

# EXPLANATORY MEMORANDUM (CLEAN)

# **Drax Bioenergy with Carbon Capture and Storage**

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

**Document Reference Number: 3.2** 

**Applicant:** Drax Power Limited **PINS Reference:** EN010120



**REVISION: 05** 

**DATE: 28 March 2023** 

**DOCUMENT OWNER: Pinsent Masons LLP** 

AUTHOR: A. Tresadern APPROVER: R. Griffiths

**PUBLIC** 

# **CONTENTS**

1	INTRODUCTION	2
2	THE PURPOSE AND STRUCTURE OF THIS DOCUMENT	12
3	PURPOSE OF THE ORDER	14
4	PROVISIONS OF THE ORDER	23
5	SCHEDULES	40

#### INTRODUCTION

#### Overview

1.

- 1.1 This Explanatory Memorandum has been prepared on behalf of Drax Power Limited ("Drax" or the "Applicant"). It forms part of the application (the "DCO Application") for a Development Consent Order (a "DCO"), that has been submitted to the Secretary of State (the "SoS") for Business, Energy and Industrial Strategy, under section 37 of The Planning Act 2008 (as amended) (the "PA 2008").
- 1.2 Drax is seeking development consent to install post-combustion carbon capture technology on up to two of the existing 660-megawatt electrical ('MWe') biomass power generating units at the Drax Power Station in Selby, North Yorkshire (Unit 1 and Unit 2). The installation of this technology constitutes an extension to the Existing Drax Power Station (of which biomass Units 1 and 2 are part), and is referred to as post-combustion carbon capture as the carbon dioxide is captured from the flue gas produced during the combustion of biomass in Units 1 and 2. The Proposed Scheme is designed to remove approximately 95% of the carbon dioxide from the flue gas from these two Units (the "Proposed Scheme").
- The Proposed Scheme involves the use by the Applicant of land at the Drax Power Station for a purpose directly related to the generation of electricity by that station. The Applicant considers that, in this particular case, the proposed Carbon Capture technology (namely, Work No. 1 as set out in Schedule 1 to the draft DCO) constitutes the NSIP by virtue of it being an extension to the Existing Drax Power Station. The design of the Proposed Scheme is unique in carbon capture plants and arises as a result of the decommissioning of Units 5 and 6, thereby enabling the Proposed Scheme to become wholly incorporated into the physical structure of the Existing Drax Power Station which is akin to a carbon capture plant being incorporated in a new generating station, such as that being promoted at Net Zero Teesside and Keadby 3 (both current NSIP projects). The interlinking and integral nature of Work No. 1 with the Existing Drax Power Station, is clearly shown through the Works Plans (AS-073), which show the location of each part of Work No. 1 and its relationship with the Existing Drax Power Station. The effect of the extension (the Proposed Scheme) will be that Units 1 and 2 of the Existing Drax Power Station will not only generate electricity but also produce negative emissions in generating that electricity. The Proposed Scheme, therefore, comprises an extension of an existing generating station for the purpose of section 14(1)(a) of the PA 2008, and consequently is a Nationally Significant Infrastructure Project. A DCO is therefore required for the Proposed Scheme as it falls within the definition and thresholds for a "Nationally Significant Infrastructure Project" (a "NSIP") under sections 14 and 15(2) of the PA 2008. The DCO, if made by the SoS, would be known as the Drax Power Station Bioenergy with Carbon Capture and Storage Extension Order 202\* (the "Order"). A draft of the Order has been submitted with the DCO Application and will be updated throughout the Examination.
- 1.4 This Explanatory Memorandum has been prepared to explain the purpose and effect of each article of, and the Schedules to, the Order, as required by Regulation 5(2)(c) of the APFP Regulations.

1.5 A Glossary (document reference AS-069) has been submitted as a standalone document with the DCO Application which incorporates all terms used within submission documents.

#### Drax

1.6 Drax Power Station is owned and managed by Drax Power Limited, which is part of the Drax corporate group of companies (the "Drax Group"). The Drax Group is a UK-based renewable energy company engaged in renewable power generation, the production of sustainable biomass and the sale of renewable electricity to businesses. Drax Power Limited is the Applicant for the DCO Application, as referred to in this and all other application and consultation documentation.

#### The Site

- 1.7 The Site (depicted with a red line on Figure 1.1, Order limits, document reference APP-056) represents the maximum extent of all potential permanent and temporary works required as part of the Proposed Scheme. The Site (or the "Order limits") is also shown on the Land Plans (document reference AS-072) and Works Plans (document reference AS-073).
- 1.8 The Site is approximately 128 ha and is split into the following parcels:
  - 1.8.1 **Drax Power Station Site** the land occupied by the Drax Power Station;
  - 1.8.2 East Construction Laydown Area area required during the construction phase of the Proposed Scheme for temporary works situated to the east of the Drax Power Station Site, across New Road. (Note, there are also several parcels of land within the Drax Power Station Site which would be used for construction laydown. These areas have been termed "Drax Power Station Site Construction Laydown Areas");
  - 1.8.3 **Habitat Provision Area** the land within the Order limits that may be used for environmental mitigation for the Proposed Scheme. This parcel is located to the north and north east of the Drax Power Station:
  - 1.8.4 Parts of the surrounding road network where street works are required in connection with the construction of the Proposed Scheme:
  - 1.8.5 Flood Compensation Area land added to the Order limits pursuant to the Applicant's proposed change application, to mitigate against the minor loss of floodplain due to construction of the Proposed Scheme within the Drax Power Station Site; and
  - 1.8.6 Further land added to the Order limits as part of the proposed change application, located outside the Drax Power Station Site, to facilitate the delivery of abnormal indivisible loads ("AlLs") to the Site during construction of the Proposed Scheme.

- 1.9 In addition, an Off-site Habitat Provision Area has been identified within land outside of the Order limits, to the west of the Site, that will be used to provide some of the ecological mitigation and compensation associated with the Proposed Scheme. This area is shown on Figure 1.3 (Off-Site Habitat Provision Area) (document reference APP-058). The provision of these works will be secured via a development consent obligation under section 106 (see draft section 106 agreement submitted to the Examination at Deadline 1 (document reference REP3-016)).
- 1.10 The Existing Drax Power Station is characterised by a number of large structures, including the main generating station buildings housing the four biomass units (retrofitted sequentially at Drax Power Station since 2013), and two coal units, a main emissions stack of 259 m in height, 12 cooling towers each of 116.5 m in height (six to the north and six to the south of the generating station buildings), offices, storage buildings and ash handling facilities, as well as overhead electricity cables and rail infrastructure.
- 1.11 Drax Power Station was originally built, owned and operated by the Central Electricity Generating Board. It had a capacity of just under 2,000 megawatt ('MW') when Phase 1 was completed in 1975, increasing to 4,000 MW from six coal-fired units after the construction of Phase 2 in 1986.
- 1.12 It is now owned and operated by Drax Power Limited. Four of the six main generating units (Units 1 to 4) run on biomass, making Drax Power Station the UK's largest single site renewable power generator.
- 1.13 The two remaining coal units (Units 5 and 6) stopped generating electricity commercially in March 2021 and will cease operations prior to works to construct the Proposed Scheme commencing.
- 1.14 The Habitat Provision Area consists mainly of agricultural fields. The East Construction Laydown Area consists of arable fields surrounded by hedgerow.
- 1.15 The current land uses for the Site are described in more detail at section 2.1 of the Environmental Statement Chapter 2 (Site and Project Description) (document reference APP-038).
- 1.16 The entire Site lies within the administrative area of The North Yorkshire Council ("NYC") (from 1 April 2023).
- 1.17 The Applicant has the benefit of a Development Consent Order ('DCO') (The Drax Power (Generating Stations) Order 2019), which allows it to repower up to two of the existing coal-powered generating units with new gas turbines that can operate in both combined cycle and open cycle modes (referred to as the Drax Repower Project). The new units would have a new combined capacity of up to 3,600 MW in combined cycle mode (1,800 MW each). The Applicant has publicly stated that it has no plans to progress the Drax Repower Project, and this is confirmed by a proposed article in the draft DCO submitted with the application. As such, for the purposes of the DCO Application for the Proposed Scheme including this

- Explanatory Memorandum, it has been assumed that the Drax Repower Project will not be built.
- 1.18 Drax Power Station is surrounded by the villages of Drax, approximately 700 m to the south east of the Order limits, Long Drax approximately 1.3 km north east, Hemingbrough approximately 1.2 km north and Camblesforth approximately 1.5 km south west. Larger towns in the vicinity of the Drax Power Station are Selby approximately 6 km north west and Goole approximately 8 km south east of the Drax Power Station Site.
- 1.19 A full description of environmental features both within the Site and in the surrounding area is given within the Environmental Statement chapters dealing with specific environmental topics, and are also shown in Figure 2.1 (Environmental Constraints) of Chapter 2 (Site and Project Description) of the Environmental Statement (document reference APP-038).

### The Proposed Scheme

- 1.20 The Proposed Scheme is for the installation of post-combustion carbon capture technology as an extension to an existing biomass generating station (Units 1 and 2 of the generating station). The NSIP is described in Work Number 1. The below summarises all elements comprising the Proposed Scheme:
  - 1.20.1 **Work No.1—** carbon capture plant as an extension to an existing generating station comprising—
    - (a) **Work No. 1A–** works to modify and upgrade the existing generating station water pre-treatment plant comprising updated technology retrofitted to the existing four sedimentation tanks.
    - (b) Work No. 1B- works to modify, upgrade and extend the existing generating station cooling water system including: modifications, upgrades and extension to existing generating station cooling water pumps, and reconfiguration of discharge manifold; works for the distribution and usage of cooling water within the carbon capture plant and supporting systems including: supply lines to the carbon capture plant, filtering equipment and heat exchangers, biocide / chemical dosing, pipework connections from the reconfigured discharge manifold to heat exchangers and other components of the carbon capture plant, and return into the existing generating station cooling infrastructure comprising return lines from the carbon capture plant to the existing generating station cooling towers.
    - (c) **Work No. 1C—** works to modify, upgrade and extend the existing generating station boilers and turbines for the carbon capture plant process steam connection comprising—
    - (d) Work No. 1C(i)— works in connection with Unit 1 of the existing generating station including: extraction of steam from Unit 1 of the existing generating station including either or both of (i)

interconnection through a boiler tap out of the hot reheat section of the host boiler from Unit 1 of the existing generating station, and (ii) interconnection into the host turbine from Unit 1 of the existing generating station; modifications to the boiler and/or turbine from Unit 1 of the existing generating station; pipelines and pipeline supports carrying steam from Unit 1 of the existing generating station to the combined power turbines and/or pressure reducing de-superheating stations including drains and flash vessels; return of condensate from the carbon capture plant to Unit 1 of the existing generating station including pipelines and pipeline supports carrying condensate to Unit 1 of the existing generating station interconnection back into the condensate system within Unit 1 of the existing generating station.

- (i) Work No. 1C(ii) - works in connection with Unit 2 of the existing generating station including: extraction of steam from Unit 2 of the existing generating station including either or both of (i) interconnection through a boiler tap out of the hot reheat section of the host boiler from Unit 2 of the existing generating station and (ii) interconnection into the host turbine from Unit 2 of the existing generating station; modifications to the boiler and/or turbine from Unit 2 of the existing generating station; pipelines and pipeline supports carrying steam from Unit 2 of the existing generating station to the combined power turbines and/or pressure reducing de-superheating stations including drains and flash vessels; return of condensate from the carbon capture plant to Unit 2 of the existing generating station including pipelines and pipeline supports carrying condensate to Unit 2 of the existing generating station and interconnection back into the condensate system- within Unit 2 of the existing generating station.
- (ii) Work No. 1C(iii)- processing of steam from Unit 1 and Unit 2 of the existing generating station by the carbon capture plant including: up to two combined power steam turbines and generator sets including all balance of plant and ancillaries; up to two combined power steam turbine buildings; up to two pressure reducing de-superheating stations; up to two pressure reducing de-superheating stations buildings; a new overground pipe bridge structure carrying steam, return condensate and connecting pipework including drainage points between the combined power steam turbines and the carbon capture plant.
- (e) **Work No. 1D—** up to two carbon dioxide capture plants for Unit 1 and Unit 2 of the existing generating station comprising—
  - (i) Work No. 1D(i)— absorber and quench system for the carbon capture plant for Unit 1 of the existing generating station including: one quench column; and one absorber column;

- (ii) Work No. 1D(ii)— absorber and quench system for the carbon capture plant for Unit 2 of the existing generating station including: one quench column; and one absorber column;
- (iii) Work No. 1D(iii)— solvent regeneration system and rich solvent / lean solvent heat exchangers for the carbon capture plant for Unit 1 of the existing generation station including: up to two regenerators; main process and service rack including rich solvent / lean solvent heat exchangers; and drums and vessels;
- (iv) Work No. 1D(iv)— solvent regeneration system and rich solvent / lean solvent heat exchangers for the carbon capture plant for Unit 2 of the existing generation station including: up to two regenerators; main process and service rack including rich solvent / lean solvent heat exchangers; and drums and vessels;
- (v) Work No. 1D(v)— supporting infrastructure for the carbon capture plant for Unit 1 of the existing generating station including: up to two gas / gas heat exchangers; up to four flue gas booster fans; solvent pumps; and monitoring and metering equipment;
- (vi) Work No. 1D(vi)— supporting infrastructure for the carbon capture plant for Unit 2 of the existing generating station including: up to two gas / gas heat exchangers; up to four flue gas booster fans; solvent pumps; and monitoring and metering equipment;
- (vii) Work No. 1D(vii)— common solvent storage and make-up system infrastructure for the carbon capture plants for Unit 1 and Unit 2 of the existing generating station comprising up to four bunded solvent storage compounds;
- (viii) Work No. 1D(viii)— common supporting infrastructure including: a wastewater treatment plant; up to eight chemical storage areas; road tanker loading and unloading areas; all firefighting systems including up to four fire water tanks; and works connecting Work Nos. 1D(i) to 1D(vii) to Work No. 1E and the existing generating station.
- (f) Work No. 1E— carbon dioxide processing and compression plant comprising—
  - (i) Work No. 1E(i)— carbon dioxide processing and compression plant for the carbon capture plant for Unit 1 of the existing generating station including: up to eight carbon dioxide gas compressors enclosed in up to four buildings; up to two carbon dioxide dryers and associated treatment and exporting plant including filters, conditioners, recirculating compressors,

heated safety valves, oxygen removal equipment, hydrogen generation, hydrogen storage, gas detection safety systems, metering and system process vents.

- (ii) Work No. 1E(ii)— carbon dioxide processing and compression plant for the carbon capture for Unit 2 of the existing generating station including: up to eight carbon dioxide gas compressors enclosed in up to four buildings; up to two carbon dioxide dryers and associated treatment and exporting plant including— filters, conditioners, recirculating compressors, heated safety valves, oxygen removal equipment, hydrogen generation, hydrogen storage, gas detection safety systems, metering and system process vents.
- (iii) Work No. 1E(iii)— one carbon dioxide main vent stack and one silencer for the carbon capture plant for Unit 1 of the existing generating station.
- (iv) Work No. 1E(iv)— one carbon dioxide main vent stack and one silencer for the carbon capture plant for Unit 2 of the existing generating station.
- (g) Work No. 1F— integral electrical connections within the existing generating station and carbon capture plant including: upgrade to the existing 400 kV National Grid substation; modifications and upgrade to the 132 kV air insulated switchgear including but not limited to circuit breakers, busbar disconnectors, and earth switches; decommissioning and removal of existing oil-filled cabling, and installation of upgraded cabling as part of the connection from the 132 kV air insulated switchgear to the new distribution voltage infrastructure (in Work No. 1F); destringing, upgrading and restringing of existing overhead lines as part of the connection from the switchgear to the new distribution voltage infrastructure; installation of new distribution voltage infrastructure including associated HV and LV transformers and distribution voltage cabling to and from the switchroom buildings and the combined power turbines; installation of up to two combined power turbine power control cubicles and associated generator step-up transformers; installation of up to thirty switchroom buildings; and installation of facilities for storage of excess electrical power and / or for electrical load balancing.

And associated development within the meaning of section 115(2) of the 2008 Act in connection with the nationally significant infrastructure project referred to in Work No. 1 comprising—

1.20.2 Work No. 2— infrastructure to transport compressed carbon dioxide from Work No. 1E to storage and transport infrastructure operated by National Grid Carbon Limited comprising one of the following—

- (a) a new carbon dioxide delivery terminal compound and pipelines including— a new underground or aboveground carbon dioxide pipeline connecting Work No. 1E with this Work No. 2(a); a pigging station; safety valves; monitoring and metering equipment; filters; system process vents; a new underground or aboveground carbon dioxide pipeline connecting this Work No. 2(a) to a terminal point within the Order limits; trenching works; and pipeline field marker posts and cathodic protection test / transformer rectifier unit(s); OR
- (b) a new carbon dioxide delivery pipeline including— a new underground or aboveground carbon dioxide pipeline connecting Work No. 1E to a terminal point within the Order limits; trenching works; pipeline field marker posts and cathodic protection test / transformer rectifier unit(s); and monitoring and metering equipment.
- 1.20.3 Work No. 3— supporting works in connection with and in addition to Work Nos. 1, 2 and 5 including: a new pipeline or pipelines connecting Work Nos. 1A and 1B to the existing generating station's on-site purge chamber; surface water collection and drainage pipe works to discharge to cooling towers; modification to and refurbishment of existing electrostatic precipitators of Unit 1 and Unit 2 of the existing generating station; cable connection back to existing generating station central control room; service and pipeline connections for supply of heat to wastewater treatment plant; replacement of the main generator transformers for Unit 1 and Unit 2 of the existing generating station; other minor auxiliary infrastructure required to support the carbon capture process; ground raising and ground preparation works; electricity, water, wastewater, control and telecommunications and other services; trenching works; below ground drainage works; security and site lighting infrastructure, including cameras, perimeter fencing and lighting columns: tree and hedge removal; hard and soft landscaping including tree planting, ecological mitigation, temporary and permanent fencing and other boundary treatments; civil works and support structures; works required in order to protect existing utilities infrastructure; internal roadways, car parking, pedestrian network, cycle parking and hardstanding; and site drainage and waste management infrastructure, including relocation of existing infrastructure as required.
- 1.20.4 Work No. 4— works to facilitate the safe entry and navigation of construction vehicles for the purpose of construction access to Work Nos. 1 to 5 and 7including— road modifications; temporary removal or reinstatement of structures, features and landscaping; and temporary modification and subsequent reinstatement of external parts of structures and buildings.
- 1.20.5 Work No. 5— temporary construction laydown areas including—car parking; areas of hardstanding; laydown areas for storage including of plant, equipment, materials and topsoil; site and welfare offices, fabrication areas and workshops; and electricity, water, waste water and telecommunications connections.

- 1.20.6 **Work No. 6—** habitat provision area including— soft landscaping including planting; landscape and biodiversity enhancement measures; and security fencing, gates, boundary treatment and other means of enclosure.
- 1.20.7 Work No. 7— works to create a floodplain compensation area including—partial removal of existing grassland or vegetation; earthworks to include excavation and movement of material within the floodplain compensation area; and landscape and habitat reinstatement and enhancement measures.
- 1.20.8 **Work No. 8—** works to facilitate the delivery of abnormal indivisible loads to the site comprising—
  - Works No. 8A— diversion of existing electrical 11kV overhead lines (a) including: removal or realignment of sections of existing electrical 11 kV overhead lines; installation of new sections of electrical 11 kV overhead lines or new sections of electrical 11 kV underground cabling; installation of new or relocation of existing electrical overhead line poles; installation of new or relocation of existing infrastructure for detecting and interrupting transient faults on the electrical network; construction of new joint bays to allow connection of new electrical 11 kV underground cabling with existing electrical 11 kV underground cabling; civil works including excavation. trenching, horizontal directional drilling works or auger boring; works required in order to protect existing utilities infrastructure; vegetation removal and landscape and habitat reinstatement measures; works facilitate construction access including temporary modifications and temporary removal or reinstatement of structures, features and landscaping; and temporary construction laydown area; and
  - Works No. 8B— diversion of existing telecommunication overhead (b) lines including— removal or realignment of sections of existing telecommunication overhead lines; installation of new sections of telecommunication overhead lines or new sections telecommunication underground cabling; installation of new or relocation of existing telecommunication overhead line poles; construction of new joint bays to allow connection of new underground cabling telecommunication telecommunication underground cabling; civil works including excavation, trenching, horizontal directional drilling works or auger boring; works required in order to protect existing utilities infrastructure; vegetation removal and landscape and habitat reinstatement measures; works to facilitate construction access including temporary road modifications and temporary removal or reinstatement of structures, features and landscaping; and temporary construction laydown area.

- 1.20.9 In connection with and in addition to Work Nos. 1 to 8 further associated development including— surface water drainage systems, storm water attenuation systems including storage basins, oil water separators, including channelling and culverting and works to existing drainage systems; electrical, gas, water, foul water drainage and telecommunications infrastructure connections and works to, and works to alter the position of, such services and utilities connections; hard standing and hard landscaping; biodiversity measures; closed circuit television cameras and columns and other security measures; site establishments and preparation works including site clearance (including vegetation removal, demolition of existing buildings and structures); earthworks (including soil stripping and storage and site levelling) and excavations; the alteration of the position of the services and utilities; and works for the protection of buildings and land; temporary construction laydown areas and contractor facilities, including materials and plant storage and laydown areas; generators; concrete batching facilities; vehicle and cycle parking facilities; pedestrian and cycle routes and facilities; offices and staff welfare facilities; security fencing and gates; external lighting; roadways and haul routes; wheel wash facilities; and signage; vehicle parking and cycle storage facilities; accesses, roads and pedestrian and cycle routes; tunnelling, boring and drilling works; and further associated development comprising such other works or operations as may be necessary or expedient for the purposes of or in connection with the construction, operation and maintenance of the authorised development but only within the Order limits and insofar as they are unlikely to give rise to any materially new or materially different environmental effects which are worse than those assessed in the environmental statement.
- 1.21 The "Associated Development", for the purposes of section 115(2) of the PA 2008 comprises Work Nos. 2 to 8 of the authorised development, and further associated development as set out in the final paragraph of Schedule 1 "Authorised Development" to the Order.
- 1.22 It is anticipated that subject to the DCO having been made by the SoS (and a final investment decision by Drax), construction work on the Proposed Scheme would commence in early 2024. Two options are proposed for the construction of the Proposed Scheme:
  - 1.22.1 Option 1: The carbon capture plant associated with Unit 2 is programmed to be constructed first along with the common plant, with the carbon capture plant associated with Unit 1 to follow sequentially.
  - 1.22.2 Option 2: The carbon capture plant associated with Unit 1 and Unit 2 as well as the common plant to be constructed at the same time.
- 1.23 Table 2.1 in Chapter 2 (Site and Project Description) of the Environmental Statement (document reference APP-038) shows a preliminary illustrative construction programme for Option 1 and Table 2.2 shows a preliminary illustrative construction programme for Option 2. For both options, construction is expected to start in early 2024. In both options it is assumed that the first Unit would be

operational by the end of 2027, with the second unit operational by the end of 2029. There is therefore not a significant difference between the two construction programmes. Nevertheless, for the purposes of the environmental impact assessment the worst case construction programme for each topic may differ, therefore the construction programme option which has been assessed is set out in each individual topic chapter of the Environmental Statement, along with an explanation of the approach taken to optionality more broadly

1.24 A more detailed description of the Proposed Scheme is provided at Schedule 1 "Authorised Development" of the Order and Chapter 2 (Site and Project Description) of the Environmental Statement (document reference APP-038). The areas within which each of the main components of the Proposed Scheme are to be built are shown by the coloured and hatched areas on the Works Plans (document reference AS-073).

#### 2. THE PURPOSE AND STRUCTURE OF THIS DOCUMENT

- 2.1 This Explanatory Memorandum has been prepared to explain the purpose and effect of each article of, and the Schedules to, the Order, as required by Regulation 5(2)(c) of the APFP Regulations. This Explanatory Memorandum also explains why each article of, and Schedule to, the Order is required for the Scheme.
- 2.2 It also seeks to identify and explain departures from the Infrastructure Planning (Model Provisions) (England and Wales) Order 2009 (the "model provisions"). Whilst the power for the SoS to designate, and the requirement to have regard to, the model provisions have been removed by the Localism Act 2011, the Applicant considers it is still relevant to note and explain variations made in the Order compared to the model provisions.
- 2.3 The Order includes a number of provisions to enable the construction, maintenance, operation and decommissioning of the Proposed Scheme. The provisions have been drafted to accord with the wide-ranging powers at section 120 of the 2008 Act, but also the limitations, requirements and exceptions imposed by section 120(8) and sections 122 to 152 so far as these are relevant to the Proposed Scheme.
- 2.4 These are briefly described below and then considered in more detail in the following sections:
  - 2.4.1 Part 1: Article 1 sets out what the Order may be cited as and when it comes into force. Article 2 sets out the meaning of various terms used in the Order;
  - 2.4.2 Part 2: Articles 3 to 5 provide development consent for the Proposed Scheme, and allow it to be constructed, maintained and operated. Articles 6 and 7 set out who has the benefit of the powers of the Order and how those powers can be transferred. Article 8 relates to the disapplication and modification of certain legislative provisions, and addresses inconsistencies between the Order and previous consents granted under the Planning and

- Electricity Acts in respect of the Drax Power Station Site, which is located within the Existing Drax Power Station, as well as the Drax Repower DCO;
- 2.4.3 **Part 3: Articles 9 to 14** provide for the undertaker (see paragraph 3.4 below for the definition of "undertaker" in the Order) to be able to carry out works to and within streets, to alter the layout of streets, to create or improve accesses; and to temporarily close public rights of way;
- 2.4.4 **Part 4: Articles 15 to 17** set out three supplemental powers relating to discharge of water, authority to survey land and removal of human remains;
- 2.4.5 Part 5: Articles 18 to 31 provide for the undertaker to be able to compulsorily acquire rights over/within the Order land, and to be able to temporarily use parts of the Order land for the construction or maintenance of the Proposed Scheme. The provisions also provide for the undertaker to suspend or extinguish certain private rights. The provisions provide for compensation to be payable to affected persons in respect of these powers, where that is not already secured elsewhere. These articles also provide for powers in relation to equipment of statutory undertakers;
- 2.4.6 **Part 6: Articles 32 and 33** provide (respectively) powers in relation to trees which need to be removed or lopped and for hedgerows to be removed in relation to the Proposed Scheme and any protective works to buildings;
- 2.4.7 **Part 7: Articles 34 to 43** include various general provisions in relation to the Order:-
  - (a) **Article 34** provides protection for statutory undertakers through the protective provisions (set out in Schedule 12);
  - (b) Articles 35 to 43 include provisions such as: application of statutes relating to leases; that the Order land will be "operational land"; a defence to proceedings in respect of statutory nuisance; certification of documents relevant to the Order; notices served under the Order; procedures for approvals required under the Order; arbitration in case of disagreements under the Order; guarantees in respect of the payment of compensation; and a provision relating to electronic communications.
- 2.5 There are 14 Schedules to the Order, providing for:-
  - 2.5.1 **Schedule 1** the description of the Proposed Scheme;
  - 2.5.2 **Schedule 2** the requirements (a form of control akin to planning conditions) applying to the Proposed Scheme;
  - 2.5.3 **Schedule 3** a list of the local legislation relating to railways, drainage and utilities that the Order will disapply insofar as any provisions are inconsistent with the powers contained in the Order;

- 2.5.4 **Schedules 4 to 7** matters in relation to streets, accesses and rights of way;
- 2.5.5 **Schedule 8** land in which only rights may be acquired or in which rights may be extinguished;
- 2.5.6 **Schedule 9** amendments to statutes to ensure appropriate compensation is payable where new rights over land are acquired under the Order;
- 2.5.7 **Schedule 10** land which may be used temporarily for the Proposed Scheme;
- 2.5.8 **Schedule 11** the procedure for discharge of requirements;
- 2.5.9 **Schedule 12** provisions protecting statutory undertakers and their apparatus;
- 2.5.10 **Schedule 13** documents and plans to be certified; and
- 2.5.11 **Schedule 14** design parameters for the Proposed Scheme.

#### 3. **PURPOSE OF THE ORDER**

- 3.1 For the reasons set out in this section, the Applicant considers that in this particular case Work No. 1 (which comprises the installation of post-combustion carbon capture technology) is an extension to the Existing Drax Power Station, being an onshore generating station with a capacity of over 50 MW, in England. As such, the Proposed Scheme is a NSIP under sections 14(1)(a) and 15 of the PA 2008.
- 3.2 The Applicant therefore requires development consent under the PA 2008 in order to construct, maintain, operate and decommission the Proposed Scheme. Development consent may only be granted by a DCO, following an application to the SoS (section 37 of the PA 2008).
- 3.3 Accordingly, the Applicant is making the DCO Application to the SoS for a DCO for the construction, operation, maintenance and decommissioning of the Proposed Scheme in the administrative area of North Yorkshire Council. The Proposed Scheme is referred to in the Order as "the authorised development".
- 3.4 The Order refers to the person authorised to exercise the powers in the Order as "the undertaker", and defines the undertaker as Drax Power Limited.
- 3.5 In addition to providing for the construction, operation, maintenance and decommissioning of the authorised development, the Order will, in accordance with section 120, section 122 and Schedule 5 of the PA 2008, authorise the acquisition of rights over land, and the extinguishment of, or interference with, interests in or rights over land.
- 3.6 The Book of Reference (document reference REP2-018) sets out a description of the land and interests included in the Order which are also shown on the Land Plans

(document reference AS-072). The Order provides for the areas over which rights can be compulsorily acquired, the nature of rights that can be acquired and what other rights and interests will be affected. The Order and the Book of Reference should be read together with the Statement of Reasons (document reference REP2-012) which accompanies the DCO Application and sets out the justification for the acquisition or interference with the Order land.

# Development for which development consent is required

- 3.7 Section 115(1) of the PA 2008 provides that development consent may be granted for "(a) development for which development consent is required, or (b) associated development". The SoS must be satisfied that all the elements included within the "authorised development" are either the NSIP or part of the NSIP or are associated development, in order to include them in the Order pursuant to section 115 of the PA 2008.
- 3.8 Development for which development consent is required under section 115(1)(a) of the PA 2008 comprises Work Number 1, being the post-combustion carbon capture technology. The Applicant considers that, in this particular case, Work Number 1 constitutes the NSIP by virtue of it being an extension to the Existing Drax Power Station.
- 3.9 Section 14 of the PA 2008 sets out what projects will be NSIPs and includes (at section 14(1)(a)) "the construction or extension of a generating station". That categorisation is subject to section 15, which provides that the construction or extension of a generating station is within section 14(1)(a) if the generating station is or (when constructed or extended) is expected to be:
  - (a) in England;
  - (b) does not generate electricity from wind;
  - (c) is not an offshore generating station; and
  - (d) its capacity is more than 50 megawatts.
- 3.10 Pursuant to section 235 of the PA 2008, "generating station" has the same meaning under the PA 2008 as in Part 1 of the Electricity Act 1989. Section 64(1) of the Electricity Act defines "generating station" as "in relation to a generating station wholly or mainly driven by water, includes all structures and works for holding or channelling water for a purpose directly related to the generation of electricity by that station;".
- 3.11 Pursuant to section 235 of the PA 2008, the term "extension", in relation to a generating station, has the meaning given by section 36(9) of the Electricity Act 1989, which provides that "extension", in relation to a generating station, includes the use by the person operating the station of any land [or area of waters] (wherever situated) for a purpose directly related to the generation of electricity by that station and "extend" shall be construed accordingly."

- 3.12 The generating station to be extended by the Proposed Scheme is the Existing Drax Power Station, which is a thermal generating station, 4 units of which (Units 1-4) generate electricity from sustainable biomass and 2 units (Units 5 and 6, both of which will be decommissioned before the Proposed Scheme is operational) generate electricity from coal. At the Existing Drax Power Station, biomass fuel is used to heat demineralised water to turn it to high pressure steam. The steam is used to spin turbines and generate electricity before being cooled by the cooling water, which flows through condensers on either side of each steam turbine before returning to the boiler. The Existing Drax Power Station, of which Units 1 and 2 form part, is therefore a "generating station" as defined by the Electricity Act 1989 and fall within sections 15(1) and (2) of the PA 2008 as it:
  - (a) is in England;
  - (b) does not generate electricity from wind;
  - (c) is an onshore generating station; and
  - (d) with a capacity of 4000 MW, is more than 50 MW.
- 3.13 As the Existing Power Station falls within the PA 2008, any works that are classified as an "extension" to the Existing Drax Power Station would also fall within the PA 2008. These works need to be the "use of any land for a purpose directly related to the generation of electricity by that station."
- 3.14 In contrast to the thresholds for other NSIPs under the PA 2008, the provisions with respect to generating stations do not specify a threshold for an extension. An extension is therefore not restricted to a specified increase in a generating station's footprint, capacity or output. That in turn means that an extension of a generating station is not restricted in any way that relates to its footprint, capacity or output.
- 3.15 In this particular case, Work Number 1 of the Proposed Scheme is a land use that is "for a purpose directly related to the generation of electricity by that station". The design of the Proposed Scheme means that it will become wholly incorporated into the physical structure of the Existing Drax Power Station and when constructed will only be capable of operating with the Existing Drax Power Station. The effect of the extension (the Proposed Scheme) will be that Units 1 and 2 of the Existing Drax Power Station will not only generate electricity but also produce negative emissions in generating that electricity.
- 3.16 This design is unique to carbon capture plants and arises as a result of Units 5 and 6 (the last two remaining coal-fired units at the Existing Drax Power Station) being decommissioned before the Proposed Scheme is operational. This presents an opportunity to the Applicant to design a carbon capture plant that makes use of spare capacity in terms of water treatment, water cooling and steam flows that arise as a result of the decommissioning of Units 5 and 6. The Proposed Scheme therefore involves the modification, upgrade and extension of existing apparatus which will result in the Proposed Scheme becoming an integral part of the process of generating electricity at the Existing Drax Power Station. For example, the

Proposed Scheme will form part of the water cycle of the Existing Drax Power Station and therefore part of the process of the generation of electricity as explained in this section. Indeed, it is akin to a carbon capture plant being incorporated in a new generating station, such as that being promoted at Net Zero Teesside and Keadby 3 (both current or recently consented NSIP projects).

3.17 As a result, modifications, upgrades and new infrastructure to components of the Existing Drax Power Station that directly relate to the generation of electricity are required as explained below:

#### Work No. 1A

- (a) Work No. 1A comprises works to modify and upgrade the existing water pre-treatment plant at the Existing Drax Power Station. The pre-treatment plant conditions the water extracted from the River Ouse for use within the site for processes such as cooling for various areas of plant such as the steam turbines. The cooling process within the generation of electricity at a thermal generating station is a core component of how the system operates. Indeed, without it the system could not operate. As such, these works are directly related to the generation of electricity given the fundamental role the turbines play in the generation of electricity.
- (b) Work No. 1A is necessary as Work No. 1D requires better quality water to operate than the existing water treatment plant provides. The works will also improve the performance of Units 1 and 2 at the Existing Drax Power Station by making the heat exchangers within Units 1 and 2 more efficient. Work No. 1A will therefore provide optimal water treatment conditions for the Existing Drax Power station and will increase heat transfer to generate electricity as well as prolong equipment life, prevent corrosion and enable uninterrupted operation. The Proposed Scheme in its entirety, will have the benefit of not only installing carbon capture equipment, but will also increase the operational capability and duration of the Existing Drax Power Station.
- (c) The integral nature of water treatment plants and the need for water to the generation of electricity is also demonstrated in the description of the NSIP at Work No. 1A(x) and Work No. 1C of Schedule 1 to the Eggborough Gas Fired Generating Station Order 2018 and in the description of the NSIP at Work No. 1A(xi) and Work No. 1B of Schedule 1 to the draft Net Zero Teesside Order.
- (d) Accordingly, Work No. 1A involves the use of land (as identified on sheet 2 of the Works Plans (document reference AS-073)) for a purpose directly related to the generation of electricity.

#### Work No. 1B

- (a) Work No. 1B comprises works to modify, upgrade and extend the existing cooling water system at the Existing Drax Power Station. As referred to above, a cooling water system is an integral part of a thermal generating station, as this cooling water is used to cool the steam from the turbine before it can be returned to be heated through the boiler, to then create steam again and generate electricity.
- (b) The existing cooling infrastructure needs to be modified, upgraded and extended in order to cool the lean solvent following the extraction of carbon dioxide (see description of Work No. 1D below), and to allow that solvent to be re-circulated to the absorber column. Cooling requirements are also involved in other areas of the carbon capture process.
- (c) With Units 5 and 6 (the current coal units) coming off-line before the Proposed Scheme is operational, the flow of cooling water will no longer be required to those Units. This flow will instead be diverted to Work No. 1D, which involves upgrading the system so that the water is pumped to a higher elevation which will benefit the whole existing system, reconfiguring the discharge manifold to the heat exchangers of the Existing Drax Power Station, and construction of a new pipeline from the manifold to Work No. 1D and onwards to the existing six northern cooling towers where all water from the Existing Drax Power Station will be cooled before being retuned to be used in the various processes involved in the generation of electricity. The works are extensively integrated with how the existing system operates and will improve how the existing system operates.
- (d) Work No. 1B therefore involves works to a system that is a necessary and integral component of generating electricity. This integral nature of water cooling systems is confirmed by other descriptions of thermal generating stations; for example, Work No. 1C (being part of the identified NSIP) of Schedule 1 to the Eggborough Gas Fired Generating Station Order 2018 and in the description of the NSIP at Work No. 1B of Schedule 1 to the draft Net Zero Teesside Order both incorporate water cooling systems in those work numbers.
- (e) Accordingly, Work No. 1B involves the use of land (as identified on sheet 3 of the Works Plans (document reference AS-073)) for a purpose directly related to the generation of electricity.

#### Work No. 1C

(a) Work No. 1C comprises works to modify, upgrade and extend the existing generating station boilers and turbines at the Existing Drax Power Station. The boilers heat the demineralised water (see above) to turn it into high pressure steam, which is then used to spin the turbines and generate electricity before the steam is cooled by the cooling water system (see above).

- (b) Work No. 1C also involves the construction of new combined power steam turbines that are required for the operation of Work No. 1D (the carbon capture plant). With Units 5 and 6 (the current coal units) being decommissioned before the Proposed Scheme is operational, steam is available from the existing process to drive the new combined power steam turbines (Work No. 1C(iii)). However, to ensure that the overall efficiency of both Units 1 and 2 is optimised works are required to the existing boilers and turbines (Work No. 1C(i) and (ii)), which has the consequential effect of making Units 1 and 2 more efficient when operating with work No. 1D (the generating capacity of Units 1 and 2 will remain the same, rather they become more efficient in generating the existing capacity). In addition, the condensate from Work No. 1D will be returned to be used in the processes for Units 1 and 2. Linking all of this together are new pipelines and runs.
- (c) Accordingly, the existing boilers and turbines will be inextricably linked to the new turbines and Work No. 1D, which in turn involves works to the existing boilers and turbines to protect their efficiency in the generation of electricity. As would be expected, boilers and turbines form part of the NSIP in thermal generating stations, for example, Work No. 1A of Schedule 1 to the Eggborough Gas Fired Generating Station Order 2018 and in the description of the NSIP at Work No. 1A of Schedule 1 to the draft Net Zero Teesside Order.
- (d) Therefore, Work No. 1C involves the use of land (as identified on sheets 4 and 5 of the Works Plans (document reference AS-073)) for a purpose directly related to the generation of electricity.

#### Work No. 1D

Work No. 1D represents up to two carbon dioxide capture plants for (a) Units 1 and 2 of the Existing Drax Power Station. As referred to above, Work No. 1D would receive its steam via the existing boilers and turbines of Units 1 and 2 (Work No. 1C). On initial start-up of Units 1 and 2, there would not be enough steam to power the associated carbon dioxide capture plants under Work No. 1D (in that Unit 1 would power capture plant 1 and unit 2 would power capture plant 2). During this period, which would be until Units 1 and 2 reached a minimum stable generation (which would be at circa 300MW each (300MW per carbon capture plant) subject to detailed design), all gases from the process of generating electricity would be emitted via the existing stack. However, above that MW threshold, Work No. 1D would be enabled and operating meaning that Work No. 1D would operate alongside the existing stack. Gases created from the process of generating electricity would flow into Work No. 1D, rather than the stack, and move into the absorber column where carbon dioxide is stripped out, with the carbon dioxide captured in the plant and the non-carbon gases being returned to the stack. In essence, Work No. 1D will work in conjunction with the existing stack, making the Existing Drax Power Station carbon negative. The effect of the extension, therefore, will be that Units 1 and 2 of the Existing Drax Power Station will not only generate electricity but also produce negative emissions in generating that electricity.

- (b) Given Units 5 and 6 of the Existing Drax Power Station will be coming off-line, the Proposed Scheme involves the re-use of land and the reuse of existing infrastructure to install carbon capture equipment. This will mean that Work No. 1D will be embedded within the Existing Drax Power Station, which can clearly be seen from the 3D model flyover video of the main built elements of the Proposed Scheme (document referenceAPP-198), which shows the integrated ties and connections that make Work No. 1D inextricably linked with the existing infrastructure.
- (c) In essence, the design of the Proposed Scheme delivers an operational capability that is similar to new build thermal generating station with carbon capture. For example, in the Net Zero Teesside Project, the stack and the carbon capture plant are identified as Work No. 1A and Work No. 1C of Schedule 1 to the draft Net Zero Teesside Order, which the Explanatory Memorandum describes as being the NSIP (and as such did not form part of the Section 35 Direction request). Furthermore, on the Keadby 3 Project, the stack and the carbon capture plant are identified as Work No. 1A and Work No. 1C of Schedule 1 to the Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order 2022, which again are classed as the NSIP.
- (d) In this particular case, given the closure of Units 5 and 6 and the modification and upgrading of existing generating infrastructure, the construction of new infrastructure on land within the heart of the Existing Drax Power Station and the changes to how Units 1 and 2 will operate, Work No. 1 D is, as with Net Zero Teesside and Keadby 3, part of the generating station NSIP and will operate in conjunction with the existing stack in how the gases produced from the generation of electricity are removed from the process.
- (e) Accordingly, Work No. 1D involves the use of land (as identified on sheets 6 to 9 of the Works Plans (document reference AS-073)) for a purpose directly related to the generation of electricity.

#### Work No. 1E

(a) Work No. 1E represents the carbon dioxide processing and compression plant. Once the carbon dioxide is captured by Work No. 1D, the carbon dioxide needs to be compressed for onwards transmission. Work 1D cannot operate without Work No. 1E. The same principles therefore apply to Work No. 1E as they to Work No.

- 1D. Indeed, in the Net Zero Teesside Project, the carbon dioxide compression plant is identified as part of Work No. 1C (under the heading of "carbon capture plant") of Schedule 1 to the draft Net Zero Teesside Order, which the Explanatory Memorandum describes as being the NSIP (and as such did not form part of the Section 35 Direction request). Equally, on the Keadby 3 Project, the carbon dioxide compression plant is identified as Work No. 1C (under the heading of "carbon dioxide capture plant") of Schedule 1 to the Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order 2022, which again is classed as the NSIP.
- (b) As Work No. 1D cannot operate without Work No. 1E, Work No. 1E involves the use of land (as identified on sheets 10 and 11 of the Works Plans (document reference AS-073)) for a purpose directly related to the generation of electricity.

#### Work No. 1F

- (a) Work No. 1F represents the integral connections required for Work No. 1D and Work No. 1E to operate, which involves upgrading existing infrastructure and replacement of transformers in the existing generating station.
- (b) Given the integrated nature of the Proposed Scheme with the Existing Drax Power Station, which effectively means that the Proposed Scheme is wholly incorporated into the physical structure of the Existing Drax Power station, these connections involve a mixture of modifications and upgrades to existing infrastructure as well as new infrastructure.
- (c) Again, in the Net Zero Teesside Project, the required connections are included as part of Work No. 1C (under the heading of "carbon capture plant") of Schedule 1 to the draft Net Zero Teesside Order, which the Explanatory Memorandum describes as being the NSIP (and as such did not form part of the Section 35 Direction request). Equally, on the Keadby 3 Project, the required connections are identified as Work No. 1E of Schedule 1 to the Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order 2022, which again is classed as the NSIP.
- (d) As Work No. 1D and Work No. 1E cannot operate without Work No. 1F, Work No. 1F involves the use of land (as identified on sheet 12 of the Works Plans (document reference AS-073)) for a purpose directly related to the generation of electricity.
- 3.18 The interlinking and integral nature of Work No. 1 with the Existing Drax Power Station, is clearly shown through the Works Plans (document reference AS-073), which show the location of each part of Work No. 1 and its relationship with the Existing Drax Power Station. As can be seen through the Works Plans, the

Proposed Scheme will become an integral, core and linked component of the Existing Drax Power Station, particularly through the modifications and extensions to the boilers and turbines cycle of steam from the boilers and turbines to the Proposed Scheme and then returned to the boilers and turbines all of which involve a land use that is directly related to the generation of electricity and which will also make the Existing Drax Power Station with the Proposed Scheme more efficient. This design is unique in carbon capture plants and arises as a result of the decommissioning of Units 5 and 6, thereby enabling the Proposed Scheme to become wholly incorporated into the physical structure of the Existing Drax Power Station which is akin to a carbon capture plant being incorporated in a new generating station, such as that being promoted at Net Zero Teesside (currently being determined by the Secretary of State) and Keadby 3 (consented in December 2022).

- 3.19 The Order also includes other development which is Associated Development (i.e. not an integral part of the NSIP itself) which is included at Work Nos. 2 to 8 (inclusive) of Schedule 1 to the Order.
- 3.20 Drax has considered Work Nos. 2 to 8 (the Associated Development) against the policy and criteria in DCLG "Guidance on associated development applications for major infrastructure projects" (April 2013). It is clear that all of these numbered works come within the guidance and are clearly capable of being granted development consent by the SoS pursuant to section 115.
- 3.21 In particular, Work Nos. 2 to 8 are all:-
  - 3.21.1 directly associated with the NSIP, as they are all required for the construction, operation or maintenance of the extension to the generating station, or to mitigate its impacts (paragraph 5(i) of the Guidance);
  - 3.21.2 subordinate to the NSIP none of them are an aim in themselves (paragraph 5(ii));
  - 3.21.3 proportionate to the nature and scale of the NSIP (paragraph 5(iv)); and
  - 3.21.4 of a nature which is typically brought forward alongside carbon capture technology as an extension to a generating station (paragraph 6).
- 3.22 Annex A and Annex B of the Guidance list "examples of general types of associated development" and "examples of associated development specific to individual types of major infrastructure projects". The following are of relevance to Work Nos. 2 to 8 of the Proposed Scheme:-
  - 3.22.1 "Formation of new or improved vehicular or pedestrian access" (Work Nos. 3, 4 and 8);
  - 3.22.2 "Alteration or construction of roads, footpaths" (Work Nos. 3, 4 and 8);
  - 3.22.3 "Highway / junction improvements" (Work Nos. 3 and 4)

- 3.22.4 "Parking spaces for workers and users of the principal development" (Work Nos. 3 and 5);
- 3.22.5 "Temporary haul roads... and lay down areas" (relevant to Work Nos. 3, 4, 5 and 8);
- 3.22.6 "Connections to national, regional or local networks" examples of which are: "Electricity networks", "Water/wastewater networks", "Fuel and pipe-line networks" and "Telecommunications networks" (Work Nos. 2, 3 and 8);
- 3.22.7 "Development undertaken for the purpose of addressing impacts" and "Hard and soft landscaping" (Work No. 6 specifically in relation to landscaping and relevant parts of Work No. 3, 7 and 8);
- 3.22.8 "Security measures", "Working sites, site offices and laydown areas" (Work Nos. 3, 5 and 6);
- 3.22.9 "Temporary and support structures" (Work Nos. 3, 5 and 8); and
- 3.22.10 "Overhead / underground lines", "Gas pipelines and pressure reduction stations" (Work No. 2 and 8).
- 3.23 As the Order seeks to apply and modify statutory provisions, including those relating to the compulsory acquisition of land, the Order has been drafted as a statutory instrument, in accordance with sections 117 and 120 of the PA 2008.

# 4. PROVISIONS OF THE ORDER

4.1 The Order consists of 43 operative provisions, each referred to as articles and 14 Schedules. The articles are considered below in numerical order (split between the "Parts" of the Order), and Schedules are considered along with the article which introduces them or to which they relate.

# Part 1 (Preliminary) and Part 2 (Principal Powers)

- 4.2 Article 1 (*Citation and commencement*) provides for the way in which the Order should be cited and when it takes effect.
- 4.3 Article 2 (*Interpretation*) provides for the interpretation of the rest of the Order, including the Schedules. Where appropriate, some Schedules also contain provisions setting out what terms mean in that particular Schedule. Article 2 makes alterations to the model provisions to accommodate departures from such model provisions elsewhere in the Order, and to add required definitions, including:-
  - 4.3.1 definitions of documents submitted as part of the DCO Application and which are referred to in the Order (such as the Environmental Statement and various plans) have been added. These documents are more fully identified in the table of Schedule 13 to the Order;

- 4.3.2 the definition of "apparatus" has the same meaning as in Part 3 of the New Roads and Street Works Act 1991. However, for the purposes of the Order this has been expanded to include electricity cables, telecommunications equipment, aerial markers, cathodic protection test posts, field boundary markers, pipelines, transformer rectification kiosks and electricity cabinets. This is required to ensure that the definition of apparatus is sufficiently broad to encompass the type of apparatus that the undertaker may encounter when constructing the authorised development. This definition has precedent in the Riverside Energy Park Order 2020;
- 4.3.3 the definition of "authorised development" has the same meaning as in section 32 of the PA 2008. The definitions of "ancillary works" and "authorised project" from the model provisions have not been used in the Order, instead the concept of Associated Development is included in the definition of "authorised development" and is described in detail in Schedule 1, as it is considered that this drafting is neater;
- the definition of "commence" excludes "permitted preliminary works", to 4.3.4 make it clear what works can be carried out without "commencing" the authorised development. The Applicant has carefully considered which works should be included within the 'permitted preliminary works' and based on the findings of the environmental impact assessment, the works that have been identified would not give rise to adverse environmental impacts that would need to be controlled by the requirements (unless expressly provided in specific cases). The works identified in the "permitted preliminary works" are considered appropriate as the nature of these works (i.e. non-intrusive, above ground works or actions) means they are not expected to give rise to environmental effects requiring mitigation. Where it has been considered that it would not be appropriate to exclude an element of the permitted preliminary works from 'commencement', this element has been carved out of the requirement for example, see requirements in Schedule 2 in relation to ground conditions, archaeology and the construction environmental management plan (requirements 12, 13 and 14);
- 4.3.5 a definition of "limits of deviation" has been added and will operate by reference to the Works Plans (document reference AS-073). These are the areas within which the authorised development can be constructed, see further below in relation to Article 3. The 'limits of deviation" are defined as the area up to the edge of the area shown for each numbered work on the Works Plans. The limits of deviation therefore go up to the edge of the hatching for the corresponding area on the Works Plans, and on this basis it is not necessary to also identify the "limits of deviation" on those plans themselves;
- 4.3.6 a definition of "maintain" has been added to make clear what activities are authorised under article 4 (see below) during the operation of the authorised development, and in particular that it does not permit the undertaker to undertake such maintenance activities if they will give rise to any materially

new or different environmental effects that are worse than those identified in the Environmental Statement (document reference APP-037 – APP-055). The reference to effects being "worse" is included as without this, the Applicant would be precluded from actions from which any benefits may result (which would otherwise fall within the description of "materially new or materially different" environmental effects);

- 4.3.7 the definition of "Order land" means the land shown on the Land Plans which is within the limits of land to be acquired or used and described in the Book of Reference. This land is coloured blue (land in which the undertaker can create and acquire new rights) and green (land in which the undertaker can extinguish existing rights). In addition, the Land Plans show the land over which temporary possession may be taken as shaded yellow. Where land on the land plans and included in the Book of Reference (and therefore part of the Order land) is shown white, powers in relation to compulsory acquisition or temporary possession are not required, however, this land has been included in the Order land on a precautionary basis in order that powers to do protective works to buildings (under Article 33 of the Order) are required;
- 4.3.8 the definition of "Order limits" means the limits shown on the Land Plans and Works Plans within which the authorised development may be carried out and land acquired or used;
- 4.3.9 the definition of "relevant planning authority" means the unitary council for the area in which Order limits are located. This definition has been amended to reflect the new unitary council to be established on 1 April 2023, being The North Yorkshire Council;
- 4.3.10 the definition of "street works" has been amended to refer to the works listed in the street works article (article 9(1)) so as to ensure consistency between the powers in the article and the definition itself; and
- 4.3.11 the "undertaker" is defined as Drax Power Limited, who has the benefit of the provisions of the Order, subject to the provisions of articles 6 and 7 (see below).
- 4.4 Sub-paragraph (2) has been included to reflect that "rights over land" include references to do or restrain or to place and maintain anything in, on or under land or in the airspace above its surface and to any trusts and incidents, including restrictive covenants. Paragraph (2) also makes it clear that references to the imposition of restrictive covenants are references to the creation of rights over land which interfere with the interests or rights of another.
- 4.5 Sub-paragraphs (3) to (7) of Article 2 have been added to provide clarity (respectively) that all distances, directions, capacities and lengths are approximate; that references to numbered works are to the works as described in Schedule 1 and shown on the Works Plans (document reference AS-073); as to how the word "includes" is to be construed; that any statutory body includes that body's successor

- in title; and all areas described in the Book of Reference (document reference REP-007) are approximate.
- 4.6 Article 3 (Development consent etc granted by this Order) grants development consent for the authorised development. Schedule 1 describes the authorised development in detail, split into "work numbers", each of which represents different sections or parts of the authorised development. This split of the authorised development between different work numbers enables the Order to refer to different parts of the authorised development by citing the relevant work number. The split also enables the Order and Works Plans (document reference 2.3) to delineate the area within which each "work" can be constructed, maintained and operated (see Article 3(2)). The areas within which each work can be constructed are therefore shown on the Works Plans.
- 4.7 Sub-paragraph (2) requires that the works authorised by the Order are situated in the areas and within the limits of deviation shown on the Works Plans (document reference AS-073). This is in order to provide certainty as to what has been consented by the Order, in respect of which land areas. Article 3, Schedules 1, 2 and 14 operate together to provide the parameters within which the undertaker must construct (etc.) the authorised development. This parameter approach reflects a standard approach used in made orders, such as the Progress Power (Gas Fired Power Station) Order 2015 and the Drax Power (Generating Stations) Order 2019, and is appropriate in the current Order as it serves to define the authorised development whilst preserving a sensible amount of flexibility in the implementation of the authorised development. The Environmental Statement (document reference APP-037 APP-055) has assessed the authorised development within the maximum envelope provide by the limits of deviation and Schedule 14.
- 4.8 Article 4 (Maintenance of authorised development) provides for the maintenance of the authorised development at any time. Article 4 reflects the terms of the model provisions. Article 4(2) restricts maintenance to the Order limits in order to provide a defined parameter within which this power can be exercised. A definition of "maintain" has been included, as referred to above, so that it is clear what the term involves. The Environmental Statement (document reference APP-037 APP-055) has assessed maintenance as defined in the Order.
- 4.9 Article 5 (Operation of authorised development) permits the operation and use of the extension to the generating station comprised in the authorised development and is included under section 140 of the PA 2008. Article 5(2) specifically preserves the need for Drax to obtain any other operational consent that may be needed for the carbon capture plant that is the extension to the generating station, in addition to the Order.
- 4.10 Article 6 (*Benefit of the Order*) overrides section 156(1) of the PA 2008 (which is permitted by section 156(2)) and provides that the benefit of the Order is for the undertaker, rather than anyone with an interest in the land. Given the nature of the authorised development and the fact that powers of compulsory acquisition are sought, it would be impracticable and inappropriate for the Order to be "open" as to who may implement it, as might occur without this provision. The undertaker is

- defined in Article 2 as Drax Power Limited, as promoter of the authorised development, and anyone to whom the benefit of the Order is given in Article 6 (see below) or anyone to whom the benefit is transferred under Article 7. Overriding section 156(1) is common in DCOs that have been made, including the Drax Power (Generating Stations) Order 2019 and Cleve Hill Solar Park Order 2020.
- 4.11 Article 6 also provides that for numbered work 1F the benefit of the Order is for either or both the undertaker and/or National Grid Electricity System Operator Limited and that for numbered work 2 the benefit of the Order is for either or both the undertaker and/or National Grid Carbon Limited (as National Grid may be best placed to carry out and operate all or part of those works). For numbered work 8A the benefit of the Order is for either or both the undertaker and/or Northern Powergrid and for numbered work 8B either or both the undertaker and/or BT Openreach (as this relates to works to apparatus owned or operated by these parties). The Article has been drafted to provide flexibility for the undertaker for these work numbers as to who is better placed at the time to undertake the works and exercise the associated powers. At such time, the body that does undertake the works will have such powers required as granted under the Order. This approach has precedent in orders such as the Progress Power (Gas Fired Power Station) Order 2015 and the Drax Power (Generating Stations) Order 2019.
- 4.12 Article 7 (Consent to transfer benefit of the Order) makes provision for the transfer of, or grant of lease for, the benefit of the Order. The consent of the SoS is needed before the undertaker can transfer or lease except where the transferee or lessee is: (i) the holder of an electricity generating licence; (ii) the transferee or lessee is a holding company or subsidiary of the undertaker; (iii) a highway authority responsible for the highways within the Order limits; or (b) where the compensation provisions for the acquisition of rights or interests in land or for effects on land have been discharged or are no longer relevant. Article 7(2) has been amended from the model provisions so that it refers to 'transfer, or grant', which is considered to be more accurate than 'agreement'.
- 4.13 The justification for these provisions is that in such cases, the transferee or lessee will either be of a similar regulatory standing to Drax so as to protect the provision for compensation for rights or interests in land that are compulsorily acquired pursuant to the Order, or there are no outstanding actual or potential compulsory purchase claims. Article 7(4) provides that where the consent of the Secretary of State is not needed, the undertaker must still notify the Secretary of State in writing prior to the transfer or grant of the benefit of the provisions of the Order. Articles 7(5) to (7) provide further detail on the notification that is to be given. This is based on the notification procedure contained in Article 7 of the Wrexham Gas Fired Generating Station Order 2017.
- 4.14 Article 8 (Application and modification of statutory provisions) disapplies a number of statutory provisions. Section 120 of the PA 2008 makes comprehensive and wideranging provision about what may be included in a DCO, as part of the integrated approach of the PA 2008 to consenting. Section 120(5) provides that, subject to specified limitations and requirements, a DCO may apply, modify or exclude a statutory provision which relates to any matter for which provision may be made in

the Order; and make amendments, repeals or revocations of statutory provisions of local application. It is common for DCOs to contain such provisions, although the scope and content inevitably differs according to the circumstances of different projects. Precedent for most of the provisions sought for this Order can be found in the Great Yarmouth Third River Crossing Development Consent Order 2020.

- 4.15 Article 8(1) provides for the disapplication of the following specified provisions:
  - 4.15.1 section 23 of the Land Drainage Act 1991 which prohibits obstruction and other works in watercourses without the consent of the appropriate Internal Drainage Board;
  - 4.15.2 byelaws made by drainage bodies under section 66 of the Land Drainage Act 1991;
  - 4.15.3 the legislation listed in Schedule 3 (legislation to be disapplied) of the DCO in so far as the provisions still in force are incompatible with the powers contained in the DCO; and
  - 4.15.4 the provisions of the Neighbourhood Planning Act 2017 in so far as they relate to temporary possession of land under Articles 26 and 27 of the Order. At present the reforms to the temporary possession regime contained in the Neighbourhood Planning Act 2017 have not yet been commenced (nor consulted on). When this may happen is uncertain, as are the detailed implications of implementation for the authorised development. A DCO should achieve certainty, and it is therefore appropriate and necessary to disapply the reforms whilst taking account of their principles in the relevant articles of the Order, these being Articles 26 and 27. This approach has precedent and has been accepted by the Secretary of State; see for example the Drax Power (Generating Stations) Order 2019, the Millbrook Gas Fired Generating Station Order 2019 and the Cleve Hill Solar Park Order 2020.
- 4.16 These disapplications are sought on the basis that they address matters whose merits and acceptability can, and will, already have been sufficiently considered and resolved if the Order is made, notably in relation to the provisions under the Land Drainage Act 1991 (noting in this respect that the Internal Drainage Board's consent is required under Article 15, and that they are to be consulted on the surface water drainage strategy under Requirement 10). Such matters should therefore not be the subject of further regulatory consideration or control, which would cause unnecessary uncertainty and duplication, and may unjustifiably delay the implementation of the authorised development.
- 4.17 Section 150 of the Planning Act 2008 only allows requirements for prescribed consents to be disapplied if the relevant body has consented to this. The relevant consents, where applicable, are being sought in parallel with the negotiation of appropriate protective provisions, which will ensure that the disapplications will not prejudice the statutory objectives and responsibilities of the relevant regulators.

- 4.18 In addition, the Applicant has conducted a review of any local legislation that might conflict with the powers and rights sought in the Order. The Applicant has included a list of the historic legislation that it seeks to disapply in Schedule 3, which relates to railways, drainage and gas utilities within, and in the vicinity of, the Order limits. This list has been prepared taking a precautionary approach, because in some cases it was difficult to conclusively determine whether or not the provisions of the legislation were relevant to the Order, given that the majority of the Acts considered did not append plans making it clear the areas they related to. Article 8 disapplies the legislation listed in Schedule 3 in so far as any provisions are inconsistent with how the powers in the Order can be exercised.
- 4.19 Article 8(2) seeks to provide clarity (in particular for the relevant planning authority) in terms of the operative consents for the Existing Drax Power Station. The Drax Power Station was started to be built in 1967, and as a result it has a complex planning history over many years with consents and planning obligations under the various Electricity Acts and Town and Country Planning Acts. This provision has therefore been included in the Order in order to address the overlap of the various consents and planning obligations, and to provide clarity (to the extent there is inconsistency) in terms of enforcement and which consent has effect. In essence, the Order would take precedence over the Order limits to the extent there is any inconsistency between the previous approvals and the approvals contained in the Order. This is broadly comparable to the approach taken in relation to inconsistency with local legislation in the National Grid (Hinkley Point C Connection Project) Order 2016, and the same approach was adopted in the Drax Power (Generating Stations) Order 2019 (where it was agreed with Selby District Council and North Yorkshire County Council).
- 4.20 For similar reasons, Article 8(3) provides that the undertaker will not commence works under the Drax Power (Generating Stations) Order 2019 from the date the Order takes effect. This is to give certainty in terms of the operative consents, and to support the approach taken in the Environmental Statement, which has been to assume the Drax Repower Project will not come forward. In terms of the drafting "to the extent already commenced" in Article 8(3), this is included given that the 2019 Order could legally be implemented, and therefore this wording ensures that if the Applicant were to commence works under the 2019 Order, those works would have to stop if the Drax Bioenergy with Carbon Capture and Storage Order was made.

# Part 3 (Streets)

4.21 Article 9 (Street Works) allows the undertaker to enter on and carry out certain works to a street for the purposes of the authorised development. It is necessary because implementation of the authorised development will require works to be undertaken to streets. Schedule 4 sets out the streets that are subject to street works, and the nature of those works, thereby clarifying the extent of the powers. Article 9 is a model provision; however, it has been modified to bring in sections 54 to 106 of the 1991 Act to apply to any street work carried out pursuant to paragraph (1). This provides protection for the street authority for the street in question. This is based on Article 9 of The Immingham Open Cycle Gas Turbine Order 2020.

- 4.22 Article 10 (*Power to alter layout, etc., of streets*) allows the undertaker to alter the layout of or carry out any works in a street. Schedule 5 then sets out the temporary and permanent alterations to streets. This Article is necessary because, in order to construct the authorised development, the undertaker will need to alter street layouts and establish suitable accesses to ensure that the authorised development can be accessed effectively while ensuring there is minimal disruption to the local highway network. The powers conferred by paragraph (2) (which is a general power enabling the undertaker to alter the layout of any street) require the consent of the street authority before they can be exercised, and this is subject to the provisions of Article 40, which seeks to ensure that the consenting process does not inappropriately delay the implementation of the authorised development. Article 10 has precedent and appears in the Drax Power (Generating Stations) Order 2019 and the Great Yarmouth Third River Crossing Development Consent Order 2020.
- 4.23 Article 11 (Construction and maintenance of altered streets) provides that temporary and permanent alterations to streets are to be made to an appropriate standard. Its purpose is to define who will be responsible for the maintenance of altered streets following the carrying out of works and is required to provide certainty as to who will be responsible for such maintenance. The temporary alterations set out in Part 1 of Schedule 5 are to be maintained by the undertaker for the duration of the alterations and, once restoration works are completed, for one year thereafter after which the street authority will become responsible for the maintenance of the restored alterations. The permanent alterations set out in Part 1 of Schedule 5 are to be maintained by and at the expense of the undertaker for a period of a year and thereafter are to be maintained by the street authority. Paragraphs (4) and (5) mirror the defence in section 58 of the Highways Act 1980 where the undertaker is subject to an action for damages and has taken such care as was reasonably required in the circumstances to secure that the street was not dangerous to traffic. This Article (and the incorporation of the defences in particular) is similar to Article 19 in the Hinkley Point C (Nuclear Generating Station) Order 2013 and Article 11 in the Drax Power (Generating Stations) Order 2019.
- 4.24 Article 12 (Temporary closure of public rights of way) provides for the temporary prohibition of the use, authorisation of use, alteration or diversion, of public rights of way for the purposes of constructing or maintaining the authorised development. It is required because the undertaker will need to temporarily close one public right of way in order to deliver mitigation and enhancements on the Off-site Habitat Provision Area, and to potentially temporarily close a further public right of way to deliver the undergrounding of overhead lines in order to facilitate transport of AlLs during construction. No permanent stopping up or diversion is required. The Article broadly follows the approach in the model provisions (save that it applies to public rights of way rather than streets generally) in that it contains provisions of general application and then also in relation to the specific public rights of way that are set out in Schedule 6 to the Order and as shown on the Access and Rights of Way Plans (document reference REP2-005). The provisions of general application include Article 12(1), which is necessary to ensure the delivery of the authorised development is not delayed if it becomes necessary during construction to temporarily close a public right of way. Article 12 mirrors Article 11 of the model provisions in providing that where the public right of way is specified in a schedule

- to the Order that there is a requirement to consult the street authority, but there would be no need to obtain its consent. In respect of other public rights of way not specified in a schedule to the Order there would be a requirement to obtain the consent of the street authority.
- 4.25 Article 12(5) provides that compensation is payable in respect of the loss or suspension of any private rights of way. This provision is required so that persons who temporarily lose private rights of way because of the closure of public rights of way can be appropriately compensated. Paragraph (6) provides an additional power to the undertaker which allows it to use any street temporarily closed as a temporary working site (which is not in the model provision). Similar wording has been used in other made Orders, including Article 11 of the Wrexham Gas Fired Generating Station Order 2017, Article 12 of the Meaford Gas Fired Generating Station Order 2016 and Article 13 of the Riverside Energy Park Order 2020.
- 4.26 Article 13 (Access to works) is a model provision which gives the undertaker powers to form new or to improve existing means of access for the purposes of the authorised development, as set out in Schedule 7 to the Order. This article is necessary because the undertaker will need to create or improve existing means of access for the purposes of the authorised development. The Article also provides that other means of access or works can also be provided in other locations reasonably required for the authorised development with the approval of the relevant planning authority, in consultation with the highway authority. The Article also requires the restoration of any temporary access to the reasonable satisfaction of the street authority.
- 4.27 Article 14 (*Agreements with street authorities*) is a model provision which authorises street authorities and the undertaker to enter into agreements relating to strengthening, improvement, repair or reconstruction of any streets, stopping up, prohibition, restriction, alteration or diversion of any street, works authorised under articles 9 (street works), 10 (power to alter layout, etc. of streets), 11 (construction and maintenance of altered streets) and 12 (temporary closure of public rights of way) of the Order and the adoption of works. The Applicant has removed reference to the ability to enter into an agreement with a street authority to allow the construction of any new street and the maintenance of any bridge or tunnel carrying a street over or under the authorised development as those powers are not required for the authorised development. Such a provision was included in the Riverside Energy Park Order 2020.

# Part 4 (Supplemental Powers)

4.28 Article 15 (*Discharge of water*) is a model provision which enables the undertaker to discharge water into any watercourse, public sewer or drain in connection with the construction and maintenance of the authorised development with the approval of the owner of the watercourse, public sewer or drain and subject to certain other conditions. The reference from the model provisions to section 85 of the Water Resources Act 1991 has been deleted as this section has now been repealed – this has been replaced with a reference to the Environmental Permitting (England and Wales) Regulations 2016 instead.

- 4.29 Article 16 (Authority to survey and investigate the land) is a model provision which allows the undertaker to enter onto any land within the Order limits or which may be affected by the authorised development for the purpose of carrying out monitoring or survey, including bringing equipment onto the land and making trial holes. The power is subject to a number of conditions including a requirement for 14 days' notice to be given and is subject to the payment of compensation in the event that any loss or damage arises. The power is essential to implementation of the authorised development, for example in verifying ground conditions or the presence of statutory undertakers' apparatus. The model provision has been modified so that no trial holes are to be made without the consent of the highway authority: in land located in the highway boundary or in a private street.
- 4.30 Where consent is required, the provisions of Article 40 (*Procedure in relation to certain approvals etc*) apply (that is because Article 40(1) makes clear that the article relates to any request of a consenting authority for any consent, agreement or approval required under the Order (as occurs pursuant to Article 16(4)), and Article 40(7) then confirms the authorities captured by the term "consenting authority", which includes, for the purposes of Article 16, the street authority), being consent not to be unreasonably withheld or delayed and a period of eight weeks for the relevant authority to make a decision and, if no decision is made, it is deemed to have been given. The Article applies section 13 of the Compulsory Purchase Act 1965 (refusal to give possession to acquiring authority) thereby providing an enforcement mechanism (by way of a warrant) where entry onto land under the Article is refused. This is considered necessary so that there is no delay in the implementation of the authorised development, and has precedent in the Lake Lothing (Lowestoft) Third Crossing Order 2020.
- 4.31 Article 17 (Removal of human remains) is a model provision which provides for the removal of human remains from the Order limits and for their reburial in such burial ground or cemetery in which burials may legally take place as the undertaker thinks suitable for the purpose or for their treatment according to the wishes of any personal representatives or relatives who come forward following the giving of the necessary notices. This Article has been included as Drax has not been able to rule out the presence of any human remains within the Order land given the archaeological history of the area and is considered necessary so that there is no delay in the implementation of the authorised development.

# Part 5 (Powers of Acquisition)

4.32 Article 18 (*Power to override easements and other rights*) provides that by virtue of section 158(2) of the PA 2008 in carrying out or using the development authorised by the Order and doing anything else authorised by the Order, the undertaker may interfere with any easement, liberty, privilege, right or advantage annexed to land and affecting other land, including any natural right to support, or breach any restriction as to use of land arising by virtue of contract. It also provides that by virtue of section 152(5) of the PA 2008, compensation may be payable under section 10(2) of the Compulsory Purchase Act 1965 for any such interference or breach. This is not a model provision, but is added to clarify the position with regard to rights

- burdening land required for the authorised development. It has precedent, for example, in Article 19 of the Immingham Open Cycle Gas Turbine Order 2020.
- 4.33 Article 19 (*Time limit for exercise of authority to acquire rights compulsorily*) is a model provision which imposes a time limit of 5 years for the exercise of powers of compulsory acquisition from the date on which the Order is made, via issuing notices to treat or executing general vesting declarations. The undertaker considers that 5 years is an appropriate time limit as it is consistent with the time limit for commencing the authorised development set out in requirement 1 of Schedule 2 to the Order and has precedent in the majority of made DCOs to date.
- 4.34 Article 20 (Compulsory acquisition of rights) enables the undertaker to acquire rights or impose restrictive covenants over the Order land as may be required for the authorised development. The Article also provides that rights may be created as well as enabling the undertaker to acquire those already in existence. The Article has been drafted to ensure that the undertaker has the appropriate powers to implement and carry out the authorised development.
- 4.35 The Article provides that, in respect of the Order land set out in Part 1 of Schedule 8 (shaded blue on the Land Plans), the undertaker's powers of acquisition of new rights and imposition of restrictive covenants are limited to the purposes set out in that Schedule. The rights sought in Part 1 of Schedule 1 are required for the installation, construction, operation and maintenance of integral electrical connections within the existing generating station and carbon capture plant (Work No. 1F) and supporting works in connection with and in addition to Work Nos. 1, 2 and 5 (Work No. 3), or the habitat provision area (Work No. 6), works to facilitate the delivery of abnormal indivisible loads to the site including the diversion of existing electrical 11kV overhead lines (Work No. 8A) and the diversion of existing telecommunications overhead line (Work No. 8B). The ability to acquire new rights is required in order that the undertaker can construct the authorised development, and it ensures that the undertaker is able to seek a lesser interference with land where this is appropriate (whether in the context of new or existing rights) during the implementation of the authorised development. Providing the undertaker with powers to acquire rights only and impose restrictive covenants only over the Order land set out in Part 1 of Schedule 8 allows the undertaker to reduce the area of land that could otherwise be required to be compulsorily acquired for the purposes of the authorised development, and therefore allows for a more proportionate exercise of compulsory acquisition powers.
- 4.36 Paragraphs (5) and (6) provide that where the undertaker proposes the acquisition of new rights or the imposition of restrictive covenants for the purpose of diverting, replacing the protecting the apparatus of a statutory undertaker, the undertaker may, with the consent of the Secretary of State transfer the powers to the relevant statutory undertaker.
- 4.37 This Article is a departure from the model provisions, but it has precedent in many DCOs including the East Anglia Three Offshore Wind Farm Order 2017, the Cleve Hill Solar Park Order 2020 and the Riverside Energy Park Order 2020. The departures are to provide for the exercise of the power by statutory undertakers,

- with the Applicant's prior written consent, to ensure that those persons are able to benefit from the rights acquired for their benefit. There is also additional drafting that limits acquisition of new rights and imposition of restrictive covenants to the purposes set out in Part 1 of Schedule 8.
- 4.38 Article 21 (*Private Rights*) is based on a model provision that (i) extinguishes private rights and restrictions over land so far as their continuance would be inconsistent with the exercise of compulsory acquisition of rights or the imposition of restrictive covenants under Article 20 (Compulsory acquisition of rights); and (ii) suspends private rights and restrictions over land so far as their continuance would be inconsistent with the exercise of temporary possession powers under the Order. This is required because it enables the undertaker to take land with a clear, unencumbered title, thereby minimising impediments to the delivery of the authorised development.
- 4.39 Paragraph (1) is not part of the model provision, and has been included to provide greater specificity in relation to plots over which extinguishment of rights only is sought (those plots shaded green on the land plans). This paragraph provides that, for the plots in column (1) of Part 2 of Schedule 8, the rights (as included in column (2) of that Part) are extinguished on commencement of an activity by the undertaker which is inconsistent with those rights. The plots identified in Part 2 of Schedule 8 are either (i) the land forming part of the Drax Power Station Site that is within the ownership of the Applicant, however, the title may contain certain easements that could be incompatible with the construction and operation of the Proposed Scheme; or (ii) land covered by Work No. 8 where the diversion of existing electrical 11kV overhead lines and the diversion of the existing telecommunications overhead line to facilitate the delivery of abnormal indivisible loads to the site will require the electrical sections of existing 11kV overhead line telecommunications overhead line over which it is proposed to extinguish existing easements.
- 4.40 Paragraph (4) provides that compensation is payable to any person who suffers loss as a result of the exercise of the powers in this Article and that such compensation would be payable under section 152 of the 2008 Act rather than the Compulsory Purchase Act 1965. Paragraph (8) also clarifies that references to private land include references to any trusts or incidents to which the land is subject.
- 4.41 Article 22 (Application of the 1981 Act) is a model provision which applies the general vesting procedures in the Compulsory Purchase (Vesting Declarations) Act 1981 to the exercise of compulsory acquisition powers pursuant to the Order. This provides the undertaker with the option to exercise its compulsory acquisition powers via the vesting process set out in the 1981 Act rather than the notice to treat procedure. Vesting declarations allow the right being acquired to be created more quickly than using the notice to treat method. They also enable several parcels of land to be covered under the same legal instrument and therefore more efficiently than under the notice to treat procedure.
- 4.42 This Article has been amended from the model provision to incorporate and reflect the changes brought about by the Housing and Planning Act 2016, which has

- precedent in numerous DCOs including the Drax Power (Generating Stations) Order 2019.
- 4.43 Article 23 (Acquisition of subsoil only) is a model provision that permits the undertaker to acquire rights only in the subsoil of land in which rights are sought to be compulsorily acquired (pursuant to Article 20), thereby giving the undertaker the ability to minimise the extent of interests acquired from landowners. This Article is appropriate in the context of the cables or pipes to be laid underground as part of the authorised development, where acquisition of rights in the 'entire' freehold may not be required. It therefore enables the undertaker to minimise as far as possible the extent of interests to be acquired, thereby reducing the impact on landowners.
- 4.44 Article 24 (Modification of Part 1 of the Compulsory Purchase Act 1965) modifies the provisions of Part 1 of the Compulsory Purchase Act 1965 as applied to the Order by section 125 of the 2008 Act. This provision reflects recent changes introduced by the Housing and Planning Act 2016 and is required to ensure that Part 1 of the 1965 Act is applied correctly to compulsory acquisition authorised under the Order. Paragraphs (2) to (4) amend the provisions of the Compulsory Purchase Act 1965 so they are consistent with the terms of the Order and paragraph (5) makes it clear that the notice periods introduced by the Housing and Planning Act 2016 do not apply to the temporary possession or use of land under Article 33 (Protective works to buildings) Article 26 (Temporary use of land for constructing the authorised development) or Article 27 (Temporary use of land for maintaining the authorised development). These modifications have precedent in numerous made DCOs and other legislation including Schedule 14 to the High Speed Rail (London West Midlands) Act 2017, the Wrexham Gas Fired Generating Station Order 2017 and the Silvertown Tunnel Order 2018.
- 4.45 Article 25 (Rights under or over streets) is a model provision which has been included in the majority of made DCOs to date which enables the undertaker to enter on and appropriate interests within streets where required for the purpose of the authorised development without being required to acquire that land. It is therefore required in order to reduce the amount of land that needs to be compulsorily acquired for the purposes of the authorised development.
- 4.46 The purpose of this Article is to allow the undertaker to appropriate and use land above or below streets within the Order limits, without having to acquire the street or any right or easement in it. Paragraphs (4) and (5) provide for the payment of compensation in certain circumstances.
- 4.47 Article 26 (Temporary use of land for constructing the authorised development) allows the land specified in Schedule 10 to be temporarily used for the carrying out of the authorised development. There is a clear limit on the length of time that the undertaker can use land in this way, which in the case of land that may only be used temporarily is the end of the period of one year beginning with the later of the date of Unit 1 and Unit 2 full commissioning. The Article also requires the undertaker to give 14 days' notice before taking possession, and to restore the land following the temporary works. Given the limited nature of the temporary possession proposed, and in order to maintain the programme for the delivery of the Proposed Scheme,

the 14 days' notice period is considered sufficient and acceptable. A longer notice period could potentially lead to greater land being taken on a precautionary basis to avoid programme disruption, to the detriment of affected persons. In addition, communication would be undertaken with stakeholders as the project progresses, and there are measures in this respect included in the Register of Environmental Actions and Commitments (REP3-007) (securing commitments to be in the construction environmental management plan), for example, at item G5(e) where there is reference to a stakeholder communication plan and item G21, where the landowner has specifically responded to the consultation on the changes asking for continued engagement and the Applicant has therefore committed to this.

- 4.48 Wording has been added to paragraph (1)(a)(ii) in order to allow Article 26 to apply to land which may later be the subject of compulsory acquisition. This reflects a common approach to designing and building infrastructure projects, whereby possession is taken of a wider area required for the purposes of construction, and once the location of new apparatus is known definitively (after it has been built), then the final width, for example, of the right required permanently is defined and acquired. This allows a more proportionate approach to the extent of land acquisition.
- 4.49 New wording has also been added to paragraphs (4) and (5) to take into account that the Applicant may, pursuant to Article 28(1)(a)(ii), temporarily use land that it may compulsorily acquire a right over. This is also subject to a one year limit beginning with the later of the date of Unit 1 and Unit 2 full commissioning.
- 4.50 Sub-paragraph (9) makes clear that the undertaker cannot compulsorily acquire, nor permanently acquire rights or impose restrictive covenants over, the land specified in Article 26(1)(a)(i) (which is land of which temporary possession only is required). Wording has also been deleted in sub-paragraph (9) to dovetail with the new drafting in sub-paragraph (1). This Article has precedent in Article 26 of The Wrexham Gas Fired Generating Station Order 2017.
- 4.51 Wording has been added at sub-paragraph (10) to make clear that the Article does not preclude the creation or acquisition of new rights, imposition of restrictions or acquisition of rights in land specified in Schedule 8, and nor are the powers under Article 23 (Acquisition of subsoil only) or Article 25 (Rights under or over streets) precluded.
- 4.52 Article 27 (*Temporary use of land for maintaining the authorised development*) provides for the temporary use of land for maintenance of the authorised development. There are clear limits on the length of time that the undertaker can use land in this way, provisions requiring 28 days' notice to be given and restoration of the land following the temporary possession. This Article is broadly based on the model provision and provides for the payment of compensation for that temporary use of the land. A longer notice period that in Article 26 is considered appropriate given the 14 days in Article 26 relates to temporary possession during construction, which follows a process of communication related to the construction of the Scheme, whereas the maintenance power lasts up to 5 years and therefore the notice under Article 27 may not be as expected.

- 4.53 The maintenance period has been adapted from the model provision to apply to the period 5 years beginning with the earlier of the date of Unit 1 and Unit 2 full commissioning as opposed to the date on which the project is opened for use as this is more appropriate for this type of development. Similar wording has been used in other made Orders in connection with generating stations, including the Drax Power (Generating Stations) Order 2019 and the Immingham Open Cycle Gas Turbine Order 2020. However, in order to be able to carry out the landscaping commitments set out in the landscape and biodiversity strategy, the maintenance period has been extended to the period in the strategy approved pursuant to requirement 7. A similar provision was included in the North Wales Wind Farm Connection Order 2016 and the Drax Power (Generating Stations) Order 2019.
- 4.54 Article 28 (Statutory undertakers) provides for the acquisition of land belonging to statutory undertakers within the Order land. This includes a power to move the apparatus of those statutory undertakers and to extinguish their rights. The model provision has been amended so as to allow for the suspension of rights of a statutory undertaker (for example where land is being temporarily used under the terms of the Order) rather than just extinguishment. This article is subject to the protective provisions (see article 34 below) included at Schedule 12 of the Order. This power is required over the whole of the Order land and similar wording has been used in made other Orders including the Wrexham Gas Fired Generating Station Order 2017 and the Immingham Open Cycle Gas Turbine Order 2020.
- 4.55 Article 29 (*Apparatus and rights of statutory undertakers in stopped up streets*) provides for the acquisition of land belonging to statutory undertakers within the Order land. The power is subject to the protective provisions in Schedule 12. This includes a power to move the apparatus of those statutory undertakers and to extinguish their rights. The model provision has been amended to allow for the suspension of rights of a statutory undertaker (for example where land is being temporarily used under the terms of the Order) rather than just extinguishment. This power is required over the whole of the Order land and has precedent in made Orders for generating stations, including in Article 28 of The Wrexham Gas Fired Generating Station Order 2017 and Article 29 of The Immingham Open Cycle Gas Turbine Order 2020.
- 4.56 Article 30 (*Recovery of costs of new connections*) provides that persons who have to create a new connection following the exercise of powers under Article 28 may recover the costs of new connections from the undertaker. It is a model provision, with the part of the model provision that referred to the permanent stopping up of streets deleted as this is not relevant in the context of the authorised development.
- 4.57 Article 31 (Compulsory acquisition of land incorporation of the mineral code) is a model provision which incorporates Parts 2 and 3 of Schedule 2 of the Acquisition of Land Act 1981 (minerals). The mineral code is incorporated as a precautionary measure given the identification of interests in mines and minerals within the Order limits.

# Part 6 (Operations)

- 4.58 Article 32 (Felling or lopping of trees and removal of hedgerows) provides that the undertaker may fell or lop or cut back the roots of any tree or shrub near any part of the authorised development to prevent it: obstructing or interfering with the construction, maintenance or operation of the authorised development; constituting a danger for persons using the authorised development; obstructing or interfering with the passage of construction vehicles. Sub-paragraph (4) allows the removal of hedgerows within the Order limits for the purposes of the authorised development. Sub-paragraph (5) also sets out that the undertaker may not fell or lop a tree or remove hedgerows under this Article within the extent of the public maintainable highway without the prior consent of the highway authority. Compensation is provided for if loss or damage is caused. It is based on the model provision. This article does not limit removal of hedgerows by reference to a plan or schedule, as the full detail of the hedgerows requiring removal cannot be confirmed at this stage. Instead, Requirement 7 of the Order includes a requirement that the hedgerows to be removed are identified in the Landscape and Biodiversity Strategies required to be submitted for approval pursuant to that requirement, along with details of if and how they are to be replaced.
- 4.59 Article 33 (*Protective works to buildings*) is a model provision which allows the undertaker to carry out protective works to buildings within the Order land, subject to a number of conditions including the service of 14 days' notice (except in the case of emergency) and the payment of compensation. The model provision has been updated to refer to the five year period during which protective works may be carried out, compensation payable, starting on the later of the date of Unit 1 and Unit 2 full commissioning. The phrase in the model provision (when it is "open for use"), is not appropriate given the nature of the authorised development.

## Part 7 (Miscellaneous and General)

- 4.60 Article 34 (*Protective provisions*) provides for Schedule 12, which protects the interests of certain statutory undertakers, to have effect.
- 4.61 Article 35 (*Application of landlord and tenant law*) is a model provision which would override landlord and tenant law so far as it would prejudice the operation of any agreement for leasing the whole of the authorised development or the right to operate the same or any agreement entered into by the undertaker for the construction, maintenance, use or operation of the authorised development. This provision is required to ensure that there is no impediment to the construction, use or maintenance of the authorised development.
- 4.62 Article 36 (Operational land for purposes of the 1990 Act) is a model provision which has the effect of ensuring that the land on which the authorised development is constructed will be "operational land" under the Town and Country Planning Act 1990 by the effect of section 264(3) of that Act. A similar provision has been included in other made Orders for gas fired generating stations, including the Hirwaun Generating Station Order 2015, the Progress Power (Gas Fired Power Station) Order 2015 and the Wrexham Gas Fired Generating Station Order 2017.

- 4.63 Article 37 (*Defence to proceedings in respect of statutory nuisance*) provides that no one is able to bring statutory nuisance proceedings under the Environmental Protection Act 1990 in respect of fumes or gases; dust, steam, smell or other effluvia; accumulation or deposit; artificial light; or noise, if the such nuisance is created in the course of carrying out construction or maintenance of the authorised development and for which notice has been given under section 60 (with respect to noise) or consent obtained under section 61 of the Control of Pollution Act 1974 or which cannot be reasonably avoided as a consequence of the authorised development. Article 37 is a model provision.
- 4.64 Article 38 (Certification of plans and documents, etc.) is a model provision which provides for the submission of the various documents referred to in the Order (such as the Book of Reference, plans and Environmental Statement) to the SoS so that they can be certified as being true copies. The Article refers to Schedule 13, where all such documents and plans are listed, along with the appropriate document and revision numbers.
- 4.65 Article 39 (*Service of notices*) deals with the service of notices pursuant to the Order. These provisions are based on those appearing in the Transport and Works (Model Provisions for Railways and Tramways) Order 2006.
- 4.66 Article 40 (*Procedure in relation to certain approvals etc*) provides procedures in relation to consents and approvals required pursuant to the Order (other than Requirements). Applications for consent submitted by the undertaker will be deemed to be granted if notice is not given of their refusal by the consenting authority within eight weeks of the submission of the application (unless a longer period has been agreed between the parties). This time period has been agreed with the local authorities. Where these provisions apply to an application, the undertaker is required to notify the consenting authority of the effect of the provisions when it submits the relevant application. The consenting authority must not unreasonably withhold or delay consent where an application has been submitted by the undertaker pursuant to this Article.
- 4.67 For any consent, agreement, or refusal pursuant to the Requirements a detailed procedure is provided for in Schedule 11 (see below).
- 4.68 This Article has precedent in Article 38 of The Immingham Open Cycle Gas Turbine Order 2020, and is considered appropriate and justified in order to ensure that the authorised development can proceed in a reasonable timescale, and so that there is a consistent approach to consents that must be sought by the undertaker pursuant to the Order.
- 4.69 Article 41 (*Arbitration*) is a general arbitration provision which provides that differences under the Order should be settled by arbitration unless another means of resolving a dispute is provided for in the Order. It is a model provision.
- 4.70 Article 42 (*Guarantees in respect of payment of compensation*) restricts the undertaker from exercising the powers conferred under articles 18, 20, 21, 25, 26, 27 or 28 until it has either put in place a guarantee or other security approved by the

- SoS in respect of the liabilities of the undertaker to pay compensation under the Order. The guarantee or alternative form of security is not required to be in place for more than 15 years from the date on which the relevant power is exercised.
- 4.71 Article 43 (*Electronic communications*) has been added to confirm that references to documents in the Order include documents in electronic form and references to communications being in writing include electronic communications. Sub-paragraph (2) sets out conditions that must be satisfied in order for an electronic communication to be treated as valid. Sub paragraphs (3) to (5) set out the arrangements for sending paper copies and the revocation of consent by recipients to the use of electronic communications.

### 5. **SCHEDULES**

- 5.1 Schedule 1 describes the authorised development in detail, split into "work numbers", each of which represents different elements of the authorised development. This split of the authorised development between different work numbers enables the Order to refer to different parts of the authorised development by citing the relevant work number. The split also enables the Order and Works Plans (document reference AS-073) to delineate the area within which each "work" can be constructed, maintained and operated (see article 3(2)). The areas within which each work can be constructed are therefore shown on the Works Plans.
- 5.2 Schedule 1 adopts the terms "comprising" and "including" when listing works packages or individual works. The general approach adopted is that where multiple sub-works packages are listed out, the paragraph introducing those uses the term "comprising". For example, Work No. 1 "comprises" of Work Nos. 1A 1E. Similarly, Work No. 1C "comprises" Work No. 1C(i), (ii) and (iii). The work packages listed under Work No. 1 constitute all the works packages included within Work No. 1 (that is, there are no more works packages forming part of Work No. 1, other than 1A 1E), which is why "comprising" is used (in other words, it is intended to be an exhaustive list of the works packages). Where there is then a list of works (for example, the works listed as being part of Work No. 1B or the works listed as being within Work No. 1C(i)) "including" is used, due to the potential for the list of more general works included at the end of Schedule 1 to be carried out as part of the works package, and so the list is not exhaustive.
- 5.3 The works set out in Schedule 1 to the Order are briefly summarised as follows-
  - 5.3.1 **Work No. 1** carbon capture plant as an extension to an existing generating station comprising: works to modify, upgrade and extend the existing generating station pre-treatment plant (Work No. 1A); works to modify, upgrade and extend the existing generating station cooling water system (Work No. 1B); works to modify, upgrade and extend the existing generating station boilers and turbines for the carbon capture plant process steam connection (Work No. 1C); up to two carbon dioxide capture plants for Unit 1 and Unit 2 of the existing generating station (Work No. 1D); carbon dioxide processing and compression plant (Work No. 1E); and integral electrical

- connections within the existing generating station and carbon capture plant (Work No. 1F);
- Work No. 2 infrastructure to transport compressed carbon dioxide from Work No. 1E to storage and transport infrastructure operated by National Grid Carbon Limited including: a new carbon dioxide delivery terminal compound and pipelines (Work No. 2(a)); or a new carbon dioxide delivery pipeline (Work No. 2(b));
- 5.3.3 **Work No. 3 –** supporting works in connection with and in addition to Work Nos. 1, 2 and 5 such as: pipeline and cable connections, drainage and waste management, minor auxiliary infrastructure, ground preparation works, replacement of the existing generating station Unit 1 and Unit 2 transformers, security and lighting, internal roadways and car parking;
- 5.3.4 Work No. 4 works to facilitate the safe entry and navigation of construction vehicles for the purpose of construction access to Work Nos. 1 to 5 and 7 including road modifications, temporary removal or reinstatement of structures, features and landscaping and temporary modification and subsequent reinstatement of external parts of structures and buildings;
- 5.3.5 **Work No. 5** temporary construction laydown areas;
- 5.3.6 **Work No. 6** habitat provision area including soft landscaping including planting; landscape and biodiversity enhancement measures; and security fencing, gates, boundary treatment and other means of enclosure;
- 5.3.7 **Work No. 7 –** works to create a floodplain compensation area including earthworks and excavation and movement of material within the floodplain compensation area; and landscape and habitat measures;
- 5.3.8 Work No. 8 works to facilitate the delivery of abnormal indivisible loads to the site including diversion of existing electrical 11 kV overhead lines (Work No. 8A) and diversion of existing telecommunication overhead lines (Work No. 8B); and
- 5.3.9 further associated development in connection with the numbered works such as drainage systems, services and utilities connections, landscaping, security measures including means of enclosure, lighting, site clearance, temporary construction laydown and contractor facilities, and tunnelling, boring and drilling works. This list of further associated development is required because, whilst the Proposed Scheme has been divided into works packages on a careful and logical basis (as set out above), further associated development may be required across any part of the Order limits. It is difficult to identify those works as only being required in specific work areas only at this point in time, ahead of a contractor being appointed. Some flexibility is therefore required in order to undertake such works across the Order limits.

# **Technology and Parameters**

- 5.4 The extension to the generating station (including Units 1 and 2) is Work No. 1. Work No. 1 consents the extension to the generating station, not the generating station itself, which is already consented and operational and is not the subject of this Application (other than to the extent it is sought to be extended). For that reason, there is no restriction on overall output capacity cap on the generating station.
- 5.5 Work No. 1 is drafted so as to be non-specific as to technology and configuration of the plant.
- 5.6 The mechanics of the drafting in Schedules 1, 2 and 14 ensure that the undertaker does not exceed the basis of the assessment in the Environmental Statement. This is achieved through a number of mechanisms in the Order which together ensure this:
  - 5.6.1 Article 3 and Schedule 1 (Work Nos. 1) provide the power to build the extension to the generating station. Pursuant to Article 3(2), each numbered work must be situated within the area delineated on the Works Plans (document reference AS-073) thus, for example, modifications to the existing pre-treatment water plant, can only be built within the area for Work No. 1A. Given these overarching constraints, there is certainty as where each element can be built;
  - 5.6.2 In terms of detailed design, requirement 6 of Schedule 2 provides that the undertaker must obtain the approval of the relevant planning authority to the siting, layout, scale and external appearance of new permanent buildings and structures contained within Work Nos. 1, 2 and 3, prior to commencing these works. Those details are required to be in accordance with various "design principles" included in the Register of Environmental Actions and Commitments (document reference REP-015). The relevant parameters are also secured via requirement 6(3) and are set out in Schedule 14 as the maximum parameters for relevant elements of the authorised development, including all those which are relied on for the assessment of effects in the Environmental Statement. These parameters are based on application of the Rochdale Envelope principle, such that maximum building dimensions have been presented and assessed in the Environmental Statement, recognising that the final building massings may differ from (but will never be materially larger than) these maxima depending on the technology provider selected.
- 5.7 The combined effect of and relationship between these provisions ensures that whichever technology or design is selected, the authorised development will not give rise to environmental effects beyond those which have been assessed. Where flexibility is allowed (for example) in the area shown for Work No. 3 on the Works Plans, this is considered to be justified and reasonable based on the minimal environmental effects likely to result from the types of works included in Work No. 3, and to allow flexibility so that those supporting works can be delivered within the

- Drax Power Station Site in a way that allows contractors to provide the works with sufficient scope for value engineering through innovative design and / or construction techniques.
- 5.8 In terms of the area shown for Work No. 4 on the Works Plans, this area is necessarily large and covers much of the Drax Power Station Site. Whilst not all structures within the area of Work No. 4 would necessarily be impacted, some external parts of existing structures and buildings may need to be modified (and then reinstated) to allow for the safe passage of construction vehicles within the operational Drax Power Station site. Some flexibility is needed in this respect, as it is not possible to identify at this stage all the structures and buildings, which may require temporary modification. Work No. 4 has been drafted in Schedule 1 to make clear the limited and temporary nature of some of the proposed works that would occur within the area of Work No. 4, in particular that removal of street furniture and landscaping, and modifications to external parts of structures and buildings, would be temporary and reinstated.

## Schedules 2 - 15

- 5.9 Schedule 2 (*Requirements*) sets out the requirements which apply to the carrying out, operation (including maintenance) and decommissioning of the authorised development under the Order. They broadly follow those set out in the model provisions, where relevant, and where they have been amended this has been informed by discussions with the relevant planning authority or statutory consultee and the outcomes of the environmental assessment. The requirements closely relate to the mitigation set out in the Environmental Statement (document reference APP-037 APP-0551) and the Register of Environmental Actions and Commitments (document reference REP3-007) and a number of them specifically refer to the Environmental Statement, items within the Register of Environmental Actions and Commitments, and other application documents (in particular, 'outline' strategies or plans) in order to ensure that the mitigation or other measures outlined in those documents are secured.
- 5.10 The requirements operate by reference to different stages in the lifetime of the authorised development (or parts of it). In effect, the undertaker may not proceed to these stages until it has met its obligations under the relevant requirements. The stages, which are effectively defined through the terms in Article 2 (see above) are as follows:
  - 5.10.1 "**commencement**" for the purposes of the requirements means beginning to carry out a material operation, other than permitted preliminary works, of the authorised development (or a part of it).
  - 5.10.2 "**commissioning**" means the process of assuring that all systems and components of the authorised development are tested and are operable in accordance with the undertaker's design objectives, specifications and operational requirements;

- 5.10.3 "date of full Unit 1 commissioning" and "date of full Unit 2 commissioning" means the date on which the commissioning of the carbon capture technology on either Unit 1 or Unit 2 is completed, as notified by the undertaker to the relevant planning authority; and
- 5.10.4 "permitted preliminary works" are those which can take place before "commencement", and therefore before the relevant requirement needs to be discharged or complied with (as relevant).
- 5.11 Some of the requirements are drafted with a view to distinguishing between the different specific work numbers, or more generally different parts or phases of the authorised development. This staged approach follows that agreed by the planning authority in relation to the proposed Knottingley Power Plant Order 2015, and permits an appropriately flexible approach to the discharge of requirements by the undertaker which allows it to (potentially) discharge a requirement in respect of a part of the authorised development and construct that element, whilst continuing to submit details to discharge the requirement in relation to other parts. This provides an appropriate balance between development not starting until details are approved, and allowing other parts of the authorised development (where details are already approved) to be constructed. The process for discharge of requirements in Schedule 11, is accordingly also drafted to allow for discharge of requirements in parts.
- 5.12 Many of the requirements provide for a document (such as details, a method statement, a plan, a programme or scheme) specifying how the undertaker will construct, operate or maintain the authorised development to be submitted for approval to the relevant planning authority NYC. The model provisions have been adapted throughout to provide that it is for the planning authority to approve the relevant document.
- 5.13 A further departure from the model provisions is in relation to the duty to consult with a third party/parties about a document submitted to the planning authority for approval. Where consultation is required under the Order it is, in each case, the planning authority's duty to carry it out before approving a document submitted to it (rather than, as in some of the model provisions, the undertaker's duty to carry it out before submitting the document for approval). Where it is considered that it would be particularly relevant for the planning authority to consult a third party, that third party has been named within the relevant requirement. For example, this has been done in response to comments received from the Environment Agency with respect to the Construction Environmental Management Plan. The general approach has been used in other DCOs as made, including the Hinkley Point C (Nuclear Generating Station) Order 2013.

## Requirements

5.14 Requirement 1: Commencement of the authorised development – This requirement is based upon the model provisions and requires that the authorised development must only be commenced within 5 years of the date of the Order coming into force.

- 5.15 Requirement 2: Phasing of the authorised development This is not a model provision. It restricts the authorised development commencing until the phasing for construction of works 1 (that is, the NSIP), 2, 3, 4 and 7 have been submitted to and approved by the relevant planning authority. The scheme must confirm that the construction of any part of the authorised development would not occur in parallel with any part of the demolition of the redundant flue gas desulphurisation plant located on the Drax Power Station Site, and is to be implemented as approved. Requirement 2 allows Work No. 8 to proceed ahead of the phasing plan being in place, as those works are geographically separate from the rest of the works, and there is not requirement from an environmental impact perspective to manage the phasing of those works alongside the balance of the authorised development.
- 5.16 Requirement 3: Notice of date of full commissioning This is not a model provision. It requires the undertaker to give notice to the planning authority of the date of Unit 1 full commissioning within 7 days of the completion of the commissioning of numbered works 1(D)(i), (iii) and (v). It also requires the undertaker to give notice to the planning authority of the date of Unit 2 full commissioning within 7 days of the completion of the commissioning of numbered works 1(D)(ii), (iv) and (vi). This requirement assists NYC in monitoring the requirements.
- 5.17 Requirement 4: Requirement for written approval This is a model provision, however the reference to "Commissioner" has been replaced with "relevant planning authority".
- 5.18 Requirement 5: Approved details and amendments to them This is based on a model provision and allows the relevant planning authority to approve amendments to certified documents, the parameters in Schedule 14 of the Order, and other details, schemes or plans already approved. This is to allow flexibility, however this flexibility is given strict parameters in that it only applies to the extent the subject matter of the approval is unlikely to result in materially new or different effects which are worse than those assessed in the Environmental Statement (document reference APP-037 APP-055). A similar Requirement appeared in the Progress Power (Gas Fired Power Station) Order 2015.
- 5.19 Requirement 6: Detailed design approval This is based on a model provision. It requires the specific design details of work numbers 1, 2 and 3 to be submitted to and approved by the planning authority before commencement of that work number, and for the authorised development to be constructed in accordance with those approved details. This requirement relates to these work numbers only as they are the parts of the authorised development including elements whose visual appearance has been assessed as being important in terms of the authorised development's visual impact (see Chapter 9 (Landscape and Visual Amenity) of the Environmental Statement (document reference APP-045)).
- 5.20 Requirement 7: Provision of landscape and biodiversity mitigation and enhancement This is based on a landscaping model provision. However, the requirement has been modified to include provision for ecological mitigation. It requires the undertaker to submit a landscaping and biodiversity strategy prior to commencing any phase of the authorised development or part of work numbers 5,

- 6 and 8 for that phase or part. The plan must include details of the hedgerows to be removed, all proposed hard and soft landscaping works and ecological mitigation measures, enhancement measures and be in accordance with the Outline Landscape and Biodiversity Strategy submitted with the DCO Application (document reference AS-094). The plan is to be implemented in accordance with the implementation timetable and the measures implemented pursuant to the strategies maintained as approved once implemented throughout operation of the numbered works to which it relates.
- 5.21 Requirement 7 (like many of the requirements) is drafted to allow the landscaping and biodiversity strategy to be submitted in several parts, specifically there could be a strategy for each phase (approved under Requirement 2) and for each of Work Nos. 5, 6, and 8. The Applicant considers that it is important for Requirement 7 to be able to be discharged in parts. This is necessary in order to retain flexibility for the detailed design, site clearance and construction works to proceed in phases. This reflects the likelihood that detailed design (and subsequent implementation) will proceed in phases, and hence work may need to start on parts of the Proposed Scheme prior to detailed design being completed for the entire Scheme. Under such circumstances, it may not be possible to produce detailed ecology and landscape proposals for the entirety of the Proposed Scheme, as these would necessarily be informed by, for example, the detailed design of earthworks, other engineering features, and site clearance footprints. Under such circumstances, it would be necessary to produce a Landscape and Biodiversity Strategy covering those parts of the Proposed Scheme for which detailed design was available, and for that Strategy to be approved by the relevant planning authority. Without such approval, the parts of the Proposed Scheme for which detailed design was available could not proceed.
- 5.22 In addition, until site and vegetation clearance requirements and subsequent habitat reinstatement for the entirety of the Proposed Scheme are finalised, the final Biodiversity Net Gain (BNG) to be delivered cannot be calculated. It is therefore also necessary to retain flexibility for the phased discharge of Requirement 7 in order to allow refinement of habitat creation proposals to achieve 10% BNG in response to the actual habitat loss and disruption that will occur as part of the Proposed Scheme.
- 5.23 Requirement 8: External lighting during operation This is based upon a model provision and requires the undertaker to submit details of all external lighting to be installed for the purposes of normal operation for numbered works 1, 2 and 3 to the relevant planning authority for approval before the earlier date of Unit 1 full commissioning or date of Unit 2 full commissioning. The scheme must be substantially in accordance with the principles set out in the draft lighting strategy and must include details of the permanent external lighting to be installed for the purposes of the operation of the relevant numbered works. The scheme must be implemented and maintained as approved.
- 5.24 Requirement 9: Highway accesses during construction This is a modified model provision. It provides that construction of each of the accesses listed in Schedule 7 may not commence until details of that access and, in respect of the accesses listed in Part 1 of Schedule 7, the means of reinstating the temporary means of access

- after construction have been submitted to and approved by the planning authority (after consultation with the highway authority).
- 5.25 Requirement 10: Surface water drainage This is based on a model provision. It provides that no part of Work Numbers 1, 2 and 3 of the authorised development may commence until a surface water drainage scheme for that work number has been submitted to and approved by the planning authority (in consultation with the lead local flood authority, the relevant internal drainage board and the Environment Agency). The schemes must be in accordance with sections 5 and 6 of the Proposed Surface Water Drainage Strategy (document reference APP-161) and the schemes must be implemented and maintained as approved throughout the operation of the numbered works to which they relate.
- 5.26 Requirement 11: Flood risk mitigation This is not a model provision, however, it is included to ensure that the authorised development is carried out and operated in accordance with the flood risk assessment. This requirement also requires that if Work No. 1 is to operate beyond the 25th anniversary of full commissioning, the Applicant must seek the Environment Agency's approval of an updated flood risk assessment and any further mitigation or compensation measures that are necessary.
- 5.27 Requirement 12: Ground conditions This is not a model provision and was included at the request of the Environment Agency. The provision is necessary to ensure that no works comprising Work Nos. 1, 2, 3, 5 and 7 is to commence (including permitted preliminary works comprising demolition of existing structures, remedial work in respect of any contamination or other adverse ground conditions or the diversion and laying of services) until a written strategy for the identification and remediation of risks associated with the contamination of Order limits associated with that numbered work has been submitted to and, after consultation with the Environment Agency, approved by the relevant planning authority. The requirement sets out at sub-paragraph (2) what information this strategy must contain. Sub-paragraph (3) requires that prior to the date of Unit 1 full commissioning, a report must be submitted to and, after consultation with the Environment Agency, approved by the relevant planning authority, providing the data to demonstrate the remediation measures and strategy (approved as part of the overarching written strategy) have been undertaken and are effective, and identifying long term monitoring requirements. This Requirement also sets out the process for dealing with contamination not previously identified, and requires that a piling risk assessment must be submitted to the Environment Agency before piling works comprised in Work Nos. 1, 2 and 3 commence. The piling risk assessment approved by the Environment Agency must be provided to the planning authority before piling works comprised in Works Nos. 1, 2 and 3 commence.
- 5.28 Requirement 13: Archaeology This is a modified model provision. It provides that no part of Work Number 5, 6 and 8 of the authorised development (including permitted preliminary works comprising intrusive archaeological surveys only) may commence until either a written scheme of investigation for that work number has been submitted to and approved by the relevant planning authority or the relevant planning authority has confirmed that no written scheme of investigation is required

for that numbered work. Any scheme submitted and approved must be in accordance with items H2, H3, H4, H5 and H6 of the Register of Environmental Actions and Commitments (document reference REP3-007). In particular, any scheme submitted and approved must identify any areas where further archaeological investigations are required, alongside the nature and extent of these, provide details of protection, recording and preservation measures and provide details of archaeological monitory. Furthermore, any archaeological investigations must be carried out in accordance with the approved scheme and by a suitably qualified person or organisation approved by the relevant planning authority.

- 5.29 Requirement 14: Construction environmental management plan This is a modified version of the model provision on "Code of Construction Practice". It requires a Construction and Environmental Management Plan, in accordance with the Register of Environmental Actions and Commitments (document reference REP3-007), to be submitted to and approved by the relevant planning authority, after consultation with the Environment Agency, and in respect of soil management matters, Natural England before commencement of the authorised development (including permitted preliminary works comprising above ground site preparation for temporary facilities for the use of contractors, remedial work in respect of any contamination or other adverse ground conditions, diversion and laying of services, and site clearance (including vegetation removal, demolition of existing buildings and structures) only). All construction works must be in accordance with the approved Construction and Environmental Management Plan.
- 5.30 Requirement 15: Construction traffic management plan This is a modified model provision. It requires a Construction Traffic Management Plan, in accordance with the Outline Construction Traffic Management Plan (document reference REP2-028), to be submitted to and approved by the planning authority, following consultation with National Highways and the highway authority, before commencement of any part of Works Nos. 1, 2, 3 and 8. It also requires notices to be erected and maintained by the undertaker throughout the construction period at every entrance to and exit from the construction site, indicating the approved routes for traffic entering and leaving the site.
- 5.31 Requirement 16: Construction worker travel plan This is not a model provision. It requires a Construction Worker Travel Plan, in accordance with the Framework Construction Worker Travel Plan (document reference REP2-030), to be submitted to the relevant planning authority, following consultation with National Highways and the highway authority, before commencement of any part of Works Nos. 1, 2 and 3.
- 5.32 For both Requirements 15 and 16, the Applicant does not consider other Work Nos. have traffic impacts that require mitigation pursuant to the construction traffic management and worker travel plans. Work No. 4 relates to works to facilitate construction access which is not envisaged to generate construction traffic; Work No. 5 is construction laydown and is similarly not expected to generate traffic; and Work Nos. 6 and 7 also are only expected to generate low traffic numbers. Whilst Work No. 5 would involve the movement of heavy duty vehicles, the plans secured by Requirements 15 and 16 relate to traffic management and the numbers of

- vehicles associated with Work No. 5 are not such as to warrant the relevant plans being in place to manage them.
- 5.33 Requirement 17: Control of noise during operation This is a modified model provision. It requires that a noise mitigation scheme is to be submitted to the relevant planning authority before commencement of any part of Works Nos. 1, 2 and 3. The noise mitigation scheme must demonstrate how the design of the numbered works has met a set of operational rating noise limits.
- 5.34 Requirement 18: Decommissioning environmental management plan This is not a model provision. It requires the undertaker to submit a Decommissioning Environmental Management Plan, to the relevant planning authority within 12 months of it deciding to decommission any part of the authorised development. The relevant planning authority must, after consultation with the Environment Agency, approve the scheme before any decommissioning works are carried out and the scheme must be implemented and maintained as approved for the duration of decommissioning of the authorised development. The measures set out in the plan must be consistent with the principles informing the measures that are set out in the register of environmental actions and commitments.
- 5.35 Requirement 19: Decommissioning traffic management plan This is not a model provision. It requires the undertaker to submit a Decommissioning Traffic Management Plan, to the relevant planning authority within 12 months of it deciding to decommission any part of the authorised development. The relevant planning authority, after consultation with National Highways and the highway authority, must approve the plan before any decommissioning works are carried out and the plan must be implemented and maintained as approved for the duration of the decommissioning of the authorised development. The measures set out in the plan must be consistent with the principles informing the measures that are set out in the register of environmental actions and commitments.
- 5.36 Requirement 20: Local liaison committee This is not a model provision. It requires that before the authorised development (save for Work No. 8) commences (including permitted preliminary works), the undertaker is to establish a committee to liaise with local residents and organisations to keep them informed about matters relating to the authorised development. Nearby parish councils and the relevant planning authority must be invited. The committee must meet quarterly during the construction, operation and decommissioning of the authorised development, starting within one month of commencement, unless otherwise agreed by the majority of the members of the committee. Work No. 8 is excluded from this Requirement as the nature of those works is not considered to require a local liaison committee (set up with local residents and organisations to Drax in mind) given those works are fairly minor, geographically separate from the other works occurring on or near to the Drax Power Station Site, and that they are likely to be undertaken by statutory undertakers.
- 5.37 Requirement 21: Local employment plan This is not a model provision. It requires the undertaker to submit a Local Employment Plan to the relevant planning authority, substantially in accordance with the Outline Local Employment Plan. The

plan must be approved prior to the commencement (including permitted preliminary works) of the authorised development (save for Work No. 8). The plan must be implemented and maintained as approved throughout the construction, operation and decommissioning of the authorised development. Work No. 8 is excluded from this Requirement given the minor nature of those works, and the likelihood that those works would be undertaken by Northern Powergrid Limited and BT Openreach Limited, and contracts for any works conducted by those undertakers are excluded from the terms of the Local Employment Plan.

- 5.38 Schedule 3 (*Legislation to be disapplied*) lists out the legislation that the Order disapplies that relates to railways, drainage and utilities in and in the vicinity of the Order limits in so far as such legislation is in force and is incompatible with the powers contained within the Order. The footnotes in the Schedule contain information about the status of each Act, where relevant. The Schedule relates to Article 8 (*Application and modification of statutory provisions*).
- 5.39 Schedule 4 (*Streets subject to street works*) sets out the streets that are to be subject to street works by reference to the Access and Rights of Way Plans (document reference REP2-005). The Schedule relates to Article 9 (*Street Works*).
- 5.40 Schedule 5 (*Alteration of streets*) sets out the streets to be temporarily and permanently altered. This Schedule relates to Articles 10 (*Power to alter layout, etc., of streets*) and 11 (*Construction and maintenance of altered streets*).
- 5.41 Schedule 6 (*Public rights of way to be temporarily closed*) sets out the locations of the public rights of way to be temporarily closed by reference to the Access and Rights of Way Plans (document reference REP2-005). This Schedule relates to Article 12 (*Temporary closure of public rights of way*).
- 5.42 Schedule 7 (*Access to works*) sets out the temporary and permanent accesses to the authorised development. It references the Access and Rights of Way Plans (document reference REP2-005). The Schedule relates to Article 13 (*Access to works*).
- 5.43 Schedule 8 (Land in which only new rights etc may be acquired or in which rights may be extinguished) Part 1 specifies the areas of land in which only new rights may be acquired by the undertaker and the nature of the rights that may be acquired. The plot numbers in column 1 of the table at Part 1 correlate with the relevant plot numbers shaded blue on the Land Plans (document reference AS-072), and the nature of the rights in column 2 is explained by reference to the relevant work numbers and the corresponding Works Plans (document reference AS-073). Part 2 specifies the areas of land in which rights may be extinguished. The plot numbers in column 1 of the table at Part 2 correlate with the relevant plot numbers shaded green on the Land Plans (document reference AS-072), and the nature of the rights to be extinguished in column 2. Part 1 of the Schedule relates to Article 20 (Compulsory acquisition of rights), and Part 2 of the Schedule relates to Article 21 (Private rights).

- 5.44 Schedule 9 (Modification of compensation and compulsory purchase enactments for creation of new rights and imposition of new restrictive covenants) modifies existing compensation legislation including the Land Compensation Act 1973 and the Compulsory Purchase Act 1965. It is commonly included in DCOs as made, including the Hinkley Point C (Nuclear Generating Station) Order 2013 and the National Grid (King's Lynn B Power Station Connection) Order 2013. This has been updated to reflect any necessary changes arising as a result of the Housing and Planning Act 2016. The Schedule relates to Article 20 (Compulsory acquisition of rights).
- 5.45 Schedule 10 (*Land of which temporary possession may be taken*) sets out the land of which only temporary possession may be taken, pursuant to Article 26. This land is shown yellow on the Land Plans (document reference AS-072), and the purpose for the temporary possession is described by reference to the relevant work numbers and corresponding Works Plans (document reference AS-073).
- 5.46 Schedule 11 (Procedure for discharge of requirements) provides a bespoke procedure for dealing with an application made to the relevant authority for any consent, agreement or approval required by the Requirements in Schedule 2 of the Order (this includes an application to discharge part of a Requirement only). It sets out time periods within which decisions must be made and provides for deemed approval of the applications in certain circumstances. Paragraph 4 makes provision for fees to be paid where an application is made to the relevant planning authority with respect to discharge of a requirement. The Schedule makes provision for appeals to be made in the event of a refusal of an application or if the relevant authority requires further information to be provided in relation to that application. Schedules similar to Schedule 11 have been used in various orders and can be seen in a similar form in the Hinkley Point C (Nuclear Generating Station) Order 2013, as amended, and the National Grid (King's Lynn B Power Station Connection) Order 2013. The bespoke process is required in order to ensure that applications under Requirements are dealt with efficiently so that the authorised development is not held up. Deemed consent of applications is required for the same reason and ensures that the nationally-needed authorised development will not be held up by the discharge of requirements. The Schedule relates to Article 40 (Procedure in relation to certain approvals etc).
- 5.47 Schedule 12 (*Protective provisions*) sets out protective provisions for the benefit of statutory undertakers whose equipment may be affected by the authorised development. The Schedule relates to Article 34 (Protective provisions) and currently contains protective provisions for the benefit of defined classes of statutory undertakers (electricity, gas, water and sewerage undertakers at Part 1 and operators of electronic communications code networks at Part 2), alongside protective provisions for the benefit of National Grid as electricity and gas undertaker at Part 3. The Applicant is also in negotiations with National Grid Carbon Limited and National Highways for bespoke protective provisions for their protection to be included in the Order, and these will be included in a future iteration of the Order.

- 5.48 Schedule 13 (*Documents and plans to be certified*) lists the documents that the undertaker must have certified as true copies by the Secretary of State pursuant to Article 38 (*Certification of plans and documents, etc.*).
- 5.49 Schedule 14 (*Design Parameters*) sets out the relevant parameters associated with the carbon capture plant for Units 1 and 2 and the common infrastructure required for both of these plants in accordance with requirement 6 of Schedule 2 to the Order. See the explanation provided for Schedule 1 above as to how this schedule operates alongside the relevant articles and schedules.