could be additive, if the same SPA/Ramsar/SSSI birds were subject to displacement from the Proposed Scheme and Development 9 (although given the intervening distance between Development 9 and the Proposed Scheme, there is a low risk of occurrence).		
			Depending on the detailed construction timings for Development 9 (which are completely unknown), it is possible that the East Construction Laydown Area of the Proposed Scheme could be in use whilst construction and operation of Development 9 is ongoing. This would increase the cumulative loss of farmland habitats in the area.		
			Should this potential overlap occur, it is considered unlikely to significantly worsen the effects of the Proposed Scheme alone on SPA / Ramsar bird species. This is because;		
			 The wintering bird surveys completed for the Proposed Scheme recorded no SPA/SSSI species in the East Construction Laydown Area; 		
			 The distance between Development 9 and The Proposed Scheme; 		

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			 The East Construction Laydown Area would be reinstated following construction, i.e., 2029 at the latest; and The habitat enhancements proposed to the north of the East Construction Laydown Area (see Figure 1 of the Outline Landscape and Biodiversity Strategy (APP-181) would increase the potential suitability of this area for SPA/Ramsar/SSSI bird species. With the mitigation measures to be implemented as part of the Proposed Scheme, cumulative effects are not predicted to arise. 		
10	2021/0788/EIA Ground-mounted solar farm	Permitted development	Development 10 involves the construction of a new solar farm across a 112ha site located approximately 1 km from the Proposed Scheme. The response from the NYCC Ecologist to the planning application states that they are confident that significant effects on the River Derwent SAC / SSSI can be ruled out, and that no further assessment under the Conservation of Habitats and Species Regulations (2017, as amended) is needed. On this basis, and given the scale and location of Development 10, there is considered to be no prospect of cumulative effects on statutory designated sites. Timescales for the construction of Development 10 are not clear, but is expected to take approximately six months. As such there is some limited potential for overlapping effects of construction of Development 10 with construction of the Proposed Scheme. If Development 10 is granted planning permission, it is likely it would be operational for much if not all of the operational period of the Proposed Scheme. The response from the NYCC Ecologist to the planning application for Development 10 states that they are satisfied that the Ecological Impact Assessment submitted addresses most of their concerns regarding ecological impacts and effects. They do however state that they remain concerned about impacts on farmland birds arising from loss of habitat to the solar array and associated infrastructure. The NYCC Ecologist proposes a series of planning conditions to address this, and to secure mitigation measures for other ecological features.	Arable habitats supporting farmland birds that will be temporarily lost during construction will be reinstated, with enhancements, following construction. Both the Proposed Scheme and Development 10 propose to deliver Biodiversity Net Gain (BNG). It is considered that this will address any significant cumulative effects of temporary and permanent loss of IEF habitats. This enhanced habitat provision is also expected to address any cumulative construction disturbance and habitat loss / disruption on farmland birds (incombination with standard good practice measures contained in each Project's CEMP) between the Proposed Scheme and Development 10. Assuming the recommended conditions provided by the NYCC Ecologist in their response to the Development 10 planning application are adopted, mitigation for that projects impacts will be secured.	Residual effects are predicted be non-significant during construction and operation for all IEF.

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			There is potential for significant cumulative effects on the following Important Ecological Features (IEF) during Construction: ~ Additive disturbance and habitat loss for breeding and wintering birds. There is no potential for significant cumulative effects during Operation, as the Proposed Scheme will result in negligible to no permanent loss of arable habitat. Given the Proposed Scheme will not cause permanent loss of habitats supporting farmland birds, it will not generate impacts that could be cumulative with the loss of farmland bird habitat arising from Development 10.		
12	2020/0994/FULM FGD Plant Demolition, Drax	Permitted development	Development 12 involves the demolition of existing flue gas desulphurisation infrastructure within the existing Drax Power Station Site. Demolition activities will overlap spatially with the Proposed Scheme. The demolition of absorber units 4, 5 and 6 of ID12 will take place prior to construction of the Proposed Scheme. Demolition of absorber units 1, 2 and 3 of ID12 will take place after construction phase of the Proposed Scheme is complete. There will therefore be no cumulative construction effects. There are limited prospects for cumulative ecological effects, as Development 12 is located almost entirely within areas of buildings and hard-standing. There is potential for significant cumulative effects on the following IEF during operation of the Proposed Scheme and the second phase of demolition of ID12: Potential for increased risk of water-borne pollution.	The Proposed Scheme proposes to deliver 10% Biodiversity Net Gain (BNG). In order to reduce disturbance to ecological receptors, the Applicant is committed to meet noise limits at the noise sensitive receptors and also at 5m from the equipment as stipulated in Schedule 2 Requirement 17 of the dDCO. Condition 08 of the Planning Permission for Development 12 requires a Method Statement to address any minor habitat loss caused by that development to be produced. This is to be provided to and approved by the Local Planning Authority (SDC). It is considered that the measures proposed by Development 12 will address any significant cumulative effects on habitats.	Residual effects are predicted be non-significant during operation of the Proposed Scheme and the second phase of demolition for ID12 for all IEF.
44	21/03027/STPLF Erection of employment and office space	Permitted Development	There is a minor spatial overlap with the Proposed Scheme. It is possible that construction of ID44 could take place at the	Following the OHL and telecoms undergrounding works for Work No. 8, land would be reinstated to its former use. These measures would be	Construction: Not Significant Operation: N/A

same time as the Overhead Line (OHL) and telecoms diversion works for PC-02.

There is potential for significant cumulative effects on the following Important Ecological Features (IEF) arising from Development 44, during construction of Work No 8:

 Increased cumulative disturbance/disruption of bird populations associated with Humber Estuary SPA/SSSI/Ramsar, using areas of habitat outside the boundaries of the designated sites

There is not considered to be any potential for significant cumulative effects during operation of the Proposed Scheme. This is because there would be negligible permanent landtake associated with Work No. 8, with habitats reinstated following the proposed OHL and telecoms undergrounding works.

A review of the ecological information submitted with ID44's planning application has been completed. This identifies that habitats within the application boundary for ID44 are considered to be of no importance for wintering/passage bird species that may be associated with the Humber Estuary SPA/SSSI/Ramsar, and of negligible importance for breeding lapwing and oystercatcher. The report also identifies a series of mitigation measures to further reduce any residual risk of disturbance to birds that may be associated with Humber Estuary SPA/SSSI/Ramsar populations. These include the provision of acoustic fencing along the eastern boundary of ID44 during site clearance and construction.

In addition, the OHL locations are adjacent to an existing main road and public footpaths, with residential and commercial properties present, reducing the suitability of this land for SPA/Ramsar/SSSI species.

In light of the above and the limited spatial extent and very short duration of construction works associated with Work No. 8 (anticipated to be a maximum of four weeks), no significant cumulative effects are expected.

included and secured within the Landscape and Biodiversity Strategy, secured by DCO requirement. Measures to minimise noise would also be implemented during construction, as set out under Item NV2 in Table 1 of the Register of **Environmental Actions and** Commitments (document reference 6.5, revision 05), although these measures would not be delivered specifically in relation to ecology receptors and are not considered necessary to avoid the risk of significant disturbance of Humber Estuary SPA/SSSI/Ramsar bird populations.

Assuming ID44 is granted planning permission, it is assumed that the mitigation measures set out in the ecological information would be secured by way of a planning condition attached to the permission. These mitigation measures include (extracted from the application):

- the western boundary of the site to a) screen from visual disturbance during the construction phase and to also reduce noise levels in adjacent land. The specification suggested is the H4 Acoustic Barrier, which can reduce noise levels by up to 40dB;
- Ensuring vehicles and machinery are regularly serviced and in good condition;
- Speed limits on site;
- Installing silencers or attenuators where applicable;
- Replacing older equipment with quieter alternatives;

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
				 Using broadband reversing alarms on site; and Not leaving engines idling when not in use. 	
47	20/01774/TIPA Land North West Of Sandall Stones Road Kirk Sandall Doncaster DN3 1QR	Permitted development	Construction: No cumulative effects are predicted during construction. Operation: As per the assessment presented for ID1 (Eggborough CCGT).	Construction: none required Operation: operational emissions control measures from the Proposed Scheme.	Construction: N/A Operation: Cumulative residual effects are expected to be neutral, not significant.
52	21/03405/STPLF Construction of a storage and distribution facility	Permitted development	There is no spatial overlap with the Proposed Scheme. It is possible that construction of ID52 could take place at the same time as the Overhead Line (OHL) and telecoms diversion works for Work No. 8, with planning permission for ID52 granted in June 2022. There is potential for significant cumulative effects on the following Important Ecological Features (IEF) arising from ID52, during construction of Work No. 8: • Increased cumulative disturbance/disruption of bird populations associated with Humber Estuary SPA/SSSI/Ramsar, using areas of habitat outside the boundaries of the designated sites. There is not considered to be any potential for significant cumulative effects during operation of the Proposed Scheme. This is because there would be negligible permanent landtake associated with Work No. 8, with habitats reinstated following the proposed OHL and telecoms undergrounding works. The ecological assessments for ID52 identify that habitats within the application boundary for ID52 are considered unsuitable for bird species associated with the Humber Estuary SPA/SSSI/Ramsar. This is due to the ID52 site being surrounded by mature trees to the east and existing buildings and industrial areas to the north, east, and west. The Wold Ecology HRA report also identifies that the ID52 Site is surrounded by several existing land uses generating noise and lighting and which also provide partial screening of the ID 52 site. The Wold Ecology HRA Report concludes that there	Following the OHL and telecoms undergrounding works for Work No. 8, land would be reinstated to its former use. These measures would be included and secured within the Landscape and Biodiversity Strategy, secured by DCO requirement. Measures to minimise noise would also be implemented during construction, as set out under Item NV2 in Table 1 of the Register of Environmental Actions and Commitments (document reference 6.5, revision 05), although these measures would not be delivered specifically in relation to ecology receptors and are not considered necessary to avoid the risk of significant disturbance of Humber Estuary SPA/SSSI/Ramsar bird populations. ID52 includes provision for a CEMP to be secured by way of planning permission, in order to minimise the risk of disturbance of birds and other fauna outside the ID52 application boundary.	Construction: Not Significant Operation: N/A

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			would be no risk of LSE to Humber Estuary bird species from disturbance, either alone or in-combination with other plans and projects. In addition, the OHL locations for Work No. 8 are adjacent to an existing main road and public footpaths, with residential and commercial properties present, reducing the suitability of this land for SPA/Ramsar/SSSI species. In light of the above and the limited spatial extent and very short duration of construction works associated with Work No. 8 (anticipated to be a maximum of four weeks), no significant cumulative effects are expected.		
92	22/02118/STPLFE Construction of a relief road from Thorpe Road to Station Road, and construction of an industrial unit.	Submitted, awaiting decision	Construction: No cumulative effects are predicted during construction. Operation: Potential for localised cumulative air quality impacts on Barn Hill SSSI and Humber SAC due to traffic emissions. These arise as the Affected Road Network (ARN) for ID92 includes roads within 200 m or closer of these designated sites. Over the Humber Estuary SAC, modelled cumulative impacts increase from 0.5% to 0.6% of critical load for nitrogen deposition and can be screened as not significant. Modelled cumulative impacts on Barn Hill Meadows SSSI increase from 1.8% to 3.6% of critical load for acid deposition (i.e ID92 contributes up to 1.8% of the critical load for acid deposition). The cumulative impact decreases with distance from the ARN, due to the drop-off in the impact of vehicle emissions on pollutant concentrations and deposition with increasing distance from the roadside. The contribution of ID92 to acid deposition onto Barn Hill Meadows SSSI is likely to reduce over the years following that development becoming fully operational. This is due to predicted future reductions in per vehicle emissions of ammonia and nitrous oxides and their subsequent contribution to nitrogen and acid deposition. These future trends reflect a continuation in the trend of reduced per-vehicle tailpipe emissions from the UK vehicle fleet resulting from improvements in engine technology and the uptake of ultra-low and zero (carbon) emissions vehicles. UK vehicle licensing statistics demonstrate the increasing proportion of low and	Construction: none required Operation: operational emissions control measures from the Proposed Scheme. No relevant mitigation appears to be proposed for Development 92, based on review of the planning application materials for that development.	Operation: There is predicted to be up to a minor magnitude impact, that is long term, reversible, and significant at up to a National scale. A significant effect has not been identified by the applicant for ID92 therefore no mitigation (to date) has been identified in the ID92 application materials. It has been assumed that if mitigation measures are implemented by ID92, the Air Quality impacts would reduce, or other measures to ameliorate the air quality effects of ID 92 would be implemented. However it will be the responsibility of the applicant for ID92 or of the LPA to address this.

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			zero-emission vehicles in quarterly and annual vehicle sales ¹ , whilst the National Atmospheric Emissions Inventory (NAEI) projections show how this trend is expected to continue ² . For example, the NAEI projections predict that zero-emissions battery electric vehicles will comprise 13.6% of the UK vehicle fleet by 2035 (in rural areas), compared to approximately 1% in 2022. Whilst there is considered to be a high degree of confidence that per-vehicle tailpipe emissions will continue to reduce in future years, impacts from traffic arising from ID92 may remain near the predicted 1.8% of critical load for a number of years. The maximum predicted cumulative impact of 3.6% critical load is unlikely to trigger perceptible changes in the Barn Hill Meadows SSSI habitats. This is particularly the case given the relatively high baseline acid deposition as reported in Table 6.11 of the Air Quality Chapter of the ES (APP-042). Given the magnitude of the predicted cumulative impact and the balance of available evidence, cumulative acid deposition is considered to have potential to trigger significant effects to Barn Hill Meadows SSSI, although there is some uncertainty associated with this conclusion.		
99	21/02915/STPLF Erection of two industrial units including a two storey office block for associated business use.	Submitted, awaiting decision	There is no spatial overlap with the Proposed Scheme. It is possible that construction of ID99 could take place at the same time as the Overhead Line (OHL) and telecoms diversion works for Work No 8, with planning permission for ID99 pending as of January 2023. There is potential for significant cumulative effects on the following Important Ecological Features (IEF) arising from ID99 during construction of Work No. 8: Increased cumulative disturbance/disruption of bird populations associated with Humber Estuary SPA/SSSI/Ramsar, using areas of habitat outside the boundaries of the designated sites. There is not considered to be any potential for significant cumulative effects during operation of the Proposed Scheme.	Following the OHL and telecoms undergrounding works for Work No. 8, land would be reinstated to its former use. These measures would be included and secured within the Landscape and Biodiversity Strategy, secured by DCO requirement. Measures to minimise noise would also be implemented during construction, as set out under Item NV2 in Table 1 of the Register of Environmental Actions and Commitments (document reference 6.5, revision 05), although these measures would not be delivered	Construction: Not Significant Operation: N/A

 $^{^{1}\,\}underline{\text{https://www.gov.uk/government/statistics/vehicle-licensing-statistics-july-to-september-2022/vehicle-licensing-$

² https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fnaei.beis.gov.uk%2Fresources%2Frtp_fleet_projection_NAEI_2017_Base2019r_v1_1.xlsx&wdOrigin=BROWSELINK

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			This is because there would be negligible permanent landtake associated with Work No. 8, with habitats reinstated following the proposed OHL and telecoms undergrounding works. A review of the ecological information submitted with ID99's planning application has been completed. The HRA Report for ID99 identified that habitats within the application boundary are considered unsuitable for bird species associated with the Humber Estuary SPA/SSSI/Ramsar. This is due to the ID99 site ground cover being dominated by scrub and rough grassland, deemed unsuitable for SPA bird species. The HRA Report concludes that there would be no risk of LSE to Humber Estuary bird species from disturbance, either alone or in-combination with other plans and projects. The Ecology Officer who reviewed the ID99 HRA Report on behalf of East Riding of Yorkshire, challenged the finding of the ID99 HRA Report (Nature Conservation Officer's comments, Jan 2023). This challenge was made in relation to ID99's potential effects on watercourses connected to the Humber Estuary, and the potential for ID99 to discharge surface and foul water to them. There was no challenge in relation to ID99's potential for disturbance effects on Humber Estuary SPA/SSSI/Ramsar bird species. In addition, the OHL locations for Work No. 8 are adjacent to an existing main road and public footpaths, with residential and commercial properties present, reducing the suitability of this land for SPA/Ramsar/SSSI species. In light of the above and the limited spatial extent and very short duration of construction works associated with Work No. 8 (anticipated to be a maximum of four weeks), no significant cumulative effects are expected.	specifically in relation to ecology receptors and are not considered necessary to avoid the risk of significant disturbance of Humber Estuary SPA/SSSI/Ramsar bird populations. No mitigation considered to be necessary for ID99.	
100	22/01930/STPLF Erection of 14 industrial/warehouse units and use of land as an EV charging station.	Submitted, awaiting decision	There is no spatial overlap with the Proposed Scheme. It is possible that construction of ID100 could take place at the same time as the Overhead Line (OHL) and telecoms	Following the OHL and telecoms undergrounding works for Work No. 8, land would be reinstated to its former use. These measures would be included and secured within the Landscape and Biodiversity Strategy, secured by DCO requirement. Measures to minimise noise would also be implemented during construction, as set out under Item	Construction: Not Significant Operation: N/A

diversion works for Work No. 8, with planning permission for ID100 pending at the time of writing.

There is potential for significant cumulative effects on the following Important Ecological Features (IEF) arising from ID100 during construction of Work No. 8:

 Increased cumulative disturbance/disruption of bird populations associated with Humber Estuary SPA/SSSI/Ramsar, using areas of habitat outside the boundaries of the designated sites.

There is not considered to be any potential for significant cumulative effects during operation of the Proposed Scheme. This is because there would be negligible permanent landtake associated with Work No.8, with habitats reinstated following the proposed OHL and telecoms undergrounding works.

A review of the ecological information submitted with ID100's planning application has been completed. The EDC Nature Conservation Officer comments on the planning application (November 2022) were also reviewed.

The ecological assessment and Nature Conservation Officer comments for ID100 identifies that habitats within and adjacent the application boundary for ID100 are unsuitable for bird species associated with the Humber Estuary SPA/SSSI/Ramsar. This is due to the ID100 site being surrounded by major roads including the M62 and existing industrial landuses. The site itself was also found to be dominated by dense scrub and poor semi-improved grassland with some tree cover; habitats of limited suitability for Humber Estuary SPA/SSSI/Ramsar bird species.

Subject to securing of a suitable Construction Environmental Management Plan in relation to water pollution risk from ID100, the Nature Conservation Officer for EDC advises that adverse effects on the integrity of European Sites can be avoided. The Nature Conservation Officer considers no Likely Significant effects would occur in relation to disturbance of Humber Estuary SPA/SSSI Ramsar bird species.

In addition, the OHL locations Work No. 8 are adjacent to an existing main road and public footpaths, with residential and commercial properties present, reducing the suitability of this land for SPA/Ramsar/SSSI species.

In light of the above and the limited spatial extent and very short duration of construction works associated with Work No.

NV2 in Table 1 of the Register of Environmental Actions and Commitments (document reference 6.5, revision 05), although these measures would not be delivered specifically in relation to ecology receptors and are not considered necessary to avoid the risk of significant disturbance of Humber Estuary SPA/SSSI/Ramsar bird populations.

ID100 includes provision for a CEMP to be secured by way of planning permission, in order to manage pollution risks.

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			8 (anticipated to be a maximum of four weeks), no significant cumulative effects are expected.		
102	Humber Low Carbon Pipelines EN070006	Scoping Report and PEIR submitted	Information has been obtained from the Preliminary Environmental Information Report and the planning application consultation response from Natural England for Development ID102. The western limit of ID102 is at the northern boundary of the existing Drax Power Station Site, with several potential locations for Above Ground Installations (AGI) proposed to the north-east of the Existing Power Station Site. There are minor overlaps with the Order Limits for the Proposed Scheme. Options A to C of the Drax AGI locations could have some overlap, as could the westernmost limits of the ID102 pipeline run. The potential overlap is with the Proposed Scheme's Habitat Provision Area. Due to the low resolution of available drawings and the lack of detailed design information for ID102, it is not possible to determine the extent of potential overlap or which (if any) parts of the Habitat Provision Area could be directly affected. The AGI would result in permanent landtake of habitats north- east of the existing Drax Power Station site and to the south of the Eastern Laydown Area. There would also be temporary loss, disturbance, and fragmentation of habitats for the pipeline installation. The permanent landtake for the AGI and the temporary effects of construction for the pipeline could lead to disturbance / loss of habitats for protected and notable species. This could include temporary disturbance of bird and otter populations associated with designated sites within the ZoI of the Proposed Scheme, including National Network Sites and SSSI. Construction is predicted to take place between 2024 – 2026, so could overlap with proposed Scheme. There is potential for significant cumulative effects on the following Important Ecological Features (IEF) arising from ID102, during Construction of the Proposed Scheme: Disturbance/disruption of bird and otter populations associated with European Sites and SSSI (including areas of habitat used by those species outside the boundaries of the designated sites);	The Applicant has proposed mitigation measures for predicted significant effects on IEF in Section 8.10 of Chapter 8: Ecology (APP-044) and embedded within the design of the Proposed Scheme. With these measures in place, the Proposed Scheme's effects on IEF are considered to be nugatory and could not contribute to significant cumulative effects on the following IEF during Construction or Operation: Migratory fish species (lamprey) using the River Ouse, that are associated with the Humber Estuary SAC and Ramsar site and the River Derwent SAC; and Otter, including those associated with the River Derwent SAC and other designated sites. Both the Proposed Scheme and ID102 propose to deliver 10% Biodiversity Net Gain (BNG) (the Proposed Scheme for all habitat impacts, ID102 for AGI locations with no net loss targeted for ID102's temporary pipeline construction impacts). It is considered that this will address any significant cumulative effects of temporary and permanent loss of IEF habitats. This enhanced habitat provision is also expected to address any cumulative Construction disturbance and habitat loss/disruption on bats and birds (incombination with standard good practice measures contained in each Project's CEMP). A Register of	Construction: Not significant Operation: Not significant

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			 Temporary loss and/or disturbance of minor watercourses for pipeline installation, with affected watercourses in the vicinity of the Proposed Scheme potentially used by the population of otters associated with the River Derwent SAC and Lower Derwent Valley SAC and underpinning SSSIs; and Loss and disturbance of farmland in the vicinity of the Proposed Scheme that could be used by wintering birds associated with the Lower Derwent Valley SPA and Ramsar and/or the Humber Estuary SPA and Ramsar and underpinning SSSI (functionally-linked land). The majority of habitat loss would be short term and temporary, associated with installation of the pipeline. There would be some limited permanent habitat loss from the Drax AGI, although at present National Grid are considering four locations for this, so it is unclear exactly where these impacts would occur. If National Grid select Drax AGI Option C, this could interfere with the delivery of ecological mitigation and habitat enhancements for Biodiversity Net Gain for areabased habitats, for the Proposed Scheme. Whilst it appears unlikely (based on Figure 10047064-ARC-EGN-ZZ-DR-ZZ-00028-S2 of ID102's PEIR), it is not possible to be certain whether there would be an overlap, due to the low resolution of mapping in the PEIR for ID102. Regardless of the selected location of the Drax AGI, this would not compromise delivery of 10% Biodiversity Net Gain for hedgerows, as the Proposed Scheme includes considerable oversupply of hedgerow planting relative to the quantity that is required to achieve 10% BNG; Cumulative temporary IEF habitat loss, disturbance, and fragmentation; and Additive disturbance of protected and notable species (not forming part of National Network Sites and SSSI populations), primarily bat and bird populations affected by construction of the Proposed Scheme and construction / operation of ID102. 	Environmental Actions and Commitments (REAC) has been produced for the Proposed Scheme (document reference 6.5, revision 05). The actions and commitments within the REAC would be secured by a requirement in the DCO and would include a requirement for a Construction Environmental Management (CEMP) to be produced for the Proposed Scheme). The application for the Proposed Scheme is accompanied by a Lighting Strategy (APP-184), which sets out measures to minimise adverse environmental effects of lighting on the environment. The Ecology chapter of the PEIR for ID102 also identifies the need for careful lighting design at the Drax AGI location and on this basis does not anticipate significant negative effects on ecological receptors from AGI lighting. With these measures in place significant cumulative lighting disturbance of bats and birds is expected to be mitigated. In addition, the Ecology chapter of the PEIR for ID102 confirms that a suite of avoidance and mitigation measures would be implemented during construction of that scheme, with additional measures to be identified as needed as the design progresses and further ecological surveys are completed. These will support avoidance, minimisation, and mitigation of ID102's impacts on ecological receptors. If necessary, the Applicant would seek Protective Provisions and / or DCO drafting	

There is potential for significant cumulative effects on the following IEF during Operation:

- Permanent loss of habitat (arable or pasture farmland) at the site of the proposed AGI additive with temporary habitat loss from the Proposed Scheme;
- Permanent loss of habitat which may be used by wintering birds at the site of the proposed AGI station being additive with temporary loss of habitat for wintering birds associated with the East Construction Laydown Area;
- Disturbance of protected and notable species (primarily bats and birds) by lighting associated with operation of the AGI, being additive with operational lighting from the Proposed Scheme.

The effects of the Proposed Scheme itself in terms of functionally-linked land that triggered LSE are very minor, comprising hedgerow planting within the Habitat Provision Area only. The hedgerow planting in the Habitat Provision Area is not predicted to lead to any material change in the suitability of this area for otter or SPA/Ramsar/SSSI bird species.

In addition, mitigation has been proposed for the Proposed Scheme (see paragraph 4.1.4 of the HRA Report, document reference APP-185) that would require hedgerow planting in the Habitat Provision Area to be timed to be completed at the end of the wintering bird season (March in any calendar year).

Depending on the detailed construction timings for ID102 (which are not confirmed but would likely be between 2024 — 2026), it is possible that the East Construction Laydown Area of the Proposed Scheme could be in use whilst construction activities for the ID102 AGI and adjacent sections of pipeline are ongoing / have been completed. This would increase the cumulative loss of farmland habitats to the north / east of the existing Drax Power Station.

Should this potential overlap occur, it is considered unlikely to significantly worsen the effects of the Proposed Scheme alone on SPA / Ramsar / SSSI bird species. This is because;

- The wintering bird surveys completed for the Proposed Scheme recorded no SPA/SSSI species in the East Construction Laydown Area;
- The East Construction Laydown Area would be reinstated following construction, i.e., 2029 at the latest;

within the HLCP DCO to ensure the HPA is appropriately protected.

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			The habitat enhancements proposed to the north of the East Construction Laydown Area (see Figure 1 of the Outline Landscape and Biodiversity Strategy (APP-181) would increase the potential suitability of this area for SPA / Ramsar / SSSI bird species; and		
			 Habitats within and adjacent to ID102's onshore works have been determined to be of low importance for SPA/Ramsar/SSSI bird species, with this finding agreed to by Natural England. 		
			In relation to otter, the Proposed Scheme would have very minor effects on functionally-linked land, that are not expected to materially affect use of that land by otter. These effects are therefore not expected to combine appreciably with those of ID102, particularly given that the majority ID102's impacts would be temporary, associated with the pipeline route where crossing watercourses and adjoining land. In addition, the Ecology chapter of the PEIR for ID102 confirms that a range of mitigation measures including pre-construction surveys for otter will be implemented during construction in proximity to watercourses for that scheme. It is also confirmed that ID102 will implement standard good practice environmental mitigation. In relation to the potential for additive habitat loss (temporary and/or permanent), both the Proposed Scheme and		
			Development 102 will deliver BNG. The Proposed Scheme is targeting 10% BNG, whereas Development 102 is targeting 10% BNG at AGI locations and No Net Loss (NNL) for the temporary pipeline construction works. These measures will avoid significant cumulative habitat loss.		
Lands	cape and Visual Impact				
3	2022/0711/EIA Scotland to England Green Link 2 (SEGL2) Project	Submitted, awaiting decision	Construction: As discussed in Chapter 9 (Landscape and Visual Impact) (APP-045), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of	Retention of existing vegetation during construction wherever practicable. No mitigation measures required for	Construction: Minor Adverse (Not significant) on Common Landscape receptors Moderate Adverse (Significant)
			effects is Minor Adverse (Not significant) on Common Landscape receptors and Moderate Adverse (Significant) on Common Visual receptors.	operation.	on Common Visual receptors
			The common LCAs (Site Fabric and Camblesforth Farmlands LCA) and visual receptors (residents in the vicinity of Camblesforth, Drax and footpath users) will experience		Operation:

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			construction activities associated with the sub-station in addition to those of the Proposed Scheme. In combination there will be an increase in localised effects along New Road due to the construction activities associated with the cumulative site. Overall, the highest level of the anticipated cumulative effects is Minor Adverse (Not significant) on Common Landscape receptors as the increase in infrastructure will be within the context of Drax Power Station and Moderate Adverse (Significant) on Common Visual receptors due to the noticeable construction activity associated with large scale infrastructure within the view.		Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (Not significant) on Common Visual receptors
			Operation: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors. The common LCAs (Site Fabric and Camblesforth Farmlands LCA) and visual receptors (residents in the vicinity of Camblesforth, Drax and nearby footpath users) will experience operational activities associated with the sub-station in addition to those of the Proposed Scheme. In combination there will be an increase in localised effects along New Road within the setting of Drax Power Station, with the cumulative site extending the influence of large scale infrastructure within the area. Overall, the highest level of the anticipated cumulative effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on		
6	NY/2022/0027/SCO Barlow Ash Mound, North West of Drax Power Station	Scoping	Construction: As discussed in (Chapter 9: Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not Significant) on Common Landscape receptors and Moderate Adverse (Significant) on Common Visual receptors. The common LCA (Camblesforth Farmlands LCA) and visual receptors (residents with south-eastern facing views and footpath users) will experience construction activities associated with the mining in addition to those of the Proposed Scheme. In combination there will be an increase in localised	During construction, retention of existing vegetation during construction wherever practicable. No mitigation required for operation.	Construction: Minor Adverse (Not Significant) on Common Landscape receptors Moderate Adverse (Significant) on Common Visual receptors Operation:

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			effects to the west of Drax Power Station due to the construction activities associated with the cumulative site. Overall, highest level of the anticipated cumulative effects is Minor Adverse (Not Significant) on Common Landscape receptors and Moderate Adverse (Significant) on Common Visual receptors as the Proposed Scheme will be viewed in the background beyond the activities associated with this cumulative site. Operation: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors. The common LCA (Camblesforth Farmlands LCA) and visual receptors (residents with south-eastern facing views and footpath users) will experience construction activities associated with the mining in addition to those of the Proposed Scheme. In combination there will be an increase in localised effects to the west of Drax Power Station Road due to the operational activities associated with the cumulative site. Overall, highest level of the anticipated cumulative effects is Minor Adverse (Not significant) on Common Londscape receptors and Minor Adverse (Not significant) on Common Visual receptors		Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (Not significant) on Common Visual receptors
7	2022/0358/FULM: Resubmission of 2021/0120/FULM Development of a Horticultural Facility for indoor farming and agri- tech	Submitted, awaiting decision	Construction As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not Significant) on Common Landscape receptors and Minor Adverse (Not Significant) on Common Visual receptors. The common LCA (Camblesforth Farmlands LCA) and visual receptors (residents of Camblesforth, and footpath users) will experience construction activities in addition to those of the Proposed Scheme. In combination there will be increase in localised effects for a small number of receptors near Brigg Lane in Camblesforth. It is anticipated effects will remain	No mitigation measures required for construction. No mitigation measures required for operation.	Construction: Minor Adverse (Not Significant) on Common Landscape receptors Minor Adverse (Not Significant) on Common Visual receptors. Operation: Minor Adverse (Not significant) on Common landscape receptors Minor Adverse (Not significant) on Common Visual receptors.

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			Minor Adverse (Not Significant) on Common Landscape receptors and Minor Adverse (Not Significant) on Common Visual receptors		
			Operation:		
			As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors.		
			The common LCA (Camblesforth Farmlands LCA) and visual receptors (residents of Camblesforth, and footpath users) will experience operational activities in addition to those of the Proposed Scheme. In combination there will be increase in localised effects for a small number of receptors near Brigg Lane in Camblesforth. It is anticipated effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors.		
8	2020/1357/FULM Development of an energy storage facility, Land off New Road, Drax	Permitted development	Construction: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not Significant) on Common Landscape receptors and Moderate Adverse (Significant) on Common Visual receptors. The committed development is the construction and operation of an energy storage facility located off New Road and will see construction activities within the Camblesforth LCA in combination with the Proposed Scheme by shared visual receptors (residents with south western facing views, residents of Drax village and footpath users). In combination there will be an increase in localised effects along New Road, overall, it is anticipated effects will remain Minor Adverse (Not	Retain and enhance existing vegetation to the eastern boundary of the Laydown Area. No mitigation measures required for operation.	Construction: Minor Adverse (Significant) on Common Landscape receptors Moderate Adverse (Significant) on Common Visual receptors Operation: Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (Not significant) on Common Visual receptors.

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			Significant) on Common Landscape receptors and Moderate Adverse (Significant) on Common Visual receptors. Operation: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors. The committed development is the construction and operation of an energy storage facility located off New Road and will see operational activities within the Camblesforth LCA in combination with the Proposed Scheme by shared visual receptors (residents with south western facing views, residents of Drax village and footpath users). In combination there will be an increase in localised effects along New Road, overall it is anticipated effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors.		
9	2021/0348/SCN Five wind turbines	Screening request, EIA required	Construction: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors The common LCA (Ouse Valley) and visual receptors (footpath users and recreational users of the River Ouse) will experience construction activities in addition to those of the Proposed Scheme. Due to the distance between the Proposed Scheme and this cumulative site, and the opposing direction of view for visual receptors, it is anticipated effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors. Operation: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape	No mitigation required for operation.	Construction: Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (Not significant) on Common Visual receptors. Operation: Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (Not significant) on Common Visual receptors

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors. The common LCA (Ouse Valley) and visual receptors (footpath users and recreational users of the River Ouse) will experience operational activities in addition to those of the Proposed Scheme. Due to the distance between the Proposed Scheme and this cumulative site, and the opposing direction of view for visual receptors, it is anticipated that the Sites are unlikely to be viewed within the same view, therefore effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors.		
10	2021/0788/EIA Development of a ground-mounted solar farm	Permitted development	Construction: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Moderate Adverse (Significant) on Common Visual receptors The common LCA (Camblesforth Farmlands) and visual receptors (residents of Camblesforth and footpath users) will experience construction activities in addition to those of the Proposed Scheme. Low level construction works associated with cumulative site will be visible in the foreground with views of the Proposed Scheme visible in the background within the context of Drax Power Station amongst the skyline. In combination there will be an increase in localised effects, it is anticipated effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Moderate Adverse (Significant) on Common Visual receptors Operation: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Common Visual receptors.	No mitigation required for construction. No mitigation required for operation.	Construction: Minor Adverse (Not significant) on Common Landscape receptors Moderate Adverse (Significant) on Common Visual receptors Operation: Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (Not significant) on Common Visual receptors.

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			The common LCA (Camblesforth Farmlands) and visual receptors (residents of Camblesforth and footpath users) will experience operational activities due to the replacement of open farmland with the cumulative site in addition to the introduction of the Proposed Scheme within the context of Drax Power Station. In combination there will no discernible increase in localised effects, it is anticipated effects will remain Minor Adverse (not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors.		
12	2020/0994/FULM Drax Demolition of Flue Gas Desulphurisation (FGD) Plant	Permitted development	Construction: Construction effects are N/A due to construction activities associated with the demolition of Absorber Units 4, 5 and 6, being be carried out before the construction activities of the Proposed Scheme, i.e. there will be no overlap of "construction" activities for these two schemes. Operation: As discussed in Chapter 9 (Landscape and Visual Impact), the Proposed Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor adverse (Not significant) on Common Visual receptors. The common LCA (Site Fabric and Camblesforth Farmland) and visual receptors (residents of nearby villages and footpath users) will experience construction activities associated with the demolition of Absorber Units 1, 2 and 3, which will be carried out following construction of the Proposed Scheme, in addition to the operation activities of the Proposed Scheme, i.e. there will be an overlap between the second phase of demolition of the FGD Plant and BECCS operation. In combination, there will be an increase in localised effects, but it is anticipated effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Minor adverse (Not significant) on Common Landscape receptors.	No additional mitigation measures required for construction.	Construction: N/A Operation: Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (not significant) on Common Visual receptors

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
49	2021/1089/FULM Development of a battery storage facility	Permitted development	Construction: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors The common LCA (Camblesforth Farmlands) and visual receptors (residents in Drax village, Carlton and footpath users) will experience construction activities in addition to those of the Proposed Scheme. In combination there will be increase in localised effects for these receptors, it is anticipated effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors Operation: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor adverse (Not significant) on Common Visual receptors. The common LCA (Camblesforth Farmlands) and visual receptors (residents in Drax village, Carlton and footpath users) will experience operational activities in addition to those of the Proposed Scheme. In combination there will be an increase in localised effects, it is anticipated however effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Minor adverse (Not significant) on Common Landscape receptors and Minor adverse (Not significant) on Common Landscape receptors and Minor adverse (Not significant) on Common Landscape receptors and Minor adverse (Not significant) on Common Landscape receptors and Minor adverse (Not significant) on Common Landscape receptors and Minor adverse (Not significant) on Common Landscape receptors.	No mitigation measures required for construction. No mitigation measures required for operation.	Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (Not significant) on Common Visual receptors Operation: Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (Not significant) on Common Visual receptors.
75	2022/1257/FULM Erection of battery energy storage system and associated external works.	Submitted, awaiting decision.	Construction: As discussed in Chapter 9 (Landscape and Visual Impact), the Proposed Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Moderate Adverse (Significant) on Common Visual receptors.	No mitigation required for construction. No mitigation required for operation.	Construction: Minor Adverse (Not significant) on Common Landscape receptors Moderate Adverse (Significant) on Common Visual receptors

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			The common LCA (Camblesforth Farmlands) and visual receptors (residents of Barlow and footpath users) will experience construction activities in relation to ID75, for a period of approximately 18 months, in addition to those of the Proposed Scheme. Low level construction works associated with ID75 will be visible, with views of the Proposed Scheme visible to the east within the context of Drax Power Station against the skyline. In combination there will be an increase in localised effects, however it is anticipated effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Moderate Adverse (Significant) on Common Visual receptors. These effects are of a level that is no worse than those reported with the Proposed Scheme alone.		These effects are of a level that is no worse than those reported with the Proposed Scheme alone. Operation: Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (Not significant) on Common Visual receptors. These effects are of a level that is no worse than those reported with the Proposed Scheme alone.
			Operation: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors.		
			The common LCA (Camblesforth Farmlands) and visual receptors (residents of Barlow and footpath users) will experience operational activities due to the replacement of open farmland with ID75 in addition to the introduction of the Proposed Scheme within the context of Drax Power Station. In combination there will be no discernible increase in localised effects, it is anticipated effects will remain Minor Adverse (not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors. These effects are of a level that is no worse than those reported with the Proposed Scheme alone.		
79	2022/0738/OUTM Erection of up to 190 dwellings	Submitted, awaiting decision	Construction: As discussed in Chapter 9 (Landscape and Visual Impact), the Proposed Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not Significant) on Common Landscape receptors and Minor Adverse (Not Significant) on Common Visual receptors.	No mitigation measures required for construction. No mitigation measures required for operation.	Construction: Minor Adverse (Not Significant) on Common Landscape receptors Minor Adverse (Not Significant) on Common Visual receptors.

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			The common LCA (Camblesforth Farmlands LCA) and visual receptors (residents of Camblesforth and Carlton, and footpath users) will experience construction activities in relation to ID79 in addition to those of the Proposed Scheme. In combination there will be increase in localised effects for some receptors on the southern boundary of Camblesforth and the northern boundary of Carlton. It is anticipated effects will remain Minor Adverse (Not Significant) on Common Landscape receptors and Minor Adverse (Not Significant) on Common Visual receptors Operation: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors. The common LCA (Camblesforth Farmlands LCA) and visual receptors (residents of Camblesforth and Carlton, and footpath users) will experience operational activities in relation to ID79 in addition to those of the Proposed Scheme. In combination there will be increase in localised effects for some receptors on the southern boundary of Carlton however it is anticipated effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors.		Minor Adverse (Not significant) on Common landscape receptors Minor Adverse (Not significant) on Common Visual receptors.
82	2022/0399/OUTM Development for circa 150 residential dwellings	Submitted, awaiting decision	Construction: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not Significant) on Common Landscape receptors and Minor Adverse (Not Significant) on Common Visual receptors. The common LCA (Camblesforth Farmlands LCA) and visual receptors (residents of Carlton, and footpath users) will experience construction activities in relation to ID82 in addition to those of the Proposed Scheme. In combination there will be	No mitigation measures required for construction. No mitigation measures required for operation.	Construction: Minor Adverse (Not Significant) on Common Landscape receptors Minor Adverse (Not Significant) on Common Visual receptors. Operation: Minor Adverse (Not significant) on Common landscape receptors

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			increase in localised effects for some receptors on the eastern boundary of Carlton however it is anticipated effects will remain Minor Adverse (Not Significant) on Common Landscape receptors and Minor Adverse (Not Significant) on Common Visual receptors		Minor Adverse (Not significant) on Common Visual receptors.
			Operation:		
			As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors.		
			The common LCA (Camblesforth Farmlands LCA) and visual receptors (residents of Camblesforth and Carlton, and footpath users) will experience operational activities in relation to ID82 in addition to those of the Proposed Scheme. In combination there will be increase in localised effects for some receptors on the eastern boundary of Carlton however it is anticipated effects will remain Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors.		
102	EN070006 Humber Low Carbon Pipelines.	Scoping Report and PEIR submitted.	Construction: As discussed in (Chapter 9: Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not Significant) on Common Landscape receptors and Moderate Adverse (Significant) on Common Visual receptors. The common LCA (Camblesforth Farmlands LCA) and visual receptors (footpath users) will experience construction activities associated with the construction of the pipelines for ID102 in addition to an AGI (either the Proposed Scheme AGI or one of the options for ID102). In combination this would lead to an increase in localised effects to the north of Drax Power Station. However, the highest level of the anticipated cumulative effects is Minor Adverse (Not Significant) on Common Landscape receptors and Moderate Adverse	During construction, retention of existing vegetation during construction wherever practicable. No mitigation required for operation.	Construction: Minor Adverse (Not Significant) on Common Landscape receptors Moderate Adverse (Significant) on Common Visual receptors. These effects are of a level that is no worse than those reported with the Proposed Scheme alone. Operation: Minor Adverse (Not significant) on Common Landscape receptors Minor Adverse (Not significant) on Common Visual receptors

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			Scheme will be viewed in conjunction with the construction activities associated with this cumulative site. It should be noted that the moderate adverse effects would not be any different to those already reported in the ES for the Proposed Scheme alone. Furthermore, an AGI has already been assessed as part of the Proposed Scheme. Operation: As discussed in Chapter 9 (Landscape and Visual Impact), the Scheme will have a range of adverse effects on Landscape and Visual receptors. The highest level of effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Visual receptors. The common LCA (Camblesforth Farmlands LCA) and visual receptors (footpath users) will experience operation activities associated with maintenance of the pipelines and the AGI for ID102 in addition to those of the Proposed Scheme. In combination this would lead to an increase in localised effects to the north of Drax Power Station. However, the highest level of the anticipated cumulative effects is Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Landscape receptors and Minor Adverse (Not significant) on Common Landscape receptors as the Proposed Scheme will be viewed in conjunction with the maintenance activities associated with this cumulative site. It should be noted that an AGI has already been assessed as part of the Proposed Scheme. Only one of the AGIs from the Proposed Scheme and ID102 will be constructed.		These effects are of a level that is no worse than those reported with the Proposed Scheme alone.
Heritag	ge				
3	2022/0711/EIA SEGL2 (Scotland to England Green Link 2) project	Submitted, awaiting decision	Construction: Construction activities associated with the committed development would temporarily impact on the setting of above ground heritage assets through an increase in levels of noise, light and dust pollution. Given the scale of the committed development, these effects are not anticipated to a significant increase of effect compared to the Scheme in isolation. Operation: It is anticipated that all impacts to setting of above ground heritage assets would take place during the construction of the	None Required	Construction: Negligible adverse effect on above Ground Heritage Assets Operation: N/A

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			committed development as the cable will be buried underground.		
6	NY/2022/0027/SCO Barlow Mound recovery of ash resource	Scoping	Construction: Construction activities associated with the committed development would impact on the setting of above ground heritage assets through an increase in levels of noise, light and dust pollution. Given the nature of the recovery works and sympathetic restoration these effects are not anticipated to result in a significant increase of effect compared to the Scheme in isolation. Operation: The committed development would retain the external elements of the mound maintaining the current mound which screens many above ground heritage assets to west from the Proposed Scheme. Due to this any cumulative impacts and resultant adverse effects are not considered to be significant.	None Required	Construction: Negligible adverse effect on above Ground Heritage Assets Operation: None
9	2021/0348/SCN Five wind turbines	Screening request, EIA required	Construction: Construction activities associated with the committed development would temporarily impact on the setting of above ground heritage assets through possible views of the construction works on the skyline, including movement of any high-level machinery such as cranes. Due to the distance from the Proposed Scheme, there is unlikely to be an additional increase in noise or light pollution that would be a considerable change from the current level. These effects are not anticipated to result in a significant increase of effect compared to the Proposed Scheme in isolation. Operation: There would be limited long distance views of the development due to topography of Barlow Mound, intervening vegetation and built form. The intervisibility between the Proposed Scheme and this development is limited however there would be a slight adverse impact resulting in a slight adverse effect on the setting of above ground heritage assets in the area.	None Required	Construction: Negligible adverse effect on above Ground Heritage Assets Operation: Slight adverse effect on the setting of above Ground Heritage Assets

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102	EN070006 National Grid Humber Low Carbon Pipeline	Scoping Report and PEIR submitted.	Construction: Construction activities associated ID102 would temporarily impact on the setting of above ground heritage assets through an increase in levels of noise, light and dust pollution. Given the scale of the committed development, these impacts are not anticipated to result in a significant increase in effect compared to the Scheme in isolation. The below ground assets within the scheme boundary for ID102 are not affected by the Proposed Scheme. Operation: It is anticipated that all impacts to setting of above ground heritage assets would take place during the construction of ID102 as the pipeline will be buried underground. Any above ground installations have the potential to impact on the setting of heritage assets however as the locations are not know this cannot be assessed.	None Required	Construction: Negligible adverse effect on above Ground Heritage Assets Operation: N/A
Water	Environment				
3	2022/0711/EIA SEGL2 (Scotland to England Green Link 2) project	Submitted, awaiting decision	Construction: Surface water: Should there be overlap between construction of SEGL2 and Drax BECCS there is the potential for short term, temporary moderate adverse impact from increased sediment load and pollutants from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated from both sites on the local drains and eventually the River Ouse. Groundwater- should there be overlap between construction of these two developments there is the potential for a short term, temporary moderate adverse impact of pollution to the groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances Operation: Surface water: There is potential for long term, permanent moderate adverse impact from increased risk of flooding to Drax Power Station, employees and people and properties elsewhere due to increased impermeable area on both sites which would increase surface water runoff generated in the area. Furthermore, there is potential for long term, permanent major adverse impact from increased risk of flooding to Drax Power Station, employees and people and properties elsewhere due	Construction: Implementation of CEMP, including preparation of Method Statements for construction works as discussed in Section 12.10 of Chapter 12 (Water Environment) (APP-048) of this ES. Operation: Implementation of surface water drainage strategy as per Appendix 12.3 Surface Water Drainage Strategy (APP-162). Floodplain compensation will be provided as per Appendix 12.1 Flood Risk Assessment (AS-088 and AS-090).	Construction: Risk of pollution to local drains and River Ouse: temporary, direct / indirect, short term slight adverse (not significant) Groundwater: Temporary, Direct, Short Term, Slight Adverse (not significant) Operation: Risk of flooding due to increased surface water runoff: Neutral (not significant) Risk of flooding due to reduction of the existing floodplain storage: Neutral (not significant) Groundwater: Neutral (not significant).

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			to loss of floodplain storage as a result of construction of the Proposed Scheme in the future floodplain (i.e. including for the impacts of climate change).		
			Groundwater- there is potential for a long term, permanent moderate adverse impact of pollution to the groundwater environment. This is from the accidental spillages or leakage of oil, hydrocarbons and hazardous substances used or storage during the operational phase infiltrating to groundwater via surface runoff.		
6	NY/2022/0027/SCO	Scoping	Construction	Construction:	Construction:
	Barlow Mound recovery of ash resource	Surface water: Should there be overlap between construction of Barlow Ash Mound Scheme and Drax BECCS there is the potential for short term, temporary moderate adverse impact from increased sediment load and pollutants from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated from both sites on the local drains and eventually Carr Dyke and the River Ouse. Groundwater- should there be overlap between construction of these two developments there is the potential for a short term, temporary moderate adverse impact of pollution to the	Implementation of CEMP, including preparation of Method Statements for construction works as discussed in Section 12.10 of the ES. Operation: Implementation of surface water drainage strategy as per Appendix 12.3 Surface Water Drainage Strategy. Floodplain compensation will be	Risk of pollution to local drains, Carr Dyke and River Ouse: temporary, direct / indirect, short term slight adverse (not significant) Groundwater: Temporary, Direct, Short Term, Slight Adverse (not significant) Operation: Risk of flooding due to increased	
			groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances Operation	provided as per Appendix 12.1 Flood Risk Assessment.	surface water runoff: Neutral (not significant)
			Operation Surface water: There is potential for long term, permanent moderate adverse impact from increased risk of flooding to Drax Power Station, employees and people and properties elsewhere due to increased impermeable area on both sites which would increase surface water runoff generated in the area.		Risk of flooding due to reduction of the existing floodplain storage associated with the Proposed Scheme and potential creation of additional floodplain storage in the Barlow Mound area: Minor Beneficial / Neutral (not
			Furthermore, there is potential for long term, permanent major adverse impact from increased risk of flooding to Drax Power Station, employees and people and properties elsewhere due to loss of floodplain storage as a result of construction of the Proposed Scheme in the future floodplain (i.e. including for the impacts of climate change).		significant) Groundwater: Neutral (not significant)
		Groundwater- there is potential for a long term, permanent moderate adverse impact of pollution to the groundwater environment. This is from the accidental spillages or leakage of			

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			oil, hydrocarbons and hazardous substances used or storage during the operational phase infiltrating to groundwater via surface runoff.		
7	2022/0358/FULM: Resubmission of 2021/0120/FULM Development of a Horticultural Facility for indoor farming and agri- tech	Submitted, not decided	Construction: Groundwater- should there be overlap between construction of these two developments there is the potential for a short term, temporary moderate adverse impact of pollution to the groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances Operation: Groundwater- there is potential for a long term, permanent moderate adverse impact of pollution to the groundwater environment. This is from the accidental spillages or leakage of oil, hydrocarbons and hazardous substances used or storage during the operational phase infiltrating to groundwater via surface runoff	Construction: Compliance with CEMP (and additionally mitigation from surface water pollution prevention) Operation: Implementation of surface water drainage strategy as per Appendix 12.3 Surface Water Drainage Strategy.	Construction: Temporary, Direct, Short Term, Slight Adverse (not significant) Operation: Neutral (not significant)
8	2020/1357/FULM Development of an energy storage facility	Permitted development	Construction: Surface water: Should there be overlap between construction of these two developments there is the potential for short term, temporary moderate adverse impact from increased sediment load and pollutants from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated from both sites on the local drains and eventually the River Ouse. Groundwater- should there be overlap between construction of these two developments there is the potential for a short term, temporary moderate adverse impact of pollution to the groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances Operation: Surface water – There is potential for long term, permanent moderate adverse impact from increased risk of flooding to Drax Power Station, employees and people and properties elsewhere due to increased impermeable area on both sites which would increase surface water runoff generated in the area. Furthermore, there is potential for long term, permanent major adverse impact from increased risk of flooding to Drax Power Station, employees and people and properties elsewhere due	Construction: Implementation of CEMP, including preparation of Method Statements for construction works as discussed in Section 12.10 of the ES. Operation: Implementation of surface water drainage strategy as per Appendix 12.3 Surface Water Drainage Strategy. Floodplain compensation will be provided as per Appendix 12.1 Flood Risk Assessment.	Construction: Risk of pollution to local drains and River Ouse: temporary, direct / indirect, short term slight adverse (not significant) Groundwater: Temporary, Direct, Short Term, Slight Adverse (not significant) Operation: Risk of flooding due to increased surface water runoff: Neutral (not significant) Risk of flooding due to reduction of the existing floodplain storage: Neutral (not significant) Groundwater: Neutral (not significant)

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			to loss of floodplain storage as a result of construction of the Proposed Scheme in the existing floodplain. Groundwater- there is potential for a long term, permanent moderate adverse impact of pollution to the groundwater environment. This is from the accidental spillages or leakage of oil, hydrocarbons and hazardous substances used or storage during the operational phase infiltrating to groundwater via surface runoff		
44	21/03027/STPLF Erection of employment units and associated landscaping and infrastructure	Permitted development	Construction: Surface Water: Should there be overlap between construction of OHL2 works and ID44 there is the potential for a short term, temporary adverse impact from increased sediment load and pollutants from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated from both sites on the local drains and eventually the River Aire. Groundwater: Should there be overlap between construction of the OHL2 works and ID44 there is the potential for a short term, temporary adverse impact of pollution to the groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated at both sites.	Construction: Implementation of CEMP, including preparation of Method Statements for construction works as discussed in Section 12.10 of the ES. A CEMP to be produced in line with Condition 18 of the planning permission for ID44.	Construction: Temporary, direct / indirect, short term slight adverse (not significant)
49	2021/1089/FULM Development of a battery storage facility	Permitted development	Construction: Groundwater- should there be overlap between construction of these two developments there is the potential for a short term, temporary moderate adverse impact of pollution to the groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances. Operation: Groundwater- there is potential for a long term, permanent moderate adverse impact of pollution to the groundwater environment. This is from the accidental spillages or leakage of oil, hydrocarbons and hazardous substances used or storage during the operational phase infiltrating to groundwater via surface runoff	Construction: Compliance with CEMP for the Proposed Scheme. Operation: Implementation of surface water drainage strategy as per Appendix 12.3 Surface Water Drainage Strategy	Construction: Temporary, Direct, Short Term, Slight Adverse (not significant) Operation: Neutral (not significant)

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52	21/03405/STPLF Erection of a storage and distribution facility with access and landscaping	Permitted development	Surface Water: Should there be overlap between construction of OHL2 works and ID52 there is the potential for a short term, temporary adverse impact from increased sediment load and pollutants from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated from both sites on the local drains and eventually the River Aire. Groundwater: Should there be overlap between construction of the OHL2 works and ID52 there is the potential for a short term, temporary adverse impact of pollution to the groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated at both sites.	Construction: Implementation of CEMP, including preparation of Method Statements for construction works as discussed in Section 12.10 of the ES. A CEMP to be produced in line with Condition 17 of the planning permission for ID52.	Construction: Temporary, direct / indirect, short term slight adverse (not significant) effect
98	22/01358/STPLF Construction of roundabout with junction leading to A161.	Permitted development	Construction Surface Water: Should there be overlap between construction of OHL2 works and ID98 there is the potential for a short term, temporary adverse impact from increased sediment load and pollutants from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated from both sites on the local drains and eventually the River Aire. Groundwater: Should there be overlap between construction of the OHL2 works and ID98 there is the potential for a short term, temporary adverse impact of pollution to the groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated at both sites.	Construction: Implementation of CEMP, including preparation of Method Statements for construction works as discussed in Section 12.10 of the ES. A CEMP to be produced in line with Condition 2 of the planning permission for ID98.	Construction: Temporary, direct / indirect, short term slight adverse
99	21/02915/STPLF Erection of industrial units and office space.	Submitted, awaiting decision	Construction Surface Water: Should there be overlap between construction of OHL2 works and ID99 there is the potential for a short term, temporary adverse impact from increased sediment load and pollutants from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated from both sites on the local drains and eventually the River Aire. Groundwater: Should there be overlap between construction of the OHL2 works and the development there is the potential for	Construction: Implementation of CEMP, including preparation of Method Statements for construction works as discussed in Section 12.10 of the ES.	Construction: Risk of pollution to local drains and River Aire: temporary, direct / indirect, short term slight adverse

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			a short term, temporary adverse impact of pollution to the groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated at both sites.		
100	22/01930/STPLF Construction of industrial units	Submitted, awaiting decision	Construction Surface Water: Should there be overlap between construction of OHL2 works and ID100 there is the potential for short term, temporary adverse impact from increased sediment load and pollutants from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated from both sites on the local drains and eventually the River Aire. Groundwater: Should there be overlap between construction of the OHL2 works and ID100 there is the potential for a short term, temporary adverse impact of pollution to the groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated at both sites.	Construction: Implementation of CEMP, including preparation of Method Statements for construction works as discussed in Section 12.10 of the ES.	Construction: Risk of pollution to local drains and River Aire: temporary, direct / indirect, short term slight adverse
102	EN070006 Humber Low Carbon Pipeline	Scoping Report and PEIR submitted.	Construction Surface Water: Should there be overlap between construction of the Proposed Scheme and the development there is the potential for short term, temporary moderate adverse impact from increased sediment load and pollutants from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated from both sites on the local drains and eventually the River Ouse. Groundwater: Should there be overlap between construction of the Proposed Scheme and ID102 there is the potential for a short term, temporary adverse impact of pollution to the groundwater environment from accidental spillages and leakage of oil, hydrocarbons and hazardous substances generated at both sites. Furthermore, if the proposed excavations for the pipeline are below the water table, there is potential for a short term, temporary moderate adverse impact on the groundwater	Construction: Implementation of CEMP, including preparation of Method Statements for construction works as discussed in Section 12.10 of the ES. As detailed in the PEIR for ID 102 PEIR good practice measures within the CEMP would reduce the risk of pollution of the water environment during construction by removing the pathways between sources and receptors for most working areas. However, potential for construction work to cause localised and temporary pollution effects would remain. Operation:	Construction: Risk of pollution to local drains and River Ouse: temporary, direct / indirect, short term slight adverse (not significant). Groundwater: Temporary, Direct, Short Term, Slight Adverse Operation: Risk of flooding due to increased surface water runoff: Neutral Risk of flooding due to reduction of the existing floodplain storage: Neutral Groundwater: Negligible

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			environment associated with the below ground excavations and dewatering at both sites. Excavations may increase turbidity within the underlying aquifer unit. Below ground excavations in shallow groundwater may require temporary dewatering at both sites. This could cause a subsequent temporary suppression in the groundwater table. The PEIR for ID102 states that this activity may reduce flow to groundwater supported sites, abstractions (regulated and non-regulated) and surface water bodies and change soil hydrology locally. Operation: Surface Water: The Proposed Scheme assesses the operational aspects of ID102 within the Water Environment ES Chapter. As such no further cumulative impacts are envisaged. Whilst it is recognised that the location of the operational features of ID102 may be located differently than that assessed the potential to mitigate the impacts has been established. Operation: Groundwater: The cumulative impact from the development is expected to be negligible during the operational phase.	Implementation of surface water drainage strategy as per Appendix 12.3 Surface Water Drainage Strategy. Floodplain compensation will be provided as per Appendix 12.1 Flood Risk Assessment.	
-	ation, Health and Socio-ed	T		T.,,	
3	2022/0711/EIA SEGL2 (Scotland to England Green Link 2) project	Submitted, awaiting decision	Construction: There is likely to be a temporary moderate significant beneficial socio-economic effect associated with direct construction employment generated by the Proposed Scheme and ID3. This is the same level of effect (moderate beneficial) as the Proposed Scheme on its own. In addition, there is likely to be a significant beneficial socio-economic effect associated with indirect effects in terms of the sourcing of local supplies (indirect employment across wider supply chains), and induced effects of local spend by on-site workers (induced employment). There may be temporary slight (not significant) adverse effects on increased demand for accommodation and community facilities. However, due to the size of the regional	N/A	Construction: Moderate beneficial (significant) Slight adverse (not significant) Operation: Slight beneficial (not significant)

Short List ID	Application Reference	Project Stage	Assessment of Cumulative Impact with Proposed Development (Drax BECCS)	Proposed Mitigation Applicable to Drax BECCS Including Any Apportionment	Residual Cumulative Effect
			and access to facilities in the surrounding villages and towns to serve construction workers, this is not anticipated to be significant.		
			Operation: There is likely to be a permanent slight (not significant) beneficial socio-economic effect associated with direct employment, indirect employment, and induced employment from both the Proposed Scheme and ID3.		
6	NY/2022/0027/SCO Barlow Ash Mound, North West of Drax Power Station, New Road, Drax, Selby, YO8 8PH	Scoping	Construction: There is likely to be a temporary moderate beneficial (significant) socio-economic effect associated with direct construction employment generated by the Proposed Scheme and ID6. This is the same level of effect (moderate beneficial) as the Proposed Scheme on its own. In addition, there is likely to be a significant beneficial socio-economic effect associated with indirect effects in terms of the sourcing of local supplies (indirect employment across wider supply chains), and induced effects of local spend by on-site workers (induced employment). There may be temporary slight (not significant) adverse effects on increased demand for accommodation and community facilities. However, due to the size of the regional labour pool and availability of hotel and rental accommodation and access to facilities in the surrounding villages and towns to serve construction workers, this is not anticipated to be significant. Operation: There is likely to be a permanent slight (not significant) beneficial socio-economic effect associated with direct employment, indirect employment, and induced employment from both the Proposed Scheme and ID6.	N/A	Construction: Moderate Beneficial (Significant) Slight adverse (not significant) Operation: Slight beneficial (not significant)

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8	2020/1357/FULM Land Off New Road Drax Selby North Yorkshire	Permitted development	Construction: There is likely to be a temporary slight (not significant) beneficial socio-economic effect associated with direct temporary employment generated by the Proposed Scheme and ID8. Similarly, multiple effects are anticipated in terms of the sourcing of local supplies (indirect employment across wider supply chains), and local spend by on-site workers (induced employment). There may be temporary slight (not significant) adverse effects on increased demand for accommodation and community facilities, and access to development land and businesses. Operation: There is likely to be a permanent slight (not significant) beneficial socio-economic effect associated with direct employment, indirect employment, and induced employment from both the Proposed Scheme and ID8.	N/A	Construction: Slight beneficial (not significant) Slight adverse (not significant) Operation: Slight beneficial (not significant)
12	2020/0994/FULM Flue Gas Desulphurisation Demolition Drax Power Station New Road Drax Selby North Yorkshire YO8 8PQ	Permitted development	Construction: Due to the phasing of ID12, the demolition of Absorber Units 4, 5 and 6 will take place before construction of the Proposed Scheme, and the demolition of Absorber Units 1, 2 and 3 will take place after construction of the Proposed Scheme is completed. There is therefore no potential for cumulative construction effects. Operation: There is likely to be a temporary slight (not significant) beneficial socio-economic effect associated with direct employment, indirect employment, and induced employment from both the operation of the Proposed Scheme and the final phase of demolition of ID12.	N/A	Construction: N/A Operation: Slight beneficial (not significant)
49	2021/1089/FULM Land Off Hales Lane Drax Selby North Yorkshire	Permitted development	Construction: There is likely to be a temporary slight (not significant) beneficial socio-economic effect associated with direct temporary construction employment generated by the Proposed Scheme and ID49. In addition, multiple effects are anticipated in terms of the sourcing of local supplies (indirect employment across wider	N/A	Construction: Slight beneficial (not significant) Slight adverse (not significant) Operation: Slight beneficial (not significant)

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			supply chains), and local spend by on-site workers (induced employment).		
			There may be temporary slight (not significant) adverse effects on increased demand for accommodation and community facilities, and access to development land and businesses.		
			Operation: There is likely to be a permanent slight (not significant) beneficial socio-economic effect associated with direct employment, indirect employment, and induced employment from both the Proposed Scheme and ID49.		
79	2022/0738/OUTM Outline application for erection of 190 dwellings and landscaping.	Submitted, awaiting decision	Construction: There is likely to be a moderate beneficial (significant) effect associated with direct temporary construction employment generated by the Proposed Scheme and ID79. This is the same level of effect (moderate beneficial) as the Proposed Scheme on its own. In addition, there is likely to be a significant beneficial socio-economic effect associated with indirect effects in terms of the sourcing of local supplies (indirect employment across wider supply chains), and induced effects of local spend by on-site workers (induced employment). There may be temporary slight adverse effects on increased demand for accommodation and access to community facilities. However, due to the size of the regional labour pool and availability of hotel and rental accommodation and access to facilities in the surrounding villages and towns to serve construction workers, this is not anticipated to be significant. Operation: There are no cumulative operational effects anticipated associated with this development as there is no employment generating floorspace within the application.	N/A	Construction: Moderate Beneficial (significant) Slight adverse (not significant) Operation: N/A
82	2022/0399/OUTM	Submitted, awaiting decision	Construction:	N/A	Construction:
	Outline application for 150 dwellings.		There is likely to be a moderate beneficial (significant) effect associated with direct temporary construction employment generated by the Proposed Scheme and ID82. This is the same level of effect (moderate beneficial) as the Proposed Scheme on its own. In addition, there is likely to be a significant beneficial socio-economic effect associated with		Moderate Beneficial (significant) Slight adverse (not significant) Operation: N/A

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			indirect effects in terms of the sourcing of local supplies (indirect employment across wider supply chains), and induced effects of local spend by on-site workers (induced employment).		
			There may be temporary slight adverse effects on increased demand for accommodation and access to community facilities. However, due to the size of the regional labour pool and availability of hotel and rental accommodation and access to facilities in the surrounding villages and towns to serve construction workers, this is not anticipated to be significant.		
			Operation:		
			There are no cumulative operational effects anticipated associated with this development as there is no employment generating floorspace within the application		
97	EN010140	Scoping	Construction:	N/A	Construction:
	Helios Renewable Energy Project		There is likely to be a moderate beneficial (significant) associated with direct temporary construction employment generated by the Proposed Scheme and ID97. This is the same level of effect (moderate beneficial) as the Proposed Scheme on its own. In addition, there is likely to be a significant beneficial socio-economic effect associated with indirect effects in terms of the sourcing of local supplies (indirect employment across wider supply chains), and induced effects of local spend by on-site workers (induced employment).		Significant beneficial Slight adverse (not significant) Operation: N/A
			There may be temporary slight adverse effects on increased demand for accommodation and access to community facilities. However, due to the size of the regional labour pool and availability of hotel and rental accommodation and access to facilities in the surrounding villages and towns to serve construction workers, this is not anticipated to be significant.		
			Operation: There are no cumulative operational effects anticipated associated with this development as there is no employment generating floorspace within the application.		

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102	EN070006 Humber Low Carbon Pipelines	Scoping report and PEIR submitted.	Construction: There is likely to be a moderate significant beneficial effect associated with direct temporary construction employment generated by the Proposed Scheme and ID102. This is the same level of effect (moderate beneficial) as the Proposed Scheme on its own. In addition, there is likely to be a significant beneficial socio-economic effect associated with indirect effects in terms of the sourcing of local supplies (indirect employment across wider supply chains), and induced effects of local spend by on-site workers (induced employment). There may be temporary slight adverse effects on increased demand for accommodation and access to community facilities. However, due to the size of the regional labour pool and availability of hotel and rental accommodation and access to facilities in the surrounding villages and towns to serve construction workers, this is not anticipated to be significant. Operation: There is likely to be a slight beneficial (not significant) effects	N/A N/A	Construction: Moderate Beneficial (significant) Slight adverse (not significant) Operation: Slight beneficial (not significant)
			(indirect employment across wider supply chains), and induced effects of local spend by on-site workers (induced employment). There may be temporary slight adverse effects on increased demand for accommodation and access to community facilities. However, due to the size of the regional labour pool and availability of hotel and rental accommodation and access to facilities in the surrounding villages and towns to serve construction workers, this is not anticipated to be significant.		