HELIOS RENEWABLE ENERGY PROJECT

PINS Document Number:
EN010140/APP/6.1.15

Pursuant to:
APFP Regulation 5(2)(a)

Environmental Statement Chapter 15: Cumulative Effects

June 2024

15. Cumulative Effects

15.1. Introduction

15.1.1. This Environmental Statement has considered the potential for likely significant intra-project effects (i.e. the different types of effects resulting from the Proposed Development combining to have effects on the same receptor) and likely significant inter-project cumulative effects on the environment (i.e. those resulting from the Proposed Development combined with other relevant development in the area).

15.2. Intra-Project Effects

15.2.1. There is no published methodology for determining the significance of intra-project effects. Combining effects with respect to one environmental discipline with another has to be qualitative and is necessarily based on judgment.

15.2.2. During the construction and decommissioning phases of the Proposed Development, users of Public Rights of Way ('PRoWs') within the Site and its vicinity have the potential to experience a combined effect of noise disturbance and the visual effect of construction and decommissioning activities. However, any adverse effects would be short term, temporary and not significant. There is also the potential for soils and agricultural land and water environment (contamination) intra-project effects, in relation to soil quality and structure and its trafficking via construction vehicles. With the measures, including storage of soils, installation of infrastructure before soils become saturated, amelioration of compacted soils, enhanced pollution monitoring and all vehicle movements on site will be confined to designated haul roads, set out in the Outline Construction Environmental Management Plan (Appendix 5.1) and Outline Soil Management Plan (refer to Appendix 14.3 of the ES) implemented, these effects would not be significant.

15.2.3. Similarly to the construction and decommissioning phases, the operational phase of the Proposed Development has the potential to result in a combined effect of noise disturbance (from plant) and visual impacts on users of PRoWs within the Site and its vicinity, as well from glint and glare. However, with the landscape planting proposals in place, and the noise mitigation incorporated into the Proposed Development's design, significant intra-project effects are not anticipated.

15.3. Inter-Project Effects

15.3.1. Inter-project effects are considered under the 'Cumulative Effects' sub-heading in each topic chapter of this ES. A summary of the identified significant inter-project cumulative effects of the Proposed Development across all topics is provided below.

15.3.2. Inter-project effects are defined in paragraph 5(e) of Schedule 4 to the EIA Regulations as:

> *'the cumulation of effects with other existing and/ or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources.'*

15.3.3. The best practice approach to cumulative schemes requires inclusion of proportionate information relating to projects that are not yet consented, dependent on the level of certainty of them coming forward. In this regard, the Planning Inspectorate's *Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure* projects[1] is relevant to this ES. In order to filter schemes into a short list of schemes to be assessed from a long list, the following criteria were applied: schemes temporal scope and programme; geography, scale and nature of development; and other factors such as capacity of the surrounding environment. The long and short list were provided to PINS and NYC for agreement via the Scoping Report (**Appendix 2.1 [EN010140/APP/6.3.2.1])**, and an updated list provided in a letter to NYC in May 2023 (which was used to inform the assessment of cumulative effects undertaken in the PEIR). An updated list was provided in a letter to NYC in January 2024 to inform the assessment of cumulative effects undertaken for the ES; these letters are provided at **Appendix 15.1 [EN010140/APP/6.3.15.1]** and **Appendix 15.2 [EN010140/APP/6.3.15.2]** respectively. The shortlist of schemes for cumulative effects assessment, as of January 2024, is provided in Table 15.1 below.

[1] Available at: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-17/

15.4. Cumulative Schemes

15.4.1. Table 15.1 below details the projects that have been identified for the assessment of likely significant cumulative effects on the environment for the purposes of this ES. The location of these projects are shown on **Figure 15.1 Cumulative Schemes Plan [EN010140/APP/6.2.15.1].**

15.4.2. The information contained within Table 15.1 is based upon information available on Selby District Council's ('SDC') website at the time of writing the Scoping Report). It was issued to SDC and North Yorkshire County Council (now North Yorkshire Council ('NYC')) for agreement in May 2023. A revised letter was issued to NYC for agreement, upon review of the schemes for assessment, in January 2024 (refer to **Appendix 2.1** of the **ES [EN010140/APP/6.3.2.1]** The list of cumulative schemes presented in Table 15.1 was reviewed in June 2024.

Table 15.1: Schemes for the Assessment of Potential Cumulative Environmental Effects with the Proposed Development

Scheme Address and Reference Number	Description	Status	Distance and Direction from the Site
Land South of A645, Wade House Lane, Drax (Ref: 2023/0128/EIA)	Development of a ground-mounted solar farm including associated infrastructure.	Consented in April 2024. Not yet under construction.	Application's site boundary overlaps with the Proposed Development's Underground Cable Corridor to the grid connection.
East Yorkshire Solar Farm NSIP (PINS Ref: EN010143)	The installation of solar photovoltaic generating panels, associated electrical equipment, cabling and on-site energy storage facilities together with grid connection infrastructure. The point of connection will be at Drax Substation, situated approximately 6.2km to the south-west of the PV site. The generating capacity of the Scheme will exceed 50MW and its maximum capacity is anticipated to be 400MW.	Accepted for Examination in December 2023	Application's grid connection corridor boundary immediately to the east of the Proposed Development's Underground Cable Corridor to the grid connection.
Drax Bioenergy	• Carbon capture infrastructure at the Drax Power Station;	Approved January	Adjacent to the eastern part of

Scheme Address and Reference Number	Description	Status	Distance and Direction from the Site
with Carbon Capture and Storage Project NSIP (PINS Ref: EN010120)	• Compression and treatment of carbon dioxide at the Drax Power Station to allow connection to a National Grid carbon dioxide transport system; • Potential Upgraded Drax Jetty and Road Improvements to facilitate the transport of abnormal indivisible loads; and • Potential Environmental Mitigation Area to the north of the Drax Power Station.	2024	the Site boundary.
Land Off New Road, Drax (Ref: 2020/1357/FULM)	Development of an energy storage facility including battery storage containers; substations; power conversion systems; transformers and associated switchgear; HVAC equipment; communications and grid compliance equipment; temporary construction compound; CCTV; fencing; infrared lighting; access, drainage and landscaping works and associated development.	Consented in May 2021. Not yet under construction.	Adjacent to the eastern part of the Site boundary.
Land Off Hales	Development of a battery storage facility, associated	Consented in May	Adjacent to the eastern part of

Scheme Address and Reference Number	Description	Status	Distance and Direction from the Site
Lane, Drax (Ref: 2021/1089/FULM)	infrastructure, access and grid connection.	2022. Not yet under construction.	the Site boundary.
Land North and South of Camela Lane, Camblesforth (Ref: 2021/0788/EIA)	Development of a ground mounted solar farm including associated infrastructure.	Consented in July 2022. Not yet under construction.	Adjacent to the eastern part of the Site boundary.
Drax Power Station, Drax (Ref: 2022/0107/NYSCO)	Recovery of ash resource from Barlow Ash Mound, North West of Drax Power Station.	Request for EIA Scoping Opinion submitted. Planning application not yet submitted.	Adjacent to the eastern part of the Site boundary.

Scheme Address and Reference Number	Description	Status	Distance and Direction from the Site
Land to the East of New Road, Drax (Ref: 2022/0711/EIA)	Hybrid Planning Application comprising two parts: (i) outline planning application (all matters reserved) for the construction of a converter station at Drax, Selby; and (ii) full planning application for the installation of high voltage direct current underground cables from the River Ouse to the converter station and high voltage alternating current underground cables from the converter station to the existing Drax Substation, as well as all associated temporary works including compounds, accesses and bellmouths as part of the construction of Scotland-England Green Link 2 (SEGL2), a two gigawatt reinforcement of the electricity transmission system between Peterhead, Scotland and Drax, England. [Installation of underground high voltage direct current cables from Mean Low Water Springs at Fraisthorpe, East Riding to the River Ouse and associated temporary works relating to land in an adjoining authority].	Consented in August 2023. Not yet under construction.	Approximately 150m to the north of the Site boundary, at its closest point.

Scheme Address and Reference Number	Description	Status	Distance and Direction from the Site
Land East of Broadacres, Mill Lane, Carlton (Ref: ZG2023/0732/OUTM)	Outline application (some matters reserved) for development of up to 200 residential dwellings with access to, but not within, the site.	Awaiting decision (validated in July 2023)	Approximately 550m south of the Site boundary.
Land Adjacent to Barlow Common Road, Barlow, Selby (Ref: 2022/0287/SCN)	EIA Screening Opinion request for a 50MW battery storage system (BESS) on land off Barlow Common Road.	EIA Screening stage – EIA not required (April 2022) Application not yet submitted.	Approximately 875m to the north of the Site boundary.
Newlands Farm, Turnham Lane,	EIA Screening Opinion **request** for five wind turbines.	EIA Screening stage – EIA	Approximately 2.5km to the north of the Site boundary.

Scheme Address and Reference Number	Description	Status	Distance and Direction from the Site
Cliffe, Selby (Ref: 2021/0348/SCN)		required (June 2021). Application not yet submitted.	
Eggborough Power Station, Selby Road, Eggborough (Ref: 2019/1343/EIA)	Hybrid application for demolition of part of the former power station and ancillary buildings and its redevelopment, comprising: (i) access into the site, internal roads, employment units, car parking, drainage infrastructure and landscaping; and (ii) outline for the scale of redevelopment of the remainder of the site for employment floorspace, proposed buildings with ridge being between 9.5 metres and 24.5 metres, car parking, drainage infrastructure and strategic landscaping.	Consented in October 2020. Under construction.	Approximately 2.9km to the west of the Site boundary.
Land near Osgodby Grange,	Installation of renewable energy generating station comprising ground mounted PV solar arrays together with	Consented in July 2022.	Approximately 7km to the north east of the Site boundary.

Scheme Address and Reference Number	Description	Status	Distance and Direction from the Site
South Duffield Road, Osgodby, Selby (Ref: 2021/0978/FULM)	substation, transformer stations, site accesses, internal access tracks, security measures, access gates, other ancillary infrastructure and landscaping and biodiversity enhancements	Not yet under construction.	
Selby Energy Park, Cliffe Common, Cliffe, Selby (Ref:ZG2023/1272/ FULM)	Development of up to 10,800sqm open storage (Use Class B8) together with associated highways works, site-wide hard and soft landscaping works, boundary treatment and associated works.	Awaiting decision (validated December 2023).	Approximately 7km to the north east of the Site boundary.
Gascoigne Wood Interchange, Gascoigne Wood Mine, Lennerton Lane, Sherburn-In-Elmet(Ref:	Outline application for the demolition of existing colliery buildings and the construction of up to 1,460,000 sq ft of employment floorspace comprising Use Classes B2, B8 and E(g) to include access (with all other matters reserved)	Awaiting decision (validated December 2021).	Approximately 8.5km to the north west of Site boundary.

Scheme Address and Reference Number	Description	Status	Distance and Direction from the Site
2021/1531/EIA)	(Previous application 2018/0818/EIA refused at appeal).		
Former Kellingley Colliery, Turvers Lane, Kellingley, Knottingley (Ref: 2016/1343/OUTM)	Outline application including means of access (all other matters reserved) for the construction of an employment park up to 1.45 million square feet ('sq ft') (135,500 square metres) gross internal area of floorspace, comprising B2, B8 and ancillary B1 uses, ancillary non-residential institution (Use Class D1) and retail uses (Use Classes A1 – A5) and related ancillary infrastructure.	Consented in February 2019. Under construction.	Approximately 10km to the west of the Site boundary.
Bradholme Farm, High Levels Bank, Thorne, Doncaster (Ref: 21/00500/OUTA)	Outline planning application for the demolition of an existing bungalow and associated buildings/ structures and all hardstanding and erection of up to 2,900,000 sq ft of employment space (Class E(g), B2 and B8 uses) with all matters reserved apart from access.	Awaiting decision.	Approximately 10km south east of the Site boundary.

15.5. Summary of the Proposed Development's Significant Inter-Project Cumulative Effects

15.5.1. No significant (beneficial or adverse) cumulative effects were identified for the following technical disciplines:

- Cultural Heritage;
- Water Environment;
- Transport and Access;
- Noise and Vibration;
- Climate Change;
- Socio-Economics; and
- Soils and Agricultural Land.

Landscape and Views:

15.5.2. The following schemes identified from the list of cumulative developments have been assessed for cumulative landscape effects (solar-related developments denoted with *):

- *Land South of A645, Wade House Lane, Drax (ref: 2023/0128/EIA);
- Drax Bioenergy with Carbon Capture and Storage Project NSIP (PINS Ref: EN010120); and
- *Land North and South of Camela Lane, Camblesforth (ref: 2021/0788/EIA).

15.5.3. These three cumulative schemes included within the scope of the assessment are all within LCA 15 – Camblesforth Farmland. The cumulative effects on this landscape receptor during the construction and decommissioning phases are determined to be not significant.

15.5.4. The cumulative effects of the Proposed Development combined with the two solar cumulative schemes during the operational phase will be significant. Following the establishment of proposed planting, the degree to which the Proposed Development and the cumulative schemes will be perceived within the landscape will be reduced, however due to the collective large extent of the solar farms and their duration, it is

considered that a major/moderate adverse (**significant**) effect would remain as a consequence of the Proposed Development in combination with the cumulative schemes. No significant effects are identified to visual receptors during the operational phase of the Proposed Development.

Biodiversity:

15.5.5. The following solar developments identified from the list of cumulative developments have been assessed for cumulative effects (solar-related developments denoted with *):

- *Land South of A645, Wade House Lane, Drax (ref: 2023/0128/EIA);
- *East Yorkshire Solar Farm NSIP (PINS ref: EN010143);
- Drax Bioenergy with Carbon Capture and Storage Project NSIP (PINS Ref: EN010120);
- Land Off New Road, Drax (Ref: 2020/1357/FULM);
- Land Off Hales Lane, Drax (Ref: 2021/1089/FULM);
- *Land North and South of Camela Lane, Camblesforth (ref: 2021/0788/EIA);
- Drax Power Station, Drax (Ref: 2022/0107/NYSCO);
- Land to the East of New Road, Drax (Ref: 2022/0711/EIA);
- Land East of Broadacres, Mill Lane, Carlton (Ref: ZG2023/0732/OUTM);
- Land Adjacent to Barlow Common Road, Barlow, Selby (Ref: 2022/0287/SCN);
- Newlands Farm, Turnham Lane, Cliffe, Selby (Ref: 2021/0348/SCN);
- Eggborough Power Station, Selby Road, Eggborough (Ref: 2019/1343/EIA); and
- *Land near Osgodby Grange, South Duffield Road, Osgodby, Selby (ref: 2021/0978/FULM).

15.5.6. These cumulative developments make clear commitments to achieve measurable biodiversity gains; therefore, a high beneficial (significant) cumulative effect to habitats has been identified at the local level.

15.5.7. With the implementation of the **outline Landscape Environmental Management Plan oLEMP [EN010140/APP/6.3.7.9]** and BNG commitments, the Proposed Development is considered likely to lead to beneficial cumulative impacts on habitats during both the construction and operational phases of the Proposed Development, which therefore represent a **significant** beneficial effect.

Socio-Economics:

15.5.8. The following five cumulative schemes will produce renewable energy and therefore when combined with the operational Proposed Development there will be a **significant** major beneficial cumulative effect on renewable energy generation in the Yorkshire and the Humber region, during the operational phase:

- Land South of A645, Wade House Lane, Drax (Ref: 2023/0128/EIA);
- East Yorkshire Solar Farm NSIP (PINS Ref: EN010143);
- Land North and South of Camela Lane, Camblesforth (Ref: 2021/0788/EIA);
- Newlands Farm, Turnham Lane, Cliffe, Selby (Ref: 2021/0348/SCN); and
- Land near Osgodby Grange, South Duffield Road, Osgodby, Selby (Ref: 2021/0978/FULM).