The Planning Inspectorate
Yr Arolygiaeth Gynllunio

The Planning Act 2008

South Humber Bank Energy Centre Project

Examining Authority's Report
of Findings and Conclusions

and

Recommendation to the Secretary of State for

Business, Energy and Industrial Strategy

Examining Authority

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10 August 2021

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OVERVIEW

File Ref: EN010107

The application, dated 9 April 2020, was made under section 37 of the Planning Act 2008 and was received in full by The Planning Inspectorate on 9 April 2020.

The Applicant is EP Waste Management Limited.

The application was accepted for examination on 4 May 2020. The examination of the application began on 10 November 2020 and was completed on 10 May 2021.

The development proposed comprises an Energy from Waste (EfW) power station and includes the construction of:

- an electricity generating station, fuelled by refuse derived fuel, with a gross electrical output of up to 95 megawatts at International Organization for Standardization conditions;
- two emissions stacks and associated emissions monitoring systems;
- administration block, including control room, workshops, stores and welfare facilities;
- electrical, gas, water, telecommunication, steam and other utility connections for the generating station;
- landscaping and biodiversity works;
- a new site access and works to an existing access; and
- temporary construction and laydown areas.

The development proposed is located on a site that already benefits from Planning Permission (DM/1070/18/FUL), granted by the Local Planning Authority, for an EfW power station of up to 49.9 Megawatts (MW) gross capacity and ancillary infrastructure. Should this Development Consent Order be made the development proposed would:

- replace the development granted under the above mentioned Planning Permission; and
- increase the gross electrical capacity from 49.9 MW to 95 MW by improving the efficiency of the EfW power station; whilst not increasing the maximum fuel throughput of 753,500 tonnes per annum, nor by increasing the maximum sizes of the building dimensions granted Planning Permission.

The key differences between the Planning Permission and the development proposed are set out below:

- a larger air-cooled condenser, with an additional row of fans and heat exchangers;
- a greater installed cooling capacity for the generator;
- an increased transformer capacity; and
- ancillary works.

Summary of Recommendation:

The Examining Authority recommends that, subject to satisfying themself on the points set out in Section 8.2, the Secretary of State for Business, Energy and Industrial Strategy makes the South Humber Bank Energy Centre Project Development Consent Order in the form attached at Appendix D to this report.

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1. INTRODUCTION

1.1. INTRODUCTION TO THE EXAMINATION

1.1.1. The application for an Energy from Waste (EfW) power station with a gross electrical generation capacity of up to 95 megawatts (MW) (the Proposed Development) on land at South Humber Bank Power Station (SHBPS), South Marsh Road, Stallingborough DN41 8BZ was submitted by EP Waste Management Limited (the Applicant) to the Planning Inspectorate on 9 April 2020 [APP-003] under section 31 of the Planning Act 2008 (PA2008) and accepted for Examination under section (s) 55 of the PA2008 on 4 May 2020 [PD-001].

1.1.2. The Proposed Development is for the construction and operation of an EfW power station with a gross electrical generation capacity of up to 95MW at International Organization for Standardization (ISO) conditions. It comprises Work Nos. 1, 1A and 1B, which the Explanatory Memorandum (EM) document [APP-006] at Paragraph 3.2.3 explains constitutes *"…development for which development consent is required" (as a NSIP…)"* This paragraph of the EM also explains associated development is being included within the Order at Work Nos. 2 to 5 (inclusive). The details of Works Nos 1, 2, 3, 4 and 5 are set out as detailed below:

- Work No.1— an electricity generating station fuelled by Refuse Derived Fuels (RDF) comprising:
  - (a) fuel reception and storage facilities, consisting of vehicle ramps, a tipping hall, shredder, fuel storage bunker and cranes;
  - (b) a combustion system housed within a boiler hall, consisting of two combustion lines and associated boilers;
  - (c) a steam turbine and generator housed within a turbine hall with a cooling system comprising fin fan coolers;
  - (d) a bottom ash handling system, including ash storage;
  - (e) a flue gas treatment system, including residue and reagent silos;
  - (f) a silo or tank for the storage of ammonia or urea based reagents;
  - (g) an air-cooled condenser;
  - (h) a compressed air system;
  - (i) a process effluent storage tank;
  - (j) a demineralised water treatment plant and demineralised water storage tanks; and
  - (k) indoor storage tanks for boiler water treatment chemicals.

- Work No. 1A— two emissions stacks and associated emissions monitoring systems.

- Work No. 1B— administration block, including control room, workshops, stores and welfare facilities.

  In connection with and in addition to Work Nos 1, 1A and 1B the following works are also required:

  - (a) an electrical switch yard, including generator transformers;

(b) auxiliary diesel generators and diesel storage tanks;
(c) pipe racks, pipe runs and cabling;
(d) fire water pump house and fire water tank;
(e) internal vehicle access roads, crossings and pedestrian and cycle facilities and routes;
(f) security gatehouse, barriers and enclosures;
(g) weighbridges;
(h) car parking;
(i) heavy goods vehicle holding area and driver welfare facilities;
(j) a surface water drainage system, including oil-water separators and attenuation pond; and
(k) connections between parts of Work No. 1 and each connection comprised in Work No. 2.

- Work No. 2, associated development, comprising:

  (a) an underground or overground electrical connection from Work No. 1;
  (b) an underground gas supply pipeline to Work No. 1;
  (c) towns water connection;
  (d) telecommunications connections;
  (e) steam connection; and
  (f) other utility connections.

- Work No. 3, associated development, comprising landscaping and biodiversity works, comprising soft landscaping, including planting and biodiversity mitigation and enhancement measures.

- Work No. 4, associated development, comprising a new site access on to South Marsh Road and works to an existing access on to South Marsh Road.

- Work No. 5, associated development, comprising temporary construction and laydown areas comprising hard standing; laydown and open storage areas, including materials and plant storage; contractor compounds and construction staff office and welfare facilities; generators; concrete batching facilities; vehicle and cycle parking facilities; pedestrian and cycle routes and facilities; security fencing and gates; external lighting; roadways and haul routes; wheel wash facilities and signage.

  In connection with and in addition to Work Nos. 1, 1A, 1B, 2, 3, 4 and 5, other associated development includes:

  (a) external lighting, including lighting columns;
  (b) security fencing, gates, boundary treatment and other means of enclosure;
  (c) closed circuit television cameras and columns and other security measures;
  (d) surface and foul water drainage systems, oil-water separators, including channelling, culverting, crossings and works to existing drainage ditches and systems;

(e) electric, gas, water, telecommunication and other infrastructure connections and works, and works to alter such services and utilities connections;
(f) hard and soft landscaping;
(g) biodiversity mitigation and enhancement measures;
(h) site establishment and preparation works, including site clearance (including vegetation removal); earthworks (including soil stripping and storage and site levelling) and excavations; temporary fencing; the creation of temporary construction access points; and the temporary alteration of the position of services and utilities apparatus and connections;
(i) 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;
(j) vehicle access roads, crossings, parking, and pedestrian and cycle facilities and routes,

and, to the extent that it does not form part of such works, further associated development comprising such other works: (i) as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised development; and (ii) which fall within the scope of the works assessed in the environmental statement.

1.1.3. The location of the Proposed Development is shown in the Location Plan [APP-008]. The site lies in the administrative county of Lincolnshire and is wholly in England. The site already benefits from Planning Permission (DM/1070/18/FUL), granted by the Local Planning Authority, for an EfW power station of up to 49.9 MW gross capacity and associated development. Should this Development Consent Order be made the development proposed would when implemented:

- replace the development granted under the above mentioned Planning Permission; and
- increase the gross electrical capacity from 49.9 MW to 95 MW by improving the efficiency of the EfW power station; whilst not increasing the maximum fuel throughput of 753,500 tonnes per annum, nor by increasing the maximum sizes of the building dimensions granted Planning Permission.

1.1.4. The key differences between the Planning Permission and the development and whether the Planning Permission represents a credible fallback position are set out in Sections 2.7 and 4.7, respectively, below.

1.1.5. The legislative tests for whether the Proposed Development is a Nationally Significant Infrastructure Project (NSIP) were considered by the Secretary of State (SoS) for Housing, Communities and Local Government (SoSHCLG) in his decision to accept the application for Examination in accordance with s55 of PA2008 [PD-002]. It was accepted that the Proposed Development is a NSIP as it comprises an EfW power

station with a capacity of more than 50MW and associated development that falls within s15(2) of the PA2008, and so requires development consent in accordance with s31 of the PA2008. The Proposed Development therefore meets the definition of a NSIP set out in s14(1)(a) of the PA2008.

1.2. APPOINTMENT OF THE EXAMINING AUTHORITY

1.2.1. On 30 June 2020, I was appointed as the Examining Authority (ExA) for the application under s78 and s79 of the PA2008 [PD-003].

1.3. THE PERSONS INVOLVED IN THE EXAMINATION

1.3.1. The persons involved in the Examination were:

- Persons who were entitled to be Interested Parties (IPs) because they had made a relevant representation (RR) or were a statutory party who requested to become an IP.

1.4. THE EXAMINATION AND PROCEDURAL DECISIONS

1.4.1. The Examination began on 10 November 2020 and concluded on 10 May 2021.

1.4.2. The principal components of and events around the Examination are summarised below. A fuller description, timescales and dates can be found in Appendix A.

The Preliminary Meeting

1.4.3. On 23 September 2020, I wrote to all IPs, Statutory Parties and Other Persons under Rule 6 of the Infrastructure Planning (Examination Procedure) Rules 2010 (EPR) (The Rule 6 Letter) inviting them to the Preliminary Meeting (PM) [PD-004], outlining:

- the arrangements and agenda for the PM;
- an Initial Assessment of the Principal Issues (IAPI);
- the draft Examination Timetable;
- availability of RRs and application documents; and
- my (the ExA's) procedural decisions.

1.4.4. The PM took place in two parts. The PM commenced on 21 October 2020, was adjourned at the end of that part of the PM and resumed on 10 November 2020. Both parts of the PM were held virtually and were live-streamed. Recordings of the PM Part 1 [EV1-001] and the PM Part 2 [EV1-002], as well as a note of both parts of the PM [EV1-003] were published on the Planning Inspectorate's National Infrastructure website[1].

[1] https://infrastructure.planninginspectorate.gov.uk/projects/Yorkshire%20and%20the%20Humber/South-Humber-Bank-Energy-Centre/

1.4.5. My procedural decisions and the Examination Timetable took full account of matters raised at the PM. They were provided in the Rule 8 Letter [PD-005], dated 17 November 2020.

Key Procedural Decisions

1.4.6. The procedural decisions set out in the Rule 8 Letter [PD-005] related to matters that were confined to the procedure of the Examination and did not bear on my consideration of the planning merits of the Proposed Development as ExA. Further, they were generally complied with by the Applicant and relevant IPs. The decisions can be seen in my Rule 8 Letter [PD-005] and so there is no need to reiterate them here.

Site Inspections

1.4.7. Site Inspections are held in PA2008 examinations to ensure that the ExA has an adequate understanding of the Proposed Development within its site and surroundings and its physical and spatial effects.

1.4.8. Where the matters for inspection can be viewed from the public domain and there are no other considerations such as personal safety or the need for the identification of relevant features or processes, an Unaccompanied Site Inspection (USI) is held. Where an inspection must be made on land requiring consent to access, there are safety or other technical considerations and/ or there are requests made to accompany an inspection, an Accompanied Site Inspection (ASI) may be held.

1.4.9. I carried out an USI on 25 August 2020 [EV2-001] to familiarise myself with the site and surrounding area and to support the Examination. I visited a number of locations and viewed the Site from up close and further afield. All locations were publicly accessible. A note of the USI, providing a procedural record of the USI, can be found in the Examination Library under the above reference.

1.4.10. On the 15 January 2021, conscious of:

- the continued threat of, and uncertainties around COVID-19;
- the Government guidance and restrictions that applied at that time; and
- the Applicant's concerns in regard to coronavirus restrictions and the SHBPS being critical infrastructure, with only necessary visits permitted in order to minimise transmission to workers;

I took a Procedural Decision [PD-007] to postpone any further detailed planning of a possible ASI, but rather required the submission of a detailed flight plan for an Unmanned Aerial Vehicle (UAV) with a view to the UAV being used to undertaking a comprehensive high-resolution video of the Proposed Development site.

1.4.11. The above-mentioned Procedural Decision [PD-007] sought the submission of the UAV detailed flight plan by Deadline (DL) 3 (20 January 2021) and allowed IPs, should they wish to comment on the UAV flight plan to do so by DL4 (19 February 2021). No representations

in relation to the UAV flight plan were received from any IP or Other Parties.

1.4.12. The Applicant submitted the UAV high-resolution video footage (UAV Footage) of the Proposed Development site and, using my discretion, as ExA, I accepted the UAV Footage [AS-009] into the Examination on the 9 March 2021. On the same day I issued a Rule 17 (R17) letter [PD-011], under the EPR, seeking comments/ observations in relation to the UAV Footage submitted from any IPs on or before DL5 (Friday 19 March 2021).

1.4.13. Only North East Lincolnshire Council (NELC) commented on the UAV Footage [REP5-013]. The Council advised that it considered the UAV Footage to be "*…a useful addition to the process and provides a good view of the site features, boundaries, and immediate surrounding area increasing the understanding of the issues under consideration.*"

1.4.14. Additionally, NELC stated it "*…considers the UAV footage showed the site in clear manner and the relationship of the site to the Humber Estuary but also nature of the surrounding area including other industrial uses and adjoining fields. NELC would also highlight the UAV provided good views of the wider site that will accommodate the additional ecological mitigation area to the west of the South Humber Bank Power Station... It also allows clear views of the existing highway adjoining the site assisting the understanding of access proposals to South Marsh Road and the wider network at Hobson Way.*"

1.4.15. NELC noted that during the USI of 25 August 2020, the ExA considered the site, its surroundings, vehicle routes and key viewpoints, as identified within the Environmental Statement. NELC indicated that the UAV Footage, together with the USI, provides a thorough understanding of the site, surrounding and wider area in relation to the effects and impacts of the proposal under consideration.

1.4.16. Taking the UAV Footage [AS-009] and IPs Responses [REP5-013] into consideration, as well as:

- my USI of 25 August 2020;
- the uncertainties around COVID-19, including the Applicant's concerns regarding coronavirus restrictions and the SHBPS being critical infrastructure, with only necessary visits permitted in order to minimise transmission to workers; and
- the Government guidance that applied in relation to COVID-19 at the time,

I confirmed, on the 23 March 2021, that I was satisfied that an ASI was not required.

1.4.17. I have had regard to the information and impressions obtained during my USI [EV2-001] and from the UAV Footage [AS-009] and IPs' Responses on the UAV Footage [REP5-013] in all relevant sections of this report.

Hearing Processes

1.4.18. Hearings are held in PA2008 Examinations in two main circumstances:

- To respond to specific requests from persons who have a right to be heard - in summary terms:
  - where persons affected by compulsory acquisition (CA) and/or temporary possession (TP) proposals (Affected Persons) object and request to be heard at a Compulsory Acquisition Hearing (CAH); and / or
  - where IPs request to be heard at an Open Floor Hearing (OFH).
- To address matters where the ExA considers that a hearing is necessary to inquire orally into matters under examination, typically because they are complex, there is an element of contention or disagreement, or the application of relevant law or policy is not clear.

1.4.19. I held a number of hearings to ensure the thorough examination of the issues raised by the application.

1.4.20. An Issue Specific Hearing (ISH) was held under s91 of PA2008 virtually and was livestreamed. This ISH was held on the subject matter of the draft DCO (ISH1) on:

- Tuesday 9 February 2021.

1.4.21. ISH1 sat in two sessions, with both sessions being recorded. The recordings of the ISH1 Part 1 [EV5-001] and ISH1 Part 2 [EV5-002] have been published on the Planning Inspectorate's National Infrastructure website[2].

1.4.22. As no CA or TP is proposed as part of the Proposed Development, no CAHs were held under s92 of PA2008.

1.4.23. An OFH was held under s93 of PA2008 virtually and was livestreamed. This OFH was held on:

- Monday 8 February 2021.

1.4.24. All IPs were provided with an opportunity to be heard on any important and relevant subject matter that they wished to raise. The recording of the OFH [EV4-001] has been published on the Planning Inspectorate's National Infrastructure website[3].

Written Processes

1.4.25. Examination under PA2008 is primarily a written process, in which the ExA has regard to written material forming the application and arising from the Examination. All of this material is recorded in the Examination Library (Appendix B) and published online. Individual document

[2] https://infrastructure.planninginspectorate.gov.uk/projects/Yorkshire%20and%20the%20Humber/South-Humber-Bank-Energy-Centre/
[3] https://infrastructure.planninginspectorate.gov.uk/projects/Yorkshire%20and%20the%20Humber/South-Humber-Bank-Energy-Centre/

references to the Examination Library in this report are enclosed in square brackets [] and the Examination Library (Appendix B) provides hyperlinks to the original documents held online. For this reason, this report does not contain extensive summaries of all documents and representations, although full regard has been had to them in my conclusions. I have considered all important and relevant matters arising from them.

1.4.26. Key written sources are set out further below.

Relevant Representations

1.4.27. Twelve RRs were received by the Planning Inspectorate [RR-001 to RR-012]. All makers of RRs received the Rule 6 Letter and were provided with an opportunity to become involved in the Examination as IPs. I have fully considered all RRs. The issues that they raise are considered in Chapter 4 of this report.

Written Representations and Other Examination Documents

1.4.28. The Applicant and IPs were provided with opportunities to:

- make written representations (WRs) (DL2);
- comment on WRs made by the Applicant and other IPs (DL3);
- summarise their oral submissions at hearings in writing (DL4);
- make other written submissions requested or accepted by the ExA; and
- comment on the Report on Implications for European Sites (RIES) [PD-012], published for consultation by the ExA on 31 March 2021, by DL6.

1.4.29. I have fully considered all WRs and other Examination documents. The issues that they raise are considered in Chapters 4 and 5 of this report.

Local Impact Reports

1.4.30. A Local Impact Report (LIR) is a report made by a relevant local authority giving details of the likely impact of the Proposed Development on the authority's area (or any part of that area) that has been invited and submitted to the ExA under s60 PA2008.

1.4.31. One LIR was received from NELC [REP1-018].

1.4.32. The LIR has been taken fully into account by me in all relevant Chapters of this report.

Statements of Common Ground

1.4.33. A Statement of Common Ground (SoCG) is a statement agreed between the Applicant and one or more parties, recording matters that are agreed between them.

1.4.34. By the end of the Examination, the following bodies had concluded SoCGs with the Applicant:

- Anglian Water (AW) [REP1-005];
- Cadent Gas Ltd [REP1-004];
- The Environment Agency (EA) [REP1-001];
- Historic England (HE) [REP1-006];
- Highways England [REP1-002];
- Natural England (NE) [REP2-003];
- National Grid (NG), being National Grid Gas plc (NGG) and National Grid Electricity Transmission plc (NGET) [REP7-004];
- Network Rail Infrastructure Limited (NR) [REP4-008];
- NELC [REP4-006];
- North Lincolnshire Council [REP1-012]; and
- Royal Mail (RM) [REP2-005];

1.4.35. Although the Applicant and NG completed a SoCG [REP7-004], it was clear from that document that NG were still objecting to the Proposed Development at that time, although the parties had agreed the principles of the matters to be covered in the protective provisions and related side agreement. However, the SoCG is clear that the exact form of the documents remains under negotiation between the parties.

1.4.36. Paragraph 4.1.4 of the SoCG with NG [REP7-004] states *"In agreeing the protective provisions, as well as considering impacts on its assets within the Order limits, National Grid must consider the AGI* [Above Ground Installation] *and Substation which, whilst carved out of the Order limits are within the SHBPS site*." Furthermore, this paragraph makes it clear that NG's view is that *"…the potential consequences of any damage caused by the Proposed Development to this apparatus must be taken into account and reflected in the protective provisions."*

1.4.37. In response to my Rule 8(3) and R17 letter [PD-013] dated 28 April 2021, which expressed disappointment that the Applicant and NG had failed to submit a completed SoCG between those parties at DL6 (as sought in the Examination timetable) the relevant parties responded:

- The Applicant: provided a response to my Rule 17 letter dated 28 April 2021 [REP7-007], along with a signed SoCG with NG [REP7-004]. They also provided a document that compared the previous version of the draft SoCG with the submitted SoCG [REP7-005], which detailed the changes;
- NG: confirmed [REP7-008] the completed SoCG *"…reflects that the parties have now reached agreement in principle in relation to the form of protective provisions to be included in the Order and a side agreement to protect National Grid's apparatus within and adjacent to the Order limits."* However, NG also made it clear that *"The final wording is currently being settled between the parties and it is anticipated that the agreement will be completed in the coming days. As set out in the SoCG, once the agreement is completed, the parties will inform the ExA of this position and National Grid shall withdraw its objection to the Project."*

1.4.38. At the close of the Examination no such confirmation had been submitted by NG and its objection to the Proposed Development remained outstanding. As such I consider that only moderate weight can be afforded to the SoCG between the Applicant and NG.

1.4.39. In regard to the other SoCG(s) [REP1-001], [REP1-002], [REP1-004], [REP1-005], [REP1-006], [REP1-012], [REP2-003], [REP2-005], [REP4-006]; and [REP4-008] I consider that these should be afforded substantial weight and they have been taken fully into account by me in all relevant Chapters of this report.

Written Questions

1.4.40. I asked two rounds of written questions (ExQ).

- ExA's First written questions (ExQ1) [PD-006] and procedural decisions were set out in the Rule 8 letter [PD-005], dated 17 November 2020.
- ExA's Further written questions (ExQ2) [PD-010] were issued on 5 March 2021.

1.4.41. The following requests for further information and comments under R17 of the EPR were issued on:

- 9 March 2021 [PD-011], which sought comments or observations in writing by DL5 (Friday 19 March 2021), in relation to the UAV Footage of the Proposed Development site, that was broadly in conformity with the Applicant's UAV Flight Plan [REP3-014] submitted at DL3; and
- 28 April 2021 [PD-013], which sought by DL7 (5 May 2021):
  - An explanation as to why the Applicant and National Grid were unable to complete a SoCG or to submit a completed SoCG;
  - The views of the Applicant and NELC in regard to:
    - why the interests of the Mortgagee, Lloyds Bank plc, were not bound to the s106 agreement, dated 11 April 2019 (Original Deed) completed by the parties as part of the planning permission granted by NELC under its reference DC/1070/18/FUL. These parties were also asked to comment on the implications of this fact in regard to the Deed of Variation (DoV) [REP6-009] submitted at DL6, which took effect on the 19 April 2021, and whether the Mortgagee would be bound by the DoV;
    - whether the confirmatory deed, attached to the DoV at Appendix A, would achieve its intention. In consideration of these matters the Applicant and NELC were asked for legal submissions by DL7 (5 May 2021), on the enforceability of the s106 agreement (as varied) on the Mortgagee, if it takes possession: (a) if the Development Consent Order (DCO) is granted; and (b) if the DCO were to be refused. These parties were also asked to suggest any alternative way to secure the habitats mitigation, should a s106 which binds the Mortgagee to the Original Deed not be signed by the Mortgagee by the close of the Examination; and
  - To clarify the address specified in the Explanatory Note on page 55 of the draft Development Consent Order (dDCO) [REP6-003],

submitted at DL6, as there appeared to be two New Oxford House in Grimsby and as such the address specified appeared to be imprecise.

1.4.42. All responses to my ExQs have been fully considered and taken into account in all relevant Chapters of this report.

Requests to Join and Leave the Examination

1.4.43. On the 7 May 2021, I used my discretion to accept an additional submission from ESP Utilities Group Ltd, formerly British Gas Connections Ltd, [AS-011]. It confirmed that it had no gas or electricity apparatus in the vicinity of the site address and its infrastructure would not be affected by the proposed works.

1.4.44. No other additional submissions were received during the Examination by persons who were not already IPs at or after the PM.

1.4.45. During the Examination, as a consequence of discussion at hearings and/ or discussions between relevant IPs and the Applicant, the following persons wrote to inform me that their issues were settled, and their representations were withdrawn:

- **Cadent Gas Limited** (Cadent) withdrew its representation advising it had received and reviewed further information, which satisfied Cadent the scheme (based on the proposals as of the date of its email withdrawing its representation) would not adversely affect its high pressure asset [AS-005].

- **NR** withdrew its objection [AS-008] advising it had entered into an agreement with the Applicant in relation to the project and the modifications the Applicant sought to make to (and retain in) its dDCO. These included: a) a new definition, defining the term 'Network Rail' within Article 2 of the DCO; b) Amendments to Requirements 16 and 24 to include consultation with NR; c) the inclusion of Requirement 37, which requires plans submitted pursuant to Requirements 16, 24 and 33 not to provide for the use of South Marsh Road (West of Hobson Way, also known as South Marsh Lane Bridleway) by Heavy Goods Vehicles (HGV) accessing to or egressing from the authorised Development; and d) Protective Provisions for the benefit of NR to be included within Schedule 8, Part 5 of the DCO.

1.5. ENVIRONMENTAL IMPACT ASSESSMENT

1.5.1. The Proposed Development is development for which an Environmental Impact Assessment (EIA) is required (EIA development).

1.5.2. On 21 August 2019, the Applicant submitted a scoping report to the SoSHCLG under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (SI 572) (as amended) (the EIA Regulations) in order to request an opinion about the scope of the Environmental Statement (ES) to be prepared (a Scoping Opinion) [APP-104]. The Applicant notified the SoS under

Regulation 8(1)(b) of the EIA Regulations that it proposed to provide an ES in respect of the Proposed Development.

1.5.3. On 2 October 2019 the Planning Inspectorate, on behalf of the SoS, provided a Scoping Opinion [APP-105]. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development was determined to be EIA development. The application was accompanied by an ES [APP-033 – APP-139].

1.5.4. On 17 July 2020 the Applicant provided the Planning Inspectorate with a certificate confirming that Regulation 16 of the EIA Regulations had been complied with [OD-005].

1.5.5. Consideration is given to the adequacy of the ES and matters arising from it in Chapter 4 of this report

1.6. HABITATS REGULATIONS ASSESSMENT

1.6.1. The Proposed Development is development for which a Habitats Regulations Assessment (HRA) Report has been provided.

1.6.2. Consideration is given to the adequacy of the HRA Report, associated information and evidence and the matters arising from it in Chapter(s) 4 and 5 of this report.

1.7. UNDERTAKINGS, OBLIGATIONS AND AGREEMENTS

1.7.1. Planning Permission, granted by NELC in 2019 under its planning reference DC/1070/18/FUL (NELC Planning Permission), is the subject of a s106 agreement between NELC and EP SHB Limited. (A copy of the Original Deed was provided at Appendix 2 (Original Deed) of the Applicant's Development Consent Obligation document [APP-032]).

1.7.2. The SoCG between the Applicant and NELC [REP4-006] confirmed:

- the parties agreed that the Original Deed was required in respect of potential impacts on water-birds and it secured the sum of £105,378.00, payable to NELC, to enable the creation of wetland habitat at Cress Marsh on South Marsh Road suitable for birds that use the Humber Estuary Special Protection Area (SPA) and Ramsar site;
- that it should carry over to the Proposed Development, with this being achieved by entering into a DoV; and
- that the Applicant and NELC had agreed the draft of the DoV and that it was with the Applicant's Mortgagee for approval.

The Applicant's position is that the DoV will ensure the necessary mitigation measures are included within the DCO.

1.7.3. A DoV [REP6-009), was submitted at DL6 (23 April 2021). However, the DoV was completed without the Mortgagee being bound to it and this is considered further at paragraphs 4.13.43 to 4.13.59 below.

1.7.4. Turning to other Agreements, NG were clear that it considered a side agreement with the Applicant would be necessary to protect NG's apparatus within and adjacent to the Order Limits. NG were clear in its e-mail dated 5 May 2021 [REP7-008] and in the Applicant's completed SoCG with NG [REP7-004] that the parties had agreed the principles in relation to such a side agreement. However, neither the Applicant or NG provided me with any update as to progress of the side agreement prior to the close of the Examination and this matter remained outstanding.

1.7.5. As such, should the SoS for BEIS be minded to grant the DCO he will need to satisfy himself that the parties are satisfied in relation to any side agreement completed between these parties.

1.7.6. By the end of the Examination there were no other matters subject to any separate undertakings, obligations and/ or agreements. All relevant considerations are addressed in this report as bearing on the DCO. These undertakings, obligations and/ or agreements (other than unsigned or incomplete ones referred to above) have been taken fully into account by me in all relevant Chapters of this report.

1.8. OTHER CONSENTS

1.8.1. The application documentation 'Other Consents and Licences' [APP-023] and questions during this Examination have identified the following consents that the Proposed Development has obtained or must obtain, in addition to Development Consent under PA2008. The latest position on these is recorded below.

- **An Electricity Generation Licence** under the Electricity Act 1989 or an exemption will be required at the operational stage of the Proposed Development in relation to generating activities.
  Regulator: The Office of Gas and Electricity Markets (OFGEM).
  Position: Licence or exemption to be applied for prior to commissioning of the Proposed Development.

- **A Greenhouse Gas Permit** under the Greenhouse Gas Emissions Trading Scheme Regulations 2012 will be required for the emission of Carbon Dioxide (CO_2) from the Proposed EfW Power Station.
  Regulator: The EA.
  Position: Application to be submitted prior to commissioning of the Proposed EfW Power Station.

- **An Environmental Permit** under the Environmental Permitting (England and Wales) Regulations 2016 is required to operate the EfW Power Station.
  Regulator: The EA.
  Position: On-going. Permit granted for the development permitted under the TCPA1990, NELC Reference DM/1070/18/FUL, with the Applicant having duly made an environmental permit application for the Proposed Development on 23rd December 2020, which means the EA has carried out its initial checks and has accepted the application, and will proceed to consider the application in detail. The Applicant in

its document 'The Applicant's Written Summary of Oral Submissions – DCO Issue Specific Hearing' [REP4-012] has clarified that "*…whilst the permit for the Proposed Development has not been granted, no substantial issues are anticipated because the permit will be very similar to that of the Consented Development* [NELC Planning Permission] *which has already been granted…"* and that "*…at this stage it is not expected that the permit for the Proposed Development will be granted before the end of the examination."*

- **A Bilateral Connection Agreement** (BCA) with NGET will be required for the connection to the National Grid 400 kV substation located within the SHBPS site.
  Regulator: NGET.
  Position: The Applicant has accepted a BCA and a Construction Agreement from NGET for the connection to the National Grid 400 kV substation located within the SHBPS site.

- **In terms of gas connections either:**
  - **A Planning and Advanced Reservation of Capacity Agreement** (PARCA) (Option A) from NGG for the reservation of gas from the National Transmission System ('NTS') may be required dependent on commercial arrangements between the Applicant and NGG.
    Position: Subject to discussions with NGG a PARCA may be required dependent on commercial arrangement between EP Waste Management Ltd and NGG. However, the Applicant advises that this will potentially, albeit unlikely, be progressed following detailed design of the Proposed Development; or
  - **An inter-company private agreement** (Option B) between the Applicant and SHBPS gas network, EP SHB Limited, to provide a connection to the NGG distribution network through the existing SHBPS gas supply network.
    Position: Applicant states that no issues are foreseen with obtaining this agreement, should it be required, and that there would be no significant timescale implications; or
  - **A Connection Agreement** (Option C) for connection to the Cadent local gas distribution network.
    Regulator: Cadent.
    Position: Feasibility study proposal received from Cadent. However, the Applicant advises such a connections agreement is unlikely to be pursued following receipt of the feasibility study.

- **An Application to Offer for physical connection to gas NTS network**. Should Option A above be selected by the Applicant, then this application would be required to provide a connection into the NGG distribution network within the SHBPS Above Ground Installation (AGI).
  Regulator: NGG
  Position: Preliminary discussions held on the scope of an application. However, the Applicant indicates that, albeit unlikely, an application will potentially be progressed following detailed design of the Proposed Development.

- **An Environmental Permit** (for discharge to surface water) under the Environmental Permitting (England and Wales) Regulations 2016 may be required for dewatering during excavations. This will only be required if the method of excavation does not comply with the EA's regulatory position statement and lasts for more than 3 continuous months.
  Regulator: The EA.
  Position: The EA specify that the application should not be made earlier than 3 months prior to when it is required during construction.

- **Land Drainage Consent** under s23 and s66 of the Land Drainage Act 1991 (prohibition on obstructions etc. in watercourses) from the North East Lindsey Internal Drainage Board (IDB).
  Position: The Applicant has indicated that discussions have taken place with the IDB and agreement has been reached on the required runoff rate and the retention of an undeveloped strip of land alongside the ditch for their ongoing maintenance purposes. Additionally, the Applicant advises that an application is to be submitted prior to the start of construction.

- **A Pipeline Safety Notification** under Regulation 20 of the Pipeline Safety Regulations 1996 will be required in connection with the Gas Connection.
  Regulator: The Health and Safety Executive (HSE).
  Position: HSE must be notified a minimum of 6 months prior to commencement of the Gas Connection.

- **A Gas Safety Case** as required by Regulation 3 of the Gas Safety (Management) Regulations 1996 in connection with the gas connection must be prepared and submitted to HSE for approval prior to gas being conveyed, although an exemption may apply.
  Regulator: The HSE.
  Position: Safety case to be submitted prior to commencement of the start of construction of the Proposed Gas Connection.

- **A Notification of Construction Works** under the Construction (Design and Management) Regulations 2015 must be provided to the HSE prior to the start of construction.
  Regulator: The HSE.
  Position: Notification in writing will be made prior to the start of construction work.

- **Construction Noise Consent** under s61 of the Control of Pollution Act 1974 may be required during construction of the EfW Power Station for certain activities.
  Regulator: NELC.
  Position: Would be applied for prior to the start of construction, or prior to specific construction activities, if required.

- **A Permit for Transport of Abnormal Loads** under the Road Vehicles (Authorisation of Special Types) (General) Order 2003 or the Road Traffic Act 1988.
  Regulator: Vehicle Certification Agency; Highways England; and NELC, acting as the Local Highway Authority.
  Position: Permits will be sought once the number and type of abnormal loads and abnormal indivisible loads has been established.

- **A Fire Notice**, if required, under the Regulatory Reform (Fire Safety) Order 2005.
  Regulator: The Local Fire and Rescue Authority.
  Position: An application would be submitted prior to the start of construction, if required.

- **Building Regulations Approval** under the Building Regulations Act 2000 (as amended) will be required in respect of buildings and structures forming part of the Proposed Development.
  Regulator: NELC.
  Position: Building Regulations Approval will be sought prior to and during the construction phase.

- **An Agreement under s278 of the Highways Act** for the carrying out of works to the public highway.
  Regulator: NELC.
  Position: Technical approval has been granted by NELC.

- **A Class Licence** under s10(3)(c) of the Wildlife and Countryside Act 1981 (as amended) is required to strim ditch vegetation pre-construction, as this may displace water voles.
  Regulator: NE.
  Position: The ditch vegetation within the channel and on the banks is likely to be strimmed back to ground level under the supervision of the Class Licensed Ecologist to displace water voles from the affected section of habitat.
  The Applicant has stated an Ecologist will be appointed, who holds a 'water vole class licence' under form WML-CL31, rather than seek a full development licence.

- **A Temporary Traffic Regulation Order** (TTRO) may be required to allow traffic management e.g. in respect of creating new access or to minimise queueing/ prevent certain turns during the construction period.
  Regulator: NELC.
  Position: TTRO would be sought once the number and nature of TTROs is established.

- **Hazardous Substances Consent** under Sections 4 and 6 of The Planning (Hazardous Substances) Act 1990 & Schedule 1 of The Planning (Hazardous Substances) Regulations 2015 may be required if the nature, amounts and concentrations of substances stored on site exceed those specified in the Planning (Hazardous Substances) Act

1990 & Schedule 1 of The Planning (Hazardous Substances) Regulations 2015.
Regulator: NELC.
Position: Hazardous Substances Consent application to be prepared for submission to NELC in the unlikely event it is required.

- **Licence to be a waste carrier, broker or dealer**
  Regulator: The EA.
  Position: Registration would be sought prior to the carrying, brokering or dealing of waste.

1.8.2. In relation to the outstanding consents recorded above, I have considered the available information bearing on these and, without prejudice to the exercise of discretion by future decision-makers, conclude that there are no apparent impediments to the implementation of the Proposed Development, should the SoS for Business, Energy and Industrial Strategy (BEIS) make the DCO.

1.8.3. All relevant considerations related to other consents mentioned above are addressed in this report as bearing on the DCO.

1.9. STRUCTURE OF THIS REPORT

1.9.1. The structure of this report is as follows:

- **Chapter 1** introduces the reader to the application, the processes used to carry out the Examination and make this report.
- **Chapter 2** describes the site and its surrounds, the Proposed Development, its planning history and that of related projects.
- **Chapter 3** records the legal and policy context for the SoS's decision.
- **Chapter 4** sets out the planning issues that arose from the application and during the Examination.
- **Chapter 5** considers HRA and effects on European Sites.
- **Chapter 6** sets out the balance of planning considerations arising from Chapters 4 and 5 in the light of the factual, legal and policy information in Chapters 1 to 3.
- **Chapter 7** considers the implications of the matters arising from the preceding chapters for the DCO.
- **Chapter 8** summarises all relevant considerations and sets out the ExA's recommendation to the SoS for BEIS.

1.9.2. This report is supported by the following Appendices:

- **Appendix A** – the Examination.
- **Appendix B** – the Examination Library.
- **Appendix C** – List of Abbreviations.
- **Appendix D** – Recommended DCO.

1.9.3. Given that the application and Examination material has been published online, this report does not contain extensive summaries of all the representations although regard has been had to them in my conclusions. I have considered all important and relevant matters and set

out my recommendations to the SoS for BEIS against the tests of PA2008.

1.9.4. In accordance with s83(1)(b)(i) and (ii) of the PA2008, this report sets out my findings and conclusions in respect of the application and my recommendation to the SoS for BEIS on the decision to be made on the application.

2. THE PROPOSAL AND THE SITE

2.1. THE APPLICATION AS MADE

2.1.1. The Applicant submitted an application for development consent under the Planning Act 2008 (PA2008) for an Energy from Waste (EfW) power station with a gross electrical output of up to 95 Megawatts (MW) at South Humber Bank Power Station (SHBPS), South Marsh Road, Stallingborough DN41 8BZ. The location of the Site is shown on the Location Plan [APP-008].

2.1.2. The application, in the Environmental Statement (ES) Non-Technical Summary [APP-033], indicates that the Proposed Development would run continuously 24 hours a day, 7 days a week, excluding Christmas Day, Boxing Day and New Year's Day, supplying its own power in normal operating conditions with the balance exported to the grid. No restriction on the number of days or hours of operations are included in the draft Development Consent Order (dDCO) as its operation would be driven by demand, and up to the maximum allowed under its Environmental Permit (EP).

The Proposed Development

2.1.3. Schedule 1 of the dDCO [REP4-004] sets out the formal description of the elements that comprise the project. These are summarised in paragraph 1.1.2 above and shown on the Works Plans [APP-010]. Further detail can be found in Chapter 4 (The Proposed Development) of the ES [APP-038].

2.1.4. However, all aspects of the final design have not yet been determined. This includes the provider of the turbine (and therefore the dimensions of the structures and buildings), the final stack location within the EfW Power Station Site and which of the three Gas Connection routes proposed would form the final route of the new gas pipeline.

2.1.5. To ensure a robust assessment of the likely significant environmental effects of the Proposed Development, the application presents a worst-case assessment of potential environmental effects. Wherever an element of flexibility is maintained, alternatives have been assessed and the worst-case impacts have been reported in the ES. Further details can be found in the ES at Chapter 4 (The Proposed Development) [APP-038], which includes details of the maximum building and fixed design parameters. These are included in the dDCO [REP4-004] at Schedule 2 (Requirement) and secured under Requirement 3 (Approved details and amendments to them).

Associated Development Gas Connection

2.1.6. The Gas Connection is associated development and would comprise an underground gas pipeline of up to 500 millimetres in diameter for the transport of natural gas from the existing gas pipeline to the EfW Power Station.

2.1.7. The Applicant is not seeking consent to carry out works on the Existing Gas Pipeline. Instead it proposes to connect via a new underground pipeline from the Proposed Development to one of the following options:

- the existing SHBPS Above Ground Installation (AGI), in order to provide a connection to the National Grid gas distribution network (Option A); or
- the existing SHBPS gas supply network, in order to provide a connection to the National Grid gas distribution network (Option B); or
- the Cadent Gas Ltd (Cadent) local distribution network located to the north of the Site (Option C).

2.1.8. All three gas connection routes are identified in the application. The first (Option A) runs south out of the existing AGI and turns east to a point where it will join into the EfW Power Station. This route is approximately 195 metres (m) in length.

2.1.9. The second route (Option B) runs east out of the existing SHBPS and then turns north for a short distance and then east, where it will join into the EfW Power Station. This route is approximately 217 m in length.

2.1.10. The third route (Option C) runs east from the junction on South Marsh Road before turning south into the site. It then turns east again for a short distance before joining into the EfW Power Station. This route is approximately 315 m in length.

2.1.11. The Applicant points out that both the SHBPS AGI (Options A) and the SHBPS gas supply network (Option B) lie within the SHBPS Site, although the AGI is excluded from the Proposed Development site. Additionally, the Applicant has confirmed that part of the pipeline route for Option C lies outside its ownership or the ownership of its parent companies. As such the Applicant states *"Any gas connection works outside of the Site, including works on the AGI (for Options A or B) or if required to connect to the local distribution network (i.e. Option C), do not form part of the Proposed Development, and the relevant undertaker will rely either on their statutory powers or obtain the relevant consents prior to any works commencing."* Additionally, the Applicants have stated that following the receipt of a feasibility study proposal from Cadent, such a connections agreement is unlikely to be pursued.

2.1.12. The final route is to be chosen at the detailed design stage by the Applicant, in conjunction with its Engineering, Procurement and Construction (EPC) Contractor. The Indicative Gas Connection Plan [APP-013] shows the potential routes for the Gas Connection and the connection locations.

2.1.13. Further details can be found in the Gas Connection & Pipeline Statement submitted with the application [APP-022].

Electrical Connection

2.1.14. The Proposed Development includes a new connection to the electricity grid to enable the export of electricity from the EfW Power Station. This would be achieved in one of two ways. Firstly, an electrical connection could be provided by an underground or overground cable to the National Grid Electrical Transmission (NGET) 400 kV system at the existing SHBPS 400 kV substation, located within the SHBPS site. This route is approximately 110m in length. Alternatively, electrical connection could be provided by an underground cable to the Northern Powergrid 132 kV local distribution network by connecting to an existing transmission tower some 2 km west of the SHBPS site on South Marsh Road.

2.1.15. The Applicant states it has accepted a Bilateral Connection Agreement and a Construction agreement from NGET for connection to the SHBPS 400 kV substation. It also advised it had rejected an offer from Northern Powergrid, for the provision of a 132kV connection at the Site.

2.1.16. The Indicative Electrical Connection Plan [APP-014] show the route for the cables (Work No. 2) and the connection locations. Further details can also be found in the Grid Connection Statement submitted with the application [APP-021].

Utilities and Services Connections

2.1.17. Utilities and connections for essential services would be made to the Proposed Development. These will include: a towns water connection to supply water for the boiler and potable water; steam connection(s); telecommunications infrastructure connections for a Local Area Network (LAN) and digital telephones and works; and works to alter the position of such services and utilities connections and are necessary to ensure safe operation and control.

2.1.18. Further details can be found in the ES at Chapter 4 (The Proposed Development) [APP-038].

2.2. THE SITE

2.2.1. The Proposed Development Site lies within the boundary of the existing SHBPS, which is a power station constructed in two phases between 1997 and 1999 and consists of two Combined Cycle Gas Turbine (CCGT) units fired by natural gas. The existing SHBPS has a combined gross electrical capacity of approximately 1,400 MW.

2.2.2. The Proposed Development Site is around 23 hectares (ha) in area and comprises the following main parts - which correlate to the areas upon which the Work Nos.1 - 5 would be undertaken:

- an electricity generating station located on the Main Development Area (MDA), which is land sited east of the existing SHBPS, to be fuelled by Refuse Derived Fuel ('RDF') with a gross electrical output of up to 95 MW at International Organization for Standardization (ISO) conditions (Work No. 1);

- two emissions stacks and associated emissions monitoring systems (Work No. 1A);
- administration block, including control room, workshops, stores and welfare facilities (Work No. 1B);
- electrical, gas, water, telecommunication, steam and other utility connections (Work No. 2);
- landscaping and biodiversity works (Work No. 3);
- a new site access on to South Marsh Road and works to an existing access on to South Marsh Road (Work No. 4); and
- temporary construction and laydown areas (Work No. 5).

2.2.3. The MDA will measure some 7 ha and currently comprises an area of grassland, with underground cooling water pipes (connecting the CCGT units and the cooling water pumping station), other buried services and an associated private access road. The MDA and land within the SHBPS site is generally flat, and typically stands at around 2.0 m Above Ordnance Datum (AOD).

2.2.4. The site also lies within the boundary of the administrative area of North East Lincolnshire Council (NELC), a unitary authority, and benefits from a Planning Permission granted by NELC (reference DM/1070/18/FUL) for a 49.9 MW EfW power station and associated development (NELC Planning Permission).

2.2.5. The NELC Planning Permission is an important and relevant matter as, for the reasons set out in Section 4.7.1 to 4.7.18, I consider there to be a greater than a theoretical possibility of the NELC Planning Permission being implemented prior to the determination of this DCO application. As such I consider a 'fallback position' exists. Should this Development Consent Order be made, the development proposed when implemented would replace the development granted under the above mentioned Planning Permission.

2.2.6. It is an important and relevant matter to note that the proposed Development would increase the gross electrical capacity from that of the NELC Planning Permission from 49.9 MW to 95 MW by improving the efficiency of the EfW power station; whilst not increasing the maximum fuel throughput of 753,500 tonnes per annum, nor by increasing the maximum sizes of the building dimensions granted Planning Permission.

2.2.7. The key differences between the NELC Planning Permission and the development proposed are set out in slightly more detail in Paragraph 2.7.1 and 4.7.4 below, but can be summarised as follows:

- a larger air-cooled condenser, with an additional row of fans and heat exchangers;
- a greater installed cooling capacity for the generator;
- an increased transformer capacity; and
- ancillary works.

2.2.8. A more detailed description of the Site is provided in the ES at Chapter 3 [APP-037].

2.3. THE SURROUNDING AREA

2.3.1. The Proposed Development site is located to the east of the existing SHBPS, which is geographically located on the South Humber Bank between the towns of Immingham and Grimsby; both over 3 km from the Site.

2.3.2. The Site is situated in an area comprising a mix of industrial and agricultural uses. To the south, west and north-west the site is adjoined by land in agricultural use, whilst to the east and north-east the site is adjoined by industrial development, which includes a large polymer manufacturing site, Synthomer, and a waste management facility, NEWLINCS, both of which are accessed from the South Marsh Road. The estuary of the River Humber lies around 175 m to the east of the Site.

2.3.3. Access to the South Humber Bank is via the A180 trunk road and the A1173. The Barton railway line runs north-west to south-east between Barton-on-Humber and Cleethorpes, some 2.5 km to the south-west of the Site and a freight railway line runs north-west to south-east some 300 m (at the closest point) to the Site.

2.4. OTHER DEVELOPMENTS

2.4.1. The Site is located in an existing industrial area in close proximity to the existing SHBPS; Synthomer, a large polymer manufacturing site; and NEWLINCS, a waste management facility.

2.4.2. In addition, there are a number of other NSIPs located nearby which have either been completed or are in the process of being implemented. However, those NSIPs do not result in an interface or overlap with the Proposed Development.

2.5. THE APPLICATION AS EXAMINED

2.5.1. Changes were made to some of the application documents during the Examination, including the wording of the dDCO. These changes sought to address my Written Questions (ExQs), as well as points raised by Interested Parties (IPs). They aim to improve the clarity of the drafting of the DCO and address any omissions, discrepancies and other matters which were raised during the Examination.

2.5.2. The Applicant's changes to the application documents, together with any additional information submitted, are detailed in the Application Guide submitted at Deadline (DL) 7 [REP7-002]. This provides a guide to all documents submitted as part of the application and was updated at each DL when new or revised documents were submitted. It provides a full record of all documentation submitted into the Examination.

2.5.3. I have remained aware throughout the Examination of the need to consider whether changes to the application documents have changed the application to a point where it became a different application and whether the Secretary of State (SoS) would have power therefore under

s114 of the PA2008 to make a Development Consent Order (DCO) having regard to the development consent applied for.

2.5.4. The 'Planning Act 2008: Guidance for the Examination of applications for development consent' (March 2015), provides guidance at paragraphs 109 to 115 in relation to changing an application post Acceptance. The view expressed by the Government during the passage of the Localism Act was that s114(1) places the responsibility for making a DCO on the decision-maker and does not limit the terms in which it can be made.

2.5.5. Having considered this context throughout the Examination, it is clear that the changes to the application (primarily consisting of document updating) have not resulted in significant change to that which was applied for. The changes taken into account in reaching this conclusion are documented in the chapters below of this report. It follows that the SoS for the department of Business, Energy and Industrial Strategy (BEIS) has the power to make the DCO as discussed in Chapter 8 and provided in Appendix D to this report.

2.6. RELEVANT PLANNING HISTORY

2.6.1. The Applicant's Planning, Design and Access Statement (PDAS) [APP-024] briefly outlines the planning history associated with the application site, as well as other land, which is located mainly to the west of the application site. The planning history related to the other land primarily details development that involves minor connection works within the Order Limits of the proposed DCO. These works include a potential effluent pipeline to be laid within the highway and which coincides with parts of the area for the utility connections (Work No. 3) and access works (Work No. 4). The Applicant states that the effluent pipeline works are expected to be physically compatible with Work Nos. 3 & 4.

2.6.2. The PDAS [APP-024] also notes the history of power generation at SHBPS, which was constructed in two phases between 1997 and 1999 and consists of two CCGT units fired by natural gas with a combined gross electrical capacity of approximately 1,400 MW.

2.6.3. The Applicant's agreed Statement of Common Ground (SoCG) with NELC [REP4-006] sets out the planning history of the site. NELC's Local Impact Report (LIR) [REP1-018] confirmed *"The SoCG accurately outlines the history of the site and those developments approved which could have an impact cumulatively with this proposal within the surrounding area."* Whilst NELC's LIR predates the Applicant's completed SoCG with NELC, it is noted that the Planning History detailed in the previous drafts of the SoCG did not substantially change other than by the inclusion of DM/0626/20/CND related to the submission of details seeking the discharge of Part 2 of Condition 13 (Contamination - Investigation) pursuant to DM/1070/18/FUL.

2.6.4. The planning history associated with the application site, as well as other land, which is located mainly to the west of the application site, is detailed below:

- DM/0626/20/CND: Details in discharge of Part 2 of Condition 13 (Contamination - Investigation) pursuant to DM/1070/18/FUL, Condition Part Complied With 17 September 2020;
- DM/1117/19/CND: Details in discharge of Condition 18 (Delivery and Servicing) pursuant to DM/1070/18/FUL, Condition Complied With 31 January 2020;
- DM/0713/19/CND: Details in discharge of Condition 10 (Construction Management Plan - Phase 1) pursuant to DM/1070/18/FUL, Condition Part Complied With 27 September 2019;
- DM/0664/19/FUL: Development of a sustainable transport fuels facility, including various stacks up to 80m high, creation of new accesses, installation of pipe lines, rail link, associated infrastructure and ancillary works (relevant only to the South Marsh Road internal access road for the SHBPS), Approved 12 June 2020;
- DM/0486/19/CND: Details in discharge of Condition 13, Part 1 (Contamination - investigation) DM/1070/18/FUL, Condition Part Complied With 12 June 2019;
- DM/1070/18/FUL: Construction of an energy from waste facility of up to 49.9 MW gross capacity including emissions stack(s), associated infrastructure including parking areas, hard and soft landscaping, the creation of a new access to South Marsh Road, weighbridge facility, and drainage infrastructure, on land at South Humber Bank Power Station, Approved 12 April 2019;
- DM/0575/18/SCO: Request for Scoping Opinion - Construction and operation of an energy from waste power station with a maximum gross electrical output of 49.9 MW, Opinion Issued 03 September 2018;
- DM/1184/16/FUL: Erection of new gatehouse/ induction centre with air conditioning units, installation of bio disk tank, security barriers, car parking, new fencing, new parking bays, relocation of flag poles and other associated works, Approved 04 April 2017;
- DC/1088/10/IMM: Erect two storey portal framed storage building & transformer storage bund, Approved 14 February 2011;
- DC/759/09/IMM: Erection of a parts storage building to existing power station in accordance with amended plans received on 16 December 2009, Approved 22 December 2009;
- DC/1001/05/IMM: Prior determination application to erect 12m high antenna, Approved 11 October 2005;
- DC/436/98/IMM: Erect complex of cladded portal frame building to house power generation plant and equipment, Approved 23 September 1998;
- DC/835/98/IMM: Erection of storage buildings and gatehouse. Retention of car park area and associated access from Hobson Way, Approved 25 June 1999;
- DC/190/96/IMM: Radio antennae to a pole at 12 metres above ground level, Approved 17 June 1996;
- 08950050: Application for approval siting and design of Power Station, Approved 28 October 1996;

- 08940461: Extension of the South Humber Bank Power Station site & creation of 2 temporary accesses from South Marsh Road & the South Humber Bank Link Road, Approved 12 January 1995;
- 08930204: Extension of the South Humber Bank Power station site for the construction and operation of a continuous cooling water system plus ancillary works, Approved 21 December 1993;
- 08910439: Construction and generation of combined cycle gas turbine power plant, Approved 01 August 1992; and
- 08900006: Construction of plant for the manufacture of straw pulp, Approved 03 January 1991.

2.6.5. In addition to the above planning history, since the submission of the Applicant' SoCG with NELC and NELC's LIR, and pursuant to Question QB.1.4 of the ExA's Further Written Questions (ExQ2) [PD-010] the Applicant, in response to my ExQ2 [REP5-005] confirmed the submission of the following planning application to NELC for its consideration:

- DM/0273/21/FUL: Variation of Condition 3 (iii - Preliminary works) to delete reference to piling and Condition 11 (Piling) to vary timing of submission of piling information details as granted on DM/1070/18/FUL. This planning application remained undetermined by NELC at the close of my Examination.

2.6.6. It is noted that NELC's LIR in regard to relevant planning history reiterated that the Applicant has a planning permission at this site for a similar EfW facility of up to 49.9MW gross capacity, including emissions stack(s) and associated development the details of which are set out above under planning reference number DM/1070/18/FUL. NELC's NIR states *"The benefit/ impacts of this development were fully considered at that time of that application and were found to both individually and cumulatively to be acceptable and in accordance with the NELLP* (North East Lincolnshire Local Plan) *and NPPF* (National Planning Policy Framework)*. Additional control of potential impacts and mitigation measures were agreed through conditions including a s106 legal agreement in accordance with the formula approach in Policy 9 of the NELLP to assist to recover part of the cost of the creation* [of] *the strategic South Humber Bank Mitigation Zone for SPA birds."*

2.7. PROPOSED DEVELOPMENTS RELATIONSHIP WITH THE NELC PLANNING PERMISSION

2.7.1. The Applicant's PDAS [APP-024] states *"The Proposed Development comprises the works contained in the Consented Development* [NELC Planning Permission]*, along with additional works not forming part of the Consented Development* [NELC Planning Permission] *('the Additional Works'). The Additional Works are set out below along with an explanation of their purpose:*

- *a larger air-cooled condenser (ACC), with an additional row of fans and heat exchangers – this will allow a higher mass flow of steam to be sent to the steam turbine whilst maintaining the exhaust pressure and thereby increasing the amount of power generated;*

- *a greater installed cooling capacity for the generator – additional heat exchangers will be installed to the closed-circuit cooling water system to allow the generator to operate at an increased load and generate more power;*
- *an increased transformer capacity – depending on the adopted grid connection arrangement the capacity will be increased through an additional generator transformer operating in parallel with the Consented Development's* [NELC Planning Permission's] *proposed generator transformer or a single larger generator transformer. Both arrangements would allow generation up to 95 MW; and*
- *ancillary works – the above works will require additional ancillary works and operations, such as new cabling or pipes, and commissioning to ensure that the apparatus has been correctly installed and will operate safely and as intended."*

2.7.2. The Applicant's SoCG with NELC confirms "The Proposed Development comprises the works contained in the Consented Development [NELC Planning Permission], along with additional works not forming part of the Consented Development [NELC Planning Permission] ('the Additional Works'). The Additional Works are summarised as:

- a larger air-cooled condenser (ACC), with an additional row of fans and heat exchangers;
- a greater installed cooling capacity for the generator;
- an increased transformer capacity; and
- ancillary works.

These Additional Works are as set out in paragraph 2.7.1 above.

3. LEGAL AND POLICY CONTEXT

3.1. INTRODUCTION

3.1.1. This chapter sets out the relevant legal and policy context for the application. I have taken this into account in the Examination of the Proposed Development and in presenting findings and making recommendations to the Secretary of State (SoS).

3.1.2. The legal and policy context, as understood by the Applicant, is described in its Planning, Design and Access Statement (PDAS) [APP-024] at Section 5, whilst:

- Section 6 of the PDAS [APP-024] sets out an assessment of the need for the Proposed Development against the relevant National Policy Statements (NPSs) EN-1 (Overarching National Policy Statement for Energy), EN-3 (National Policy Statement for Renewable Energy Infrastructure) and EN-5 (National Policy Statement for Electricity Networks Infrastructure) and the Waste Hierarchy;
- Section 7 considers the proposal against the policy requirements of the NPS's, the National Planning Policy Framework (NPPF), the National Planning Policy for Waste and the North East Lincolnshire Local Plan 2013-2031 (NELLP); and
- Individual chapters of the Applicant's Environmental Statement (ES) provide specific background relating to particular topics.

3.1.3. The Local Impact Report (LIR) of North East Lincolnshire Council (NELC) [REP1-018] sets out the local authority's position regarding its development plan policies.

3.2. THE PLANNING ACT 2008

3.2.1. The application is for a Development Consent Order (DCO) under the Planning Act 2008 (PA2008). It is for an Energy from Waste (EfW) power station with a gross electrical generation capacity of up to 95 megawatts (MW) [APP-003] and is defined as a Nationally Significant Infrastructure Project (NSIP) within section (s) 14(1)(a), s15(1) and s15(2) of PA2008, as the DCO seeks an onshore generating station in England having a capacity of more than 50MW, which does not generate electricity from wind. The components of the Proposed Development are set out in Chapter 2 of this report.

3.2.2. NPSs in respect of this type of development have been designated and the SoS must therefore, subject to certain exceptions, decide the application in accordance with the relevant NPS as specified in s104(3) of PA2008. Under s104(2) of PA2008, the SoS must have regard to any relevant NPS, any LIRs, any matters prescribed in relation to the development, and any other matters the SoS thinks are both important and relevant to the decision.

3.2.3. The remainder of this chapter addresses the identification and application of relevant NPSs and the LIR, and identifies other legal and policy matters that are capable of being important and relevant considerations.

3.3. NATIONAL POLICY STATEMENTS

3.3.1. The Overarching NPS for Energy[4] (NPS EN-1) published in July 2011 sets out the Government's policy for delivery of major energy infrastructure. It was accompanied by five technology-specific NPSs for the energy sector of which the NPS for Renewable Energy Infrastructure[5] (NPS EN-3) and the NPS for Electricity Networks Infrastructure[6] (NPS EN-5), primarily in regard to Electric and Magnetic Fields, are relevant.

NPS EN-1: Overarching National Policy Statement for Energy

3.3.2. Part 2 of EN-1 sets out 'Government policy on energy and energy infrastructure development'. It confirms:

- the Government's commitment to meet its legally binding target to cut greenhouse gas emissions by at least 80% by 2050 compared to 1990 levels (which has since been increased to a commitment of net zero emissions by 2050[7]);
- the need to affect a transition to a low carbon economy, so as to reduce greenhouse gas emissions; and
- the importance of maintaining secure and reliable energy supplies as older fossil fuel generating plant close due to the European Union Emissions Trading System and the United Kingdom (UK) moves towards a low carbon economy.

3.3.3. NPS EN-1 sets out the Government's policy for delivery of major energy infrastructure projects. Paragraph 3.1.1 states:

"the UK needs all the types of energy infrastructure covered by this NPS in order to achieve energy security at the same time as dramatically reducing greenhouse gas emissions".

3.3.4. Paragraph 3.1.2 states that it is for industry to propose new energy infrastructure and that the Government does not consider it appropriate for planning policy to set targets for or limits on different technologies.

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[4] Overarching National Policy Statement for Energy (EN-1) (Department of Energy & Climate Change 2011). Retrieved from: https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure.

[5] National Policy Statement for Renewable Energy Infrastructure (EN-3) (Department of Energy & Climate Change 2011). Retrieved from: https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure.

[6] National Policy Statement for Electricity Network Infrastructure (EN-5) (Department of Energy & Climate Change 2011). Retrieved from: https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure.

[7] UK becomes first major economy to pass net zero emissions law (27 June 2019). Retrieved from: https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law.

3.3.5. Paragraph 3.1.3 sets out that applications for development consent should be assessed *"on the basis that the Government has demonstrated that there is a need for those types of infrastructure"*, whilst paragraph 3.1.4 indicates that the SoS *"should give substantial weight to the contribution which projects would make towards satisfying this need when considering applications for development consent under the Planning Act 2008"*. Indeed the scale of the need for new electricity generating capacity is set out within EN-1 at paragraph 3.3.7 with up to 22 gigawatts ('GW') of existing capacity (including a large amount of fossil fuel power generation) needing to be replaced in part due to the Industrial Emissions Directive, but also as a result of some power stations reaching the end of their operational lives. In response to this, NPS EN-1, at paragraph 3.3.23, identifies a minimum need for 59 GW of new generating capacity over the period to 2025.

3.3.6. NPS EN-1 gives particular regard to the need to have sufficient capacity to meet demand and provide back up to intermittent renewable energy such as wind and solar. Paragraph 3.3.2 states: *"The Government needs to ensure sufficient generating capacity is available to meet maximum peak demand, with a safety margin of spare capacity to accommodate unexpectedly high demand and to mitigate risks such as unexpected plant closures and extreme weather events…"*

3.3.7. The need for more electricity capacity is also set out in EN-1, at paragraph 3.3.11, which states: *"…some renewable sources (such as wind, solar and tidal) are intermittent and cannot be adjusted to meet demand. As a result, the more renewable generating capacity we have the more generation capacity we will require overall, to provide back-up at times when the availability of intermittent renewable sources is low."*

3.3.8. The urgency of the need for new electricity capacity is explained in terms of (paragraph 3.3.15) meeting our obligations for 2050, particularly low carbon energy, whilst it is noted (paragraph 3.3.16) that a failure to decarbonise and diversify energy sources could result in becoming locked into a system of high carbon generation, making it very difficult and expensive to meet the 2050 carbon reduction target.

3.3.9. Paragraph 3.3.24 states that it is not the Government's intention to set targets or limits on any new generating infrastructure to be consented in accordance with the energy NPSs.

3.3.10. NPS EN-1 Paragraph 3.4.3 notes that energy from waste constitutes a form of renewable generation where it reduces the amount of waste going to landfill in accordance with the Waste Hierarchy and recovers energy from that waste as electricity or heat. Whilst, given UK commitments to largely decarbonise the power sector by 2030, paragraph 3.4.5 sets out the need to bring forward new renewable electricity generating projects as soon as possible, whilst indicating that need is urgent.

3.3.11. Section 3.6 of NPS EN-1 acknowledges that fossil fuel generation plays a vital role in providing reliable energy supplies and providing flexibility in

response to changes in supply and demand and diversity in energy mix. Government policy is that they must be constructed and operate in line with increasingly demanding climate change goals.

3.3.12. Paragraph 4.1.2 of NPS EN-1 indicates that the SoS should start with a presumption in favour of granting consent to applications for energy NSIPs, and that the presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused. This presumption is subject to the requirements of s104(3) PA2008.

3.3.13. As set out in paragraph 4.1.3 of NPS EN-1, account should be taken of the potential benefits of the Proposed Development to meeting the need for energy infrastructure, job creation and any longer term or wider benefits. Account should also be taken of potential adverse impacts, including any long term and cumulative ones, as well as measures to avoid, reduce or compensate for them. Paragraph 4.1.4 continues by stating that within this context the SoS should take into account environmental, social and economic benefits and adverse impacts, at national, regional and local levels.

3.3.14. Additionally, other policies and considerations, including those contained in the development plan for the area may constitute matters that the SoS may regard as important and relevant to the decision. However, the primacy of NPSs for NSIPs is clear. In the event of a conflict between policies contained in any other document and those in an NPS, those in the NPS prevail for the purposes of decision making on nationally significant infrastructure (NPS EN-1, paragraph 4.1.5).

3.3.15. Part 5 of NPS EN-1 lists a number of 'generic impacts' that relate to most types of energy infrastructure, which the SoS should take into account when preparing and considering applications. These include land use; socio-economics; air quality and emissions; noise and vibration; dust, odour, artificial light, steam and smoke; traffic and transport; civil and military aviation; biodiversity and geological conservation; historic environment; landscape and visual; water quality and resources; flood risk and waste, amongst others.

NPS EN-3: National Policy Statement for Renewable Energy Infrastructure

3.3.16. NPS EN-3 sets out the specific policies relating to renewable energy infrastructure including EfW infrastructure. It covers generating stations that generate electricity using waste, including non-renewable sources of waste, as a fuel and that generate more than 50MW of electricity.

3.3.17. Paragraph 2.1.2 states that the starting point for decisions is that the need for the infrastructure covered by NPS EN-3 has been demonstrated. Paragraph 2.3.3 states EfW generating stations are likely to require significant water resources and should consider how the plant will be resilient to increased risk of flooding and increase risk of drought affecting river flows as part of their ability to adapt to climate change.

3.3.18. Section 2.4 deals with good design for energy infrastructure.

3.3.19. Paragraph 2.5.2 recognises that the recovery of energy from the combustion of waste will play an increasingly important role in meeting the UK's energy needs that will form an important element of waste management strategies in England.

3.3.20. Paragraph 2.5.10 states a proportion of the biodegradable waste may be classed as "renewable" for the purposes of Renewable Obligation Certificates eligibility, but this is not an issue of relevance to the decision maker. Paragraphs 2.5.12 and 2.5.13 state the fuel throughput capacity of the combustion plant may vary widely. Throughput volumes are not, in themselves, a factor in decision-making but the increase in traffic volumes, any change in air quality, and any other adverse impacts as a result of the increase in throughput should be considered in accordance with the NPS and balanced against the net benefits of the combustion of waste and biomass described in paragraph 2.5.2 and in Section 3.4 of NPS EN-1.

3.3.21. NPS EN-3 identifies assessment principles specific to EfW generating stations, however, these overlap with the generic impacts of NPS EN1: national designations – relating to biodiversity and geological conservation, landscape and visual and historic environment; Green Belts – not relevant to this Proposed Development; and other locational considerations.

3.3.22. NPS EN-3 also provides details on the potential impacts that are specific to EfW generating stations, which expand on some of the generic impacts of NPS EN-1: Air Quality and Emissions; Landscape and Visual; Noise and Vibration; Odour, Insect and Vermin Infestation; Waste Management; Residue Management; and Water Quality and Resources.

NPS EN-5: Electricity Networks Infrastructure

3.3.23. NPS EN-5 outlines the principles which should be applied to applications for new electricity transmission lines as well as associated infrastructure. The Proposed Development would involve the provision of an electricity cable to the boundary of the existing National Grid Electricity Transmission (NGET) substation, which will be connected into the transmission system by the Statutory Undertaker (SU) under the SU provisions. The supply of the provision of the electricity cable to the boundary of the existing NGET substation is included as associated development.

3.3.24. Technology specific considerations to be taken into account for such works include biodiversity, landscape and visual amenity, noise and vibration and the impacts of electric and magnetic fields.

3.4. UK REGULATIONS DERIVING FROM EUROPEAN LAW

European Union Withdrawal

3.4.1. The UK left the European Union (EU) as a member state on 31 January 2020 with the transition period concluding on 31 December 2020. EU derived domestic legislation, as it has effect in domestic law immediately before exit day, continues to have effect in domestic law on and after exit day as retained law unless it is specifically superceded.

3.4.2. This report has been prepared on the basis of the retained law and references in it to European terms such as 'Habitats' have generally been retained for consistency with the Examination documents. However, where terminology has changed, for example 'national sites network' rather than 'Natura 2000 network', the amended terminology will be utilised.

3.4.3. Since there may be changes in legislation between the writing of this report and the SoS's decision, it will be for the SoS to satisfy themselves as to the position on retained law and obligations at the point of decision.

3.5. UK REGULATIONS

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

3.5.1. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, as amended by the Infrastructure Planning (Publication and Notification of Applications etc.) (Coronavirus) (Amendment) Regulations 2020 (the EIA Regulations), provide the legislative framework for the Environmental Impact Assessment (EIA) of the Proposed Development and its Examination. They originate from EU Council Directive 2011/92/EU, amended by 2014/52/EU, on the assessment of the effects of certain public and private projects on the environment (the EIA Directive). The EIA Regulations define the procedure by which information about the environmental effects of a project is collated and taken into account by the relevant decision-making body before consent is granted for a development.

3.5.2. The Proposed Development is a 'Schedule 1 development' as set out in the EIA Regulations and is therefore EIA development. As such the Applicant undertook an EIA and provided an ES with the application [APP-033] to [APP-139].

The Waste (England and Wales) Regulations 2011

3.5.3. The Waste (England and Wales) Regulations 2011 (2011 Regulations), originated from the revised Waste Framework Directive (the Waste Directive), which came into force established the overarching framework for the management of waste across the EU. Article 4 of the Waste Directive (Directive 2008/98/EC) sets out five steps for dealing with waste, ranked according to environmental impact - the 'waste hierarchy'. The definitions of each of the stages can be found in Article 3. It gives top priority to preventing waste. When waste is created, it gives priority to preparing it for re-use, then recycling, then recovery, and last of all

disposal (eg landfill). A very key principle in the backdrop to the hierarchy is to pursue efficient use of resource.

3.5.4. Responsibility for compliance with the waste hierarchy lies with processors of waste whose compliance therewith is regulated and monitored by the Environment Agency (EA) (or other permitting authority if located elsewhere in the UK) through its respective Environmental Permits (EPs).

3.5.5. Any entity which imports, produces, collects, transports, recovers or disposes of waste, or which as a dealer or broker has control of waste is obliged to take *"all such measures available to it as are reasonable in the circumstances to apply the ...waste hierarchy as a priority order"*. They may depart from the priority order where this is justified by life-cycle thinking on the overall impacts of the generation and management of the waste so as to achieve the best overall environmental outcome.

3.5.6. The revised hierarchy inherent in the Waste Directive points up the preference for waste prevention. It also confirms that waste treatment involving energy generation is a recovery operation provided it achieves energy recovery efficiency expressed as R1 of 0.65 or more. The way in which the R1 criterion is calculated is set out in the Waste Directive. The Government has published guidance "Waste incinerator plant: apply for R1 status" on 4 October 2016.

3.5.7. To provide a consistent approach to report recycling rates at UK level, under the Waste Directive, 'Waste from Households' was first published by the Department for Environment, Food and Rural Affairs (DEFRA) in May 2014, and includes waste from: Regular household collection, Civic amenity sites, 'Bulky waste' and 'Other household waste'. It does not include street cleaning/sweeping, gully emptying, separately collected healthcare waste, or asbestos waste. It is a narrower measure than 'municipal waste' and 'council collected waste'.

3.5.8. Ratification of the Circular Economy Package (CEP) across the Member States meant that a revised legislative framework on waste came into force on 4 July 2018, including changes to the Waste Directive, as set out in Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste. The objectives of CEP measures are among other matters to reduce the adverse impacts of waste generation and the overall impacts of resource use by ensuring appropriate application of waste hierarchy by placing restrictions for landfilling and incineration, specifically:

- waste separately collected for preparing for re-use and recycling should not be landfilled or incinerated, with the exception of waste resulting from subsequent treatment operations of the separately collected waste for which incineration or landfill is the best environmental outcome.

3.5.9. Member States had two years in which to transpose the agreed amendments. The UK Government indicated that it would implement the changes in full. On 30 July 2020 it published its statement setting out the

approach the UK will take to transposing the EU's 2020 Circular Economy Package (EU CEP) measures.

3.5.10. On 30 July 2020 the government re-affirmed its commitment to recycling 65% of municipal waste by 2035 and set out its approach to transposing the EU CEP into domestic law. It would be mainly the same as the EU CEP, including targets such as sending no more than 10% municipal waste to landfill by 2035. The EU CEP was approved in April 2018 but no longer applies in the UK after 30 December 2020.

3.5.11. Notwithstanding that the Government has in effect published its own CEP, as there is still a legal obligation to transpose the Waste Directive because the measures became EU law before the UK left the EU. On 25 August 2020 the Waste (Circular Economy) (Amendment) Regulations 2020 were made which are intended in effect to transpose the 2020 CEP in England and Wales.

3.5.12. Specifically regarding the waste hierarchy, the Waste Directive added a paragraph requiring Member States to make use of economic instruments and other measures to provide incentives for the application of the waste hierarchy (the Waste Directive Annex IVa). In responding to this requirement the Government asserted in its Circular Economy Package Statement (Annex I – Summary of 2020 CEP measures and proposed approaches to transposition) that *"this will be delivered through existing provisions and, where relevant, measures will be included in Waste Prevention Programmes"*, therefore *"no new measures are proposed"*.

3.5.13. Article 6 of the Waste Directive specifies when and how end of waste is achieved, as amended under the CEP set out in Our Waste, Our Resources: A Strategy for England 2018. A condition found in the Waste Directive is that Municipal Waste must be collected separately unless it is not "technically, environmentally and economically practicable" to do so. This is transposed by the 2011 Regulations, in particular Regulation 13.

3.5.14. Article 10(4) of the Waste Directive requires Member States to ensure that waste materials collected separately for preparing for re-use or recycling must not be incinerated, except for waste resulting from subsequent treatment operations of the separately collected waste for which incineration delivers the best environmental outcome. Measures were required to be taken to achieve this.

3.5.15. The precise proposed approach to meet this requirement is unclear but CEP Policy Statement 30 July 2020, Annex I – Summary of 2020 CEP measures and proposed approaches to transposition states that it:

"Includes legislative changes to prevent waste separately collected for preparing for reuse or recycling from being accepted at waste incinerators", whilst noting that *"This approach will have a positive impact on recycling rates and help to deliver on ambitions ranging from the 25 YEP to climate change commitments."*

The Environmental Permitting Regulations

3.5.16. The Environmental Permitting (England and Wales) Regulations 2016 (EP Regulations) apply to all new installations and implement the EU Directive 2008/1/EC concerning Integrated Pollution Prevention and Control and the Industrial Emissions Directive (IED) 2010/75/EU that applies to all incinerators and other EfW facilities. They define activities that require the operator to obtain an EP from the EA and transpose the requirements of the EU IED into UK legislation. As the Proposed Development falls within s1 Combustion Activity under the EP Regulations, an EP would be required before the Proposed Development commences operation.

3.5.17. The EP Regulations provide a regulatory system to ensure a high level of protection of environmental and health impacts, secured by demonstrating that the proposed approach used adopts BAT to prevent or minimise the effects of the activity on the environment, taking account of relevant local factors. Generating stations exceeding 50MW are covered by the IED and the EP Regulations.

3.5.18. As set out in section 1 of this report, the Applicant has confirmed that an amendment to the existing EP has been granted in relation to the NELC Planning Permission, and that a separate EP application related to the development subject to this DCO application has been made to the EA to construct, operate and maintain the Proposed Development. This matter is addressed further in Chapter 4.

The Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017

3.5.19. The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations), The Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 govern the assessment processes that must be undertaken in relation to National Site Network (NSN) sites and Ramsar sites and the Proposed Development, referred to as the Habitats Regulations Assessment (HRA). NSN sites are European sites, which include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), which no longer form part of the EU's Natura 2000 ecological network.

3.5.20. These Regulations were originated in part from:

- EU Council Directive 2009/147/EC on the conservation of wild birds (Birds Directive), which is a European nature conservation legislative measure for the protection for all wild bird species naturally occurring in the EU. The Directive placed great emphasis on the protection of habitats for endangered as well as migratory species. It requires classification of areas as SPAs comprising all the most suitable territories for these species. Since 1994 all SPAs formed an integral

part of the Natura 2000 ecological network, now referred to as the NSN in UK legislation in respect of European sites in the UK; and

- EU Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive), which is a European nature conservation legislative measure. Habitat types requiring designation as a SAC are listed in Annex I of the Habitats Directive. Animal and plant species of interest whose conservation requires the designation of SACs are listed in Annex II. Annex IV lists animal and plants species of interest in need of legal protection. All species listed in these annexes are identified as European Protected Species.

3.5.21. The SoS as the decision maker is the competent authority for the HRA.

3.5.22. On 1 January 2021, during the course of the Examination, DEFRA published the policy paper, *Changes to the Habitats Regulations 2017*. It outlines the arrangements for the transfer of responsibility for the protection of UK sites previously designated under the European Birds and Habitats Directives from the EU to the UK Government following the UK's departure from the EU. This has been subject to Written Questions during the Examination and has been taken into account by the Examining Authority (ExA). DEFRA published the guidance, *Habitats regulations assessments: protecting a European site* on 24 February 2021 to assist competent authorities, and I have had regard to this in preparing this report for the SoS.

3.5.23. Any proposals affecting Ramsar sites designated under the Ramsar Convention on Wetlands of International Importance, proposed SACs, potential SPAs and areas secured as sites compensating for damage to a European site also require a HRA under Government policy.

3.5.24. Chapter 5 sets out full details of the HRA that is required for the Proposed Development.

Air Quality Standards Regulations 2010 made under the Environment Act 1995

3.5.25. Air Quality Standards Regulations 2010 made under the Environment Act 1995 (EA1995) derived from the EU Council Directive 2008/50/EC on ambient air quality and cleaner air for Europe (the Air Quality Directive) required Member States to assess ambient air quality with respect to sulphur dioxide (SO_2), nitrogen dioxide (NO_2), oxides of nitrogen (NOx), particulate matter (PM_{10} and $PM_{2.5}$), lead, benzene, carbon monoxide (CO) and ozone. The Directive aims to protect human health and the environment by avoiding, reducing or preventing harmful concentrations of air pollutants. It set legally binding concentration-based limit values (LVs) as well as target values to be achieved for the main air pollutants and establishes control actions where these are exceeded.

The Air Quality Standards Regulations 2010

3.5.26. The Air Quality Standards Regulations 2010 require the SoS to assess ambient air quality for the presence of SO_2, NO_2, NOx, PM_{10} and $PM_{2.5}$,

lead, benzene and CO. They set limit values for compliance and establish control actions where the limit values are exceeded.

The UK Air Quality Strategy

3.5.27. EA1995 established a requirement for the production of an Air Quality Strategy (AQS) for improving ambient air quality. The AQS establishes a long-term vision for improving air quality and offers options to reduce the risk to health and the environment from air pollution. It sets UK air quality standards and objectives for the pollutants in the Air Quality Standards Regulations.

3.5.28. Individual plans prepared beneath the AQS provide more detailed actions to address LV exceedances for individual pollutants. In turn, these plans set the framework for action in specific local settings where LV exceedances are found, including the designation of Clean Air Zones and Air Quality Management Areas (AQMAs) where Air Quality Management Plans are prepared by local authorities aimed at reducing levels of the relevant pollutant.

3.5.29. As a consequence of decisions taken over a number of years to broadly promote the growth of diesel vehicles as a proportion of national fleets, combined with a divergence between regulatory and real environment outcomes in the testing of emissions from diesel vehicles, a number of European countries including the UK now experience issues with the achievement of NO_2 LV compliance. NSIP proposals giving rise to air emissions from combustion plant or significant changes to the volume or location of vehicle movements may have implications for the achievement of NO_2 LV compliance.

3.5.30. In response to litigation a revised draft Air Quality Plan for NO_2 was published by DEFRA on 26 July 2017[8] (AQP2017). This refers to Zone Plans for action in a large number of localities. However, a High Court Order was made on 21 February 2018 (ClientEarth No 3)[9], providing that whilst the AQP2017 remains in force, it and its supporting Zone Plans are unlawful because they do not contain measures sufficient to ensure substantive compliance with the Air Quality Directive in a number of local authority areas.

3.5.31. The remedy required was the production of a supplement to the 2017 plan ensuring necessary information and feasible compliance measures are in place. Following a consultation on possible measures to be included in this supplement in identified locations in May 2018[10], the

[8] Air quality plan for nitrogen dioxide (NO_2) in the UK, DEFRA (2017)
[9] ClientEarth v SoS EFRA (No3), [2018] EWHC 315 (Admin)
[10] Supplement to the UK plan for tackling roadside nitrogen dioxide concentrations: a consultation, May 2018, DEFRA and DfT

Government published the final version of its Clean Air Strategy in January 2019[11].

The Water Environment Regulations

3.5.32. The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended) (The Water Environment Regulations) transposed the Water Framework Directive (Council Directive 2000/60/EC) (the WFD) in to English and Welsh domestic legislation. The WFD, established a framework for Community action in the field of water policy and a framework for water policy, managing the quality of receiving waters. Amongst other objectives, it seeks to prevent the deterioration of aquatic ecosystems and improve them by progressively reducing pollution and mitigating the effects of floods.

3.5.33. The Water Environment Regulations includes objectives such as preventing and reducing pollution, environmental protection, improving aquatic ecosystems and mitigating the effects of floods.

3.5.34. NPS EN-1 states at paragraph 5.15.3 that an ES should describe existing physical characteristics of the water environment affected by the proposed project and any impact of physical modifications to these characteristics. It should also address any impacts of the proposed project on water bodies or protected areas under the WFD.

3.6. OTHER LEGAL PROVISIONS AND POLICY

The Infrastructure Planning (Decisions) Regulations 2010

3.6.1. The Infrastructure Planning (Decisions) Regulations 2010 (The Decisions Regulations) contain provisions in respect of the treatment of listed buildings, conservation areas, scheduled monuments and of biodiversity.

3.6.2. Regulation 3 of the Decisions Regulations provides that:

'*(1) When deciding an application which affects a listed building or its setting, the decision-maker must have regard to the desirability of preserving the listed building or its setting or any features of special architectural or historic interest that it possesses.*

(2) When deciding an application relating to a conservation area, the decision-maker must have regard to the desirability of preserving or enhancing the character or appearance of that area.

(3) when deciding an application for development consent which affects or is likely to affect a scheduled monument or its setting, the decision

[11] Clean Air Strategy, January 2019, BEIS, DEFRA, DfT, DoHSC, HM Treasury, MHCLG.

maker must have regard to the desirability of preserving the scheduled monument or its setting.'

3.6.3. In respect of biological diversity, Regulation 7 requires regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992 in consideration of the likely impacts of the Proposed Development and of appropriate objectives and mechanisms for mitigation and compensation. The provisions on EIA and transboundary matters with regard to impacts on biodiversity referred to in this Chapter, satisfies the requirements of Article 14 of the Convention (Impact Assessment and Minimising Adverse Impacts).

United Nations Environment Programme Convention on Biological Diversity 1992

3.6.4. Responsibility for the UK contribution to the Convention on Biological Diversity lies with DEFRA who promote the integration of biodiversity into policies, projects and programmes within Government and beyond. This is of relevance to biodiversity, biological environment, ecology, HRA and EIA matters, which are considered in Chapters 4 and 5 of this report.

The Town and Country Planning Act 1990 (as amended)

3.6.5. The Town and Country Planning Act 1990 (as amended) (TCPA1990) regularises the development of land in England and Wales and includes an expansive set of planning regulations.

The Highways Act 1980

3.6.6. The Highways Act 1980 deals specifically with the management and operation of the road network in England and Wales.

Control of Pollution Act 1974

3.6.7. The Control of Pollution Act 1974 (CoPA) provides the main legislation regarding demolition and construction site noise and vibration. If noise complaints are received, a s60 notice may be issued by the local authority with instructions to cease work until specific conditions to reduce noise have been adopted. Section 61 of the CoPA provides a means for applying for prior consent to carry out noise-generating activities during construction. Once prior consent has been agreed under s61, a s60 notice cannot be served provided the agreed conditions are maintained on site. The legislation requires 'Best Practicable Means' be adopted for construction noise on any given site.

Noise Policy Statement for England

3.6.8. The Noise Policy Statement for England (NPSE) seeks to clarify the underlying principles and aims in existing policy documents, legislation and guidance that relate to noise. The NPSE applies to all forms of noise, including environmental noise, neighbour noise and neighbourhood noise.

The Statement sets out the long-term vision of the Government's noise policy, which is to 'promote good health and a good quality of life through the effective management of noise within the context of policy on sustainable development'.

3.6.9. The Explanatory Note within the NPSE provides further guidance on defining 'significant adverse effects' and 'adverse effects.' One such concept identifies the Lowest Observable Adverse Effect Level (LOAEL), which is defined as the level above which adverse effects on health and quality of life can be detected. Other concepts identified are: Significant Observed Adverse Effect Level (SOAEL), which is the level above which significant adverse effects on health and quality of life occur; and, No Observed Effect Level (NOEL), which is the level below which no effect can be detected. Below this level no detectable effect on health and quality of life due to noise can be established.

3.6.10. When assessing the effects of a Proposed Development on the noise environment, the aim should be to avoid noise levels above the SOAEL, and to take all reasonable steps to mitigate and minimise noise effects where development noise levels are between LOAEL and SOAEL.

Planning Practice Guidance – Noise 2019

3.6.11. This guidance provides advice on how planning can manage potential noise effects in a new development. In terms of how to recognise when noise could be a concern, the guidance provides a table outlining perception, outcomes, effect level and action required.

The Environment Act 1995

3.6.12. The EA1995, which applies to England, Scotland and Wales, is a wide-ranging piece of legislation and sets standards for environmental management.

Environmental Protection Act 1990

3.6.13. S79(1) of the Environmental Protection Act 1990 identifies what is considered to be a statutory nuisance.

The Air Quality Strategy for England

3.6.14. The EA1995 requires the UK Government and devolved administrations to produce a national AQS containing standards, objectives and measures for improving ambient (outdoor) air quality, and to keep these policies under review. The Proposed Development has the potential to affect air quality through generation of emissions from construction, industrial and transport sources.

Water Resources Act 1991, Flood and Water Management Act 2010, Water Act 2003 and 2014, Land Drainage Act 1991

3.6.15. These Acts set out the relevant regulatory controls that provide protection to waterbodies and water resources from abstraction pressures, discharge and pollution, and for drainage management related to non-main rivers. The Proposed Development is considered against such matters in Chapter 4 of this report.

The UK Biodiversity Action Plan

3.6.16. Priority habitats and species are listed in the UK Biodiversity Action Plan. This was taken into account in the Examination, with biodiversity and ecological considerations discussed in Chapter 4 of this report.

The Wildlife and Countryside Act 1981

3.6.17. The Wildlife and Countryside Act 1981, as amended (WCA81), is the primary legislation that protects certain habitats and species in the UK. It provides for and protects wildlife, nature conservation, countryside protection, National Parks, and Public Rights of Way (PRoWs) including the notification, confirmation, protection and management of Sites of Special Scientific Interest (SSSI). These sites are identified for their flora, fauna, geological or physiographical features by the statutory nature conservation bodies (SNCB) in the UK. The SNCB for England is Natural England.

3.6.18. WCA81 contains provisions relevant to Ramsar sites, National Nature Reserves and Marine Nature Reserves. If a species protected under the WCA81 is likely to be affected by a development, a protected species licence will be required from Natural England. Sites protected under the Act (including SSSIs) that are affected by a Proposed Development must also be considered. The effects of development on the PRoW network are also relevant.

3.6.19. WCA81 is relevant to the Proposed Development in view of the sites and species identified in the ES. Relevant considerations are discussed in Chapter 4 of this report.

Natural Environment and Rural Communities Act 2006

3.6.20. The Natural Environment and Rural Communities Act 2006 (as amended) (the NERC Act) makes provision for bodies concerned with the natural environment and rural communities, including in connection with wildlife sites and SSSIs. It includes a duty that every public body must, in exercising its functions, have regard, so far as is consistent with the proper exercising of those functions, to the purpose of biodiversity. In complying with the biodiversity duty, regard must be had to the United Nations Environment Programme Convention on Biological Diversity.

3.6.21. I have had regard to the NERC Act and the biodiversity duty in all relevant sections of this report.

National Parks and Access to the Countryside Act 1949

3.6.22. The National Parks and Access to the Countryside Act 1949 provides the framework for the establishment of National Parks and Areas of Outstanding Natural Beauty. It also establishes powers to declare National Nature Reserves and for local authorities to establish Local Nature Reserves.

The Countryside and Rights of Way Act 2000

3.6.23. The Countryside and Rights of Way Act 2000 (as amended) includes provisions in respect of PRoW and access to land. It brought in improved provisions for the protection and management of SSSIs and other designations under the WCA81.

The Planning (Listed Buildings and Conservation Areas) Act 1990

3.6.24. The Planning (Listed Buildings and Conservation Areas) Act 1990, as amended, empowers the SoS to maintain a list of built structures of historic or architectural importance and sets out the principal statutory provisions that must be considered in the determination of any application affecting listed buildings and conservation areas.

3.6.25. As required by Regulation 3 of the Decisions Regulations, I have had regard to the desirability of preserving any listed building or its setting or any features of special architectural or historic interest which it possesses as set out in Chapter 4. Similarly, I have also had regard to the desirability of preserving or enhancing the character or appearance of any conservation area.

Ancient Monuments and Archaeological Areas Act 1979

3.6.26. The Ancient Monuments and Archaeological Areas Act provides for scheduled monuments to be protected and for the maintenance of a list of scheduled monuments. It also imposes a requirement to obtain scheduled monument consent for any works of demolition, repair, and alteration that might affect a designated scheduled monument. For non-designated archaeological assets, protection is afforded through the development management process as established both by TCPA1990 and the NPPF.

Electricity Act 1989

3.6.27. Under the Electricity Act 1989, the Applicant has a duty to develop and maintain an efficient, co-ordinated and economical system of electrical transmission. It also confers a duty upon the Applicant to ensure that it has regard to amenity when carrying out its undertaking.

The Human Rights Act 1998

3.6.28. The European Convention on Human Rights is incorporated into domestic law by the Human Rights Act 1998. I have taken this into account as part of the Examination of this application.

The Public Sector Equality Duty

3.6.29. The Equality Act 2010 established a duty (the PSED) to eliminate discrimination, advance equality of opportunity and foster good relations between persons who share a protected characteristic and persons who do not. The PSED is applicable to the conduct of this Examination, its reporting, and to the SoS in decision-making.

Climate Change

3.6.30. PA2008 s10(3)(a) requires the SoS to have regard to the desirability of mitigating, and adapting to, climate change in designating an NPS. This duty has been addressed throughout Chapter 4 of this report. The Climate Change Act 2008 also establishes statutory climate change projections and carbon budgets.

The Climate Change Act 2008 (as amended)

3.6.31. The Climate Change Act 2008 (as amended by the Climate Change Act 2008 (2050 Target Amendment) Order 2019) established the world's first long-term, legally binding framework to tackle the dangers of climate change. It sets statutory climate change projections and carbon budgets. A key provision is the setting of legally binding targets for greenhouse gas emission reductions in the UK of at least 100% by 2050 ('NetZero', increased from 80% by the June 2019 amendment order) and at least 26% by 2020, against a 1990 baseline.

3.6.32. The Act also created the Committee on Climate Change, which has responsibility for setting five year Carbon Budgets covering successive periods of emissions reduction to 2050, advising and scrutinising the UK Government's associated climate change adaptation programmes and producing a National Adaptation Plan for the UK Government to implement. The Sixth Carbon Budget Report was published in December 2020, although the Carbon Budget Order 2021 had not been made or come into force prior to the close of this Examination.

3.6.33. The PA2008 s10(3)(a) requires the SoS to have regard to the desirability of mitigating, and adapting to, climate change in designating an NPS. I have had regard to these objectives throughout this report, notably in Chapters 4 and 6.

The Paris Agreement

3.6.34. In December 2015, the Paris Agreement was concluded as an agreement within the United Nations Framework Convention on Climate Change and adopted by consensus on 12 December 2015 by all 195 participating states and the EU, bringing about a strong international commitment to mitigating climate change. In particular, Article 2 establishes not only a firm commitment to restrict the increase in the global average

temperature to 'well below 2 degrees Celsius above pre-industrial levels', but also to 'pursue efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels' and an aspiration to achieve net-zero greenhouse gas emissions during the second half of the 21st century.

3.6.35. On 22 April 2016, the UK signed the Paris Agreement and then ratified it on 18 November 2016.

The Ramsar Convention on Wetlands of International Importance 1971 (as amended) ('the Ramsar Convention')

3.6.36. The Ramsar Convention is an international treaty that provides a framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. The Convention applies a broad definition of wetlands, which includes lakes, rivers, aquifers, marshes, wet grasslands and estuaries.

3.6.37. Participating nations are expected to designate relevant sites, known as 'Ramsar sites' to be included on the Ramsar List of Wetlands of International Importance, and the UK Government has designated a number of such sites. The Government has chosen to apply, as a matter of policy, the provisions that apply to the consideration of NSN sites (including SACs and SPAs) to Ramsar sites (and proposing SACs, potential SPAs and areas secured as sites compensating for damage to a European site).

3.7. MADE DEVELOPMENT CONSENT ORDERS

3.7.1. The Applicant in its Explanatory Memorandum [APP-006] and response to the ExA's first written questions [REP2-008] has made reference to the following made Orders to support its position:

- Rookery South (Resource Recovery Facility) Order 2011;
- Hinkley Point C (Nuclear Generating Station) Order 2013;
- National Grid (King's Lynn B Power Station Connection) Order 2013;
- East Anglia ONE Offshore Wind Farm Order 2014;
- Hirwaun Generating Station Order 2015;
- Progress Power (Gas Fired Power Station) Order 2015;
- Thorpe Marsh Gas Pipeline Order 2016;
- Wrexham Gas Fired Generating Station Order 2017;
- Eggborough Gas Fired Generating Station Order 2018;
- Drax Power (Generating Stations) Order 2019;
- Millbrook Gas Fired Generating Station Order 2019; and
- The Port of Tilbury (Expansion) Order 2019.

3.7.2. I have had regard to all of the above-mentioned Orders where relevant.

3.8. OTHER RELEVANT POLICY AND PLANS

3.8.1. Other relevant Government policy has been taken into account by the ExA, including:

- *Energy white paper: Powering our net zero future* (BEIS, 2020);
  - Clean electricity will become the predominant form of energy, entailing a potential doubling of electricity demand and consequently a fourfold increase in low-carbon electricity generation. We must secure this transition while retaining the essential reliability, resilience and affordability of our energy;
  - Given the pivotal role of electricity in delivering net zero emissions, we must aim for a fully decarbonised, reliable and low-cost power system by 2050;
  - The electricity market should determine the best solutions for very low emissions and reliable supply, at a low cost to consumers; and
  - The review will seek the appropriate balance between environmental, social and economic costs.
- The National Infrastructure Strategy (November 2020), which sets out a foundation for future priorities and investments in order to radicalise the delivery of effective infrastructure in pursuance of the net zero emissions target by 2050. It accompanied the Prime Minister's 10-point plan to decarbonise the economy across all sectors including energy, transport and industry. In particular, it considers:
  - increasing reliance on renewable and low carbon energy projects and technologies
  - enhancing the digital network by expanding the gigabit-capable broadband programme to enable full-fibre connectivity across 85% of the UK by 2030
  - embedding good design in all infrastructure projects
  - improving public transport to tackle congestion and air pollution arising from traffic
  - working within Government departments to review NPSs.
- UK Low Carbon Transition Plan (2009);
- National Strategy for Climate and Energy (July 2009); and
- UK Renewable Energy Strategy (July 2009).

3.9. THE NATIONAL PLANNING POLICY FRAMEWORK

3.9.1. The NPPF and its accompanying Planning Practice Guidance (PPG) set out the Government's planning policies for England and how these are expected to be applied. This is for the particular purpose of making development plans and deciding applications for planning permission and related determinations under the TCPA1990.

3.9.2. At the close of the Examination the NPPF (February 2019) was the relevant version of the NPPF. However, the NPPF was revised on the 20 July 2021. Despite this revision the relevant paragraphs of the NPPF, as appropriate to this Proposed Development, remained unchanged other than the paragraph numbers. Therefore, the NPPF paragraph numbering

in this Recommendation Report reflects the changes in paragraph numbering introduced in the current version of the NPPF. I am satisfied that the changes to the NPPF paragraph numbering have not prejudiced any party involved in the Examination.

3.9.3. Both the NPPF and PPG are likely to be important and relevant considerations in decisions on NSIPs, but only to the extent relevant to that project. Paragraph 5 of the NPPF makes it clear that the document does not contain specific policies for NSIPs, where particular considerations can apply. However, it does note that the NPPF and the policies within it may be matters considered to be both important and relevant to NSIPs.

3.10. LOCAL IMPACT REPORTS

3.10.1. Sections 104 and 105 of the PA2008 state that in deciding an application the SoS must have regard to any LIR within the meaning of s60(3) of the PA2008. A LIR is a report made by a relevant local authority giving details of the likely impact of a proposed development on the authority's area (or any part of that area) that had been invited and submitted to the ExA under s60 of the PA2008.

3.10.2. The ExA's Rule 6 letter [PD-004] contained a formal request under s60(2) of the PA2008 to eligible local authorities to submit LIRs by Deadline 1. One LIR from NELC was submitted [REP1-018].

3.10.3. The LIR set out the principal local planning policies and other policies relevant to the Proposed Development and provided commentary on the consideration of local impacts. Matters raised in the LIR are discussed in this report and have been fully considered by me.

3.11. THE DEVELOPMENT PLAN

3.11.1. The legal requirement under s38(6) of the Planning and Compulsory Purchase Act 2004 to determine applications for development consent in accordance with development plan documents does not apply to applications under the PA2008. However, in the case of this application I consider the development plan to be important and relevant.

3.11.2. NPS EN-1 confirms that policies in development plans and other Local Development Framework documents may be considered important and relevant in planning decision making. However, in the event of a conflict, the NPSs prevail for the purpose of decision making by the SoS. The development plan is therefore a material consideration for the SoS and has accordingly been considered as part of the policy context for the Proposed Development.

3.11.3. The relevant development plan and policies comprise the following:

North East Lincolnshire Council: North East Lincolnshire Local Plan 2013-2031

- Policy 1 – Employment land supply;

- Policy 5 – Development boundaries;
- Policy 6 – Infrastructure;
- Policy 8 – Existing employment areas;
- Policy 9 – Habitat Mitigation - South Humber Bank;
- Policy 22 – Good design in new developments;
- Policy 31 – Renewable and low carbon infrastructure;
- Policy 32 – Energy and low carbon living;
- Policy 33 – Flood risk;
- Policy 34 – Water management;
- Policy 36 – Promoting sustainable transport;
- Policy 38 – Parking;
- Policy 39 – Conserve and enhance historic environment;
- Policy 41 – Biodiversity and Geodiversity;
- Policy 42 – Landscape;
- Policy 47 – Future requirements for waste facilities; and
- Policy 48 – Safeguarding waste facility and related infrastructure.

3.12. TRANSBOUNDARY EFFECTS

3.12.1. In December 2019, during the pre-application stage, and under the EIA Regulation 32 process, the Inspectorate undertook transboundary screening of the Proposed Development on behalf of the SoS [OD-001] and found that the Proposed Development was unlikely to have a significant effect either alone or cumulatively on the environment in another European Economic Area State.

3.12.2. In reaching this conclusion likely impacts of the Proposed Development, including consideration of potential pathways and the extent, magnitude, probability, duration, frequency and reversibility of the impacts were considered.

3.12.3. This conclusion was reviewed on 15 January 2021 where it was found that the likelihood of transboundary effects resulting from the Proposed Development, taking into account any changes that have been made to the Proposed Development since the previous transboundary screening process was undertaken, were unlikely to have a significant effect either alone or cumulatively on the environment in a European Economic Area State.

3.12.4. No correspondence was received in relation to transboundary issues.

3.12.5. The UK left the EU prior to the Examination being completed.

4. THE PLANNING ISSUES

4.1. MAIN ISSUES IN THE EXAMINATION

4.1.1. As required by Section (s) 88 of the Planning Act 2008 (PA2008) and Rule 5 of the Infrastructure Planning (Examination Procedure) Rules 2010 (EPR), as the Examining Authority (ExA) I made an Initial Assessment of the Principal Issues (IAPI) arising from the Proposed Development and of the Relevant Representations (RRs) received. This was done within 21 days of the day after receipt of the s58 certificate of compliance with s56 of the PA2008 provided by the Applicant [OD-006]

4.1.2. My IAPI, arising from the Proposed Development, was published as Annex B to my letter of 26 September 2019 under Rule 6 of the EPR [PD-004] and are summarised, in alphabetical order, as follows:

- Air Quality;
- Cultural Heritage;
- Design and Layout;
- Draft Development Consent Order (dDCO);
- Ecology;
- Environmental Impact Assessment (EIA) and Environmental Statement (ES);
- Flood Risk, Hydrology and Water Resources;
- Geology and Land Contamination;
- Habitats Regulations Assessment (HRA);
- Noise and Vibration;
- Planning Policy;
- Socio-Economic Effects; and
- Traffic, Transport and Waste Management.

4.1.3. At the Preliminary Meetings [EV1-001 and EV1-002] no party questioned my IAPI. Whilst the Principal Issues I identified subsequently formed the basis of the final assessment, I have considered them under the following headings in this Chapter, in no particular order of importance:

- Air Quality and Emissions, which includes from dust, smoke and steam;
- Biodiversity and Nature Conservation, which includes from dust and artificial light;
- Landscape and Visual Effects, which includes from artificial light;
- Traffic and Transport;
- Water Quality, Flood Risk and Flood Resilience;
- Noise and Vibration;
- Ground Conditions and Contamination;
- Cultural Heritage;
- Waste Management;
- Socio-Economic Effects (Including Human Health), which includes from dust, odour and pests (insect and vermin) infestation; and
- Other Considerations, including climate change.

4.1.4. Matters relating to the dDCO are addressed in this Chapter within the framework of the individual planning issues to which they relate. The dDCO itself is reported on in Chapter 7 of this report.

4.1.5. In addition to the planning issues, this Chapter also addresses the following topics arising from the conduct of the Examination:

- issues arising in written and oral submissions;
- issues arising in Local Impact Report(s) (LIR);
- conformity with National Policy Statements (NPS);
- conformity with the development plan;
- the application of other policies;
- the principle of the development;
- EIA;
- HRA;
- Environmental Permitting Regime; and
- Waste Hierarchy and Fuel Availability.

4.2. ISSUES ARISING IN WRITTEN SUBMISSIONS

4.2.1. Twelve RRs were made [RR-001 to RR-012] and have been considered. These can be summarised as follows:

Statutory Parties

- Anglian Water Services Ltd (AW) in its RR [RR-002] initially raised a holding objection to the Proposed Development. This was due to concerns related to impacts on its existing assets. AW raised a number of issues regarding the wording of Requirements and Protective Provisions (PPs) in the dDCO and sought to negotiate with the Applicant on these matters. These matters were subsequently resolved, as set out in the Statement of Common Ground (SoCG) completed with the Applicant [REP1-005];
- Cadent Gas Ltd (Cadent) in its RR [RR-003] indicated that it had infrastructure located in close proximity to the proposed Order Limits, including a high-pressure gas pipeline and medium pressure gas pipelines. Cadent advised that it was seeking to engage with the Applicant to better understand the works and the potential impacts on the high-pressure gas pipeline. Cadent subsequently wrote [AS-005] advising it was in a position to withdraw its RR, as it was satisfied the Proposed Development (based on the current proposals) would not adversely affect its high-pressure asset;
- The Environment Agency (EA) in its RR [RR-005] having reviewed the Development Consent Order (DCO) application, ES and supporting documents submitted, confirmed it had no objection to the Proposed Development, as submitted. Their position was subject to the imposition of Requirements as set out in the dDCO, as may need to be varied to reflect its comments in the RR. In reaching this position the EA considered: the existing and potential future Environmental Permit(s) (EP); flood risk; protection of groundwater and land contamination; water quality; foul water drainage; and waste management & pollution prevention. Additionally, the EA reserved the right to add to or amend its RR, including requests for DCO

Requirements and PPs should further information be forthcoming during the course of the Examination on issues within its remit;

- Humberside International Airport in its RR [RR-007] confirmed that it did not object to the proposal having considered it from an aerodrome safeguarding aspect, as it does not conflict with safeguarding criteria;
- Natural England (NE) in its RR [RR-008] expressed concerns that the Applicant had provided insufficient evidence to establish that there would be no adverse impacts on the Humber Estuary European sites, advising that further information was required to assess the following impact pathways:
    - noise disturbance from piling during construction to Humber Estuary Special Protection Area (SPA) and Ramsar site birds using the Humber Estuary foreshore (Pyewipe mudflats);
    - noise and vibratory disturbance from piling during construction and during operation to SPA and Ramsar site birds using neighbouring functionally-linked land (fields to the north and south of the application site); and
    - air quality impacts on the SPA, Ramsar site and Special Area of Conservation (SAC) arising from Nitrogen Oxides (NOx) concentrations and acid deposition resulting from the Proposed Development in combination with other plans and projects during operation.
- Network Rail Infrastructure Limited (NR) in its RR [RR-001] initially objected to the Proposed Development, due to concerns related to the designated route providing Heavy Goods Vehicle (HGV) access to the site and the fact it traversed the Kiln Lane level crossing. However, following negotiations between the Applicant and NR, agreement was reached between the parties in regard to the project and the modifications made by the Applicant in its dDCO. These modifications included NR being defined in Article 2; the need to consult with NR being incorporated into dDCO Requirements 16 and 24; the inclusion of an additional Requirement (Requirement 37), which prohibits HGVs accessing and egressing the Proposed Development via South March Road (West of Hobson Way) and the inclusion of agreed PPs. As a result of the parties reaching agreement NR subsequently withdrew its objection [AS-008];
- National Grid (NG), being National Grid Gas plc (NGG) and National Grid Electricity Transmission plc (NGET), in its RR [RR-006] stated its primary concern is to meet its statutory obligations and ensure that any development does not impact in any adverse way upon those statutory obligations. As such NG sought to protect its position in relation to infrastructure and land, which is within or in close proximity to the proposed Order Limits. Furthermore, NG advised that it has rights to retain its apparatus in situ and rights of access to inspect, maintain, renew and repair such apparatus located within or in close proximity to the Order Limits and that these rights must be maintained at all times and access to inspect and maintain such apparatus must not be restricted. Having reviewed the documentation and plans submitted NG advised that it considers the following assets to be affected:

- Electricity Transmission Overhead Lines;
- 2AH 400kV Overhead Line and Tower;
- Above and below ground associated apparatus;
- South Humber Bank 400kV Gas Transmission;
- Feeder Main 9 – Brocklesby to Stallingborough; and
- Above and below ground associated apparatus.

NG's RR confirms it will require PPs to be included within the DCO to ensure that its interests are adequately protected and to ensure compliance with relevant safety standards. NG noted draft PPs for its benefit were included in the submitted dDCO and advised it was liaising with the Applicant in relation to amendments required to those PPs. At the close of the Examination these matters remained outstanding, although NG advised [REP7-008] it had reached agreement in principle in relation to the form of PPs to be included in the Order and a side agreement to protect NG's apparatus within and adjacent to the Order Limits. NG also confirmed that the final wording was being settled between the parties and, as set out in the completed SoCG [REP7-004] with it, once the agreement is completed, NG will be in a position to withdraw its objection to the Proposed Development;

- Public Health England (PHE) in its RR [RR-011] confirmed it chose not to register an interest with the Planning Inspectorate on this occasion. PHE referred to previous consultation with it and advised it was satisfied that its comments had been addressed. PHE also acknowledged the fact that the ES did not identify any issues which could significantly affect public health and confirmed it was satisfied that the wider determinants of health had been adequately assessed using a suitable methodology. PHE concluded that on the basis of the documentation it had reviewed, it had no additional comments to make at this stage;
- Royal Mail Group in its RR [RR-004] raised concerns related to potential road disruption and closures, which it considered could have the potential to impact on its operations. However, the SoCG with Royal Mail [REP2-005] submitted at Deadline (DL) 2 confirmed that its concerns had been resolved, as set out in paragraph 4.6.1 of that document;
- North East Lindsey Drainage Board, in its WR [REP2-016], did not raise any concerns or objections to the Proposed Development and noted the surface water discharge would be limited to the greenfield rate; and
- The Ministry of Defence's WR [REP2-022], through its Defence Infrastructure Organisation, confirmed the application relates to a site outside of Ministry of Defence statutory safeguarding areas. As such it stated that it had no safeguarding objections to this proposal. However, in the interests of air safety, it requested that the structure is fitted with aviation warning lighting, specifying that an omni directional flashing red light of a minimum intensity 25 candela or equivalent infra-red light, be fitted at the highest practicable point of the structure.

Other Interested Parties

United Kingdom Without Incineration Network (UKWIN) in its RR [RR-012] state:

  - the proposal is not needed and if it were to go ahead it would result in unacceptable adverse climate impacts and would hamper efforts to decarbonise the electricity supply;
  - the methodologies and assumptions adopted by the Applicant for its needs and climate change assessments are flawed and as such UKWIN dispute them; and
  - the disbenefits of the scheme outweigh any benefits of the scheme, and the Proposed Development should be refused permission.

- Paul Hamilton in his RR [RR-009] raised concerns regarding:

  - the size of the project and questioned whether it will be burning local refuse or refuse shipped in from around the country;
  - the Proposed Development promoting waste production, rather than reducing and recycling;
  - air quality/ public health, in particular concerning environmental monitoring of the extremely small particulate matter (PM*), $PM_{2.5}$ and smaller, especially health impacts of small particles on the respiratory system. He states that he is not aware of any systems capable of continuous monitoring of such particles.

- Philippa Roddis in her RR [RR-010] said the principal submissions she intended to make in relation to the application were around carbon emissions, sustainability and community benefits. However, no subsequent submissions were received from this person.

4.2.2. Participants in the Examination were provided with the opportunity to make Written Representations (WR) at Examination DL2, to comment on them at DL3 and to respond in writing to my questions, to matters arising at hearings, to requests for further information and to Additional Submissions (AS), over seven DLs (DL2 to DL8).

4.2.3. Eleven ASs, from six separate parties, were provided, which I accepted and have taken into account [AS-001 to AS-0011], comprising:

- Historic England (HE) [AS-001];
- Cadent [AS-005];
- Energy Asset Networks Ltd [AS-006];
- NR [AS-008];
- ESP Utilities Group [AS-011]; and
- The Applicant [AS-002, AS-003, AS-004, AS-007, AS-009 and AS-010].

4.2.4. Signed SoCGs between the Applicant and the following parties have been provided and have been taken into account as follows:

- North East Lincolnshire Council (NELC);
- North Lincolnshire Council (as an adjoining Unitary Authority);
- The EA;
- NE;

- Highways England;
- NG;
- NR;
- AW;
- Royal Mail;
- HE; and
- Cadent.

4.2.5. Only the Applicant and NELC participated in the Issue Specific Hearing in regard to the DCO (ISH1), which was held virtually and undertaken in two parts [EV5-001 and EV5-002]. No new issues were raised in oral representations which were not addressed in written submissions.

4.2.6. The matters raised in RRs, WRs and responses to my questions, in LIRs, ASs and to matters arising at hearings have been responded to in my framework of issues set out below and are taken into account in the remainder of this report to the extent that they are important and relevant.

4.3. ISSUES ARISING IN LIRs

4.3.1. Only NELC submitted an LIR [REP1-018], which was submitted at DL1 of the Examination. S104(2) of the PA2008 requires the Secretary of State (SoS) to consider the contents of an LIR when making a decision on an application.

4.3.2. NELC's LIR [REP1-018] provided information on the following matters:

- An introduction, which set out NELC's background, outlined the Proposed Development and the fact NELC has granted Planning Permission (DM/1070/18/FUL) on the 12 April 2019 for an Energy from Waste (EfW) facility of up to 49.9 Megawatts (MW) gross capacity and ancillary infrastructure (NELC Planning Permission) that would be replaced by the Proposed Development;
- The policy framework for the area, including highlighting the fact that the South Humber Bank Power Station (SHBPS) lies within an existing employment area as designated in the North East Lincolnshire Local Plan (NELLP) and specific policies in the NELLP it considered relevant to the current proposal;
- Site description and surroundings;
- Relevant planning history and any issues arising; and
- Relevant issues, including:
    - Policy considerations;
    - Character, visual amenity, landscape and heritage;
    - Impact on neighbouring land uses;
    - Highways;
    - Ecology;
    - Pollution, air quality and contamination;
    - Drainage and flood risk; and
    - Health and Safety Executive.

4.3.3. As recorded in Chapter 3 above, and as set out in the LIR, the development plan for the area comprises the NELLP, adopted in March 2018.

4.3.4. NELC's LIR highlights the following summarised points:

- With regard to Policy Considerations NELC consider that similar to the NELC Planning Permission, the proposed EfW plant would in principle accord with the NELLP Policies 1, 7, 8, 32 and 47. Forming this view NELC stated:
  - NELLP Policies 1, 7 and 8, and the plan allocations, seek to promote sustainable economic growth with investment within North East Lincolnshire having a particular focus on certain key areas of activity.
  - Policy 7 of the NELLP, seeks to promote the growth of the renewable and energy sector including generating power through biomass processing, and waste.
  - The Proposed Development would be located on the same site as the NELC consented EfW plant and would be directly to the rear (east) of the existing SHBPS.
  - The Proposed Development represents a significant investment in the area which will support the economic growth of the South Humber Bank, linking with growth aspirations for NELC.
  - The construction and operational phases will support local employment and job creation over a considerable period (30 years) which supports NELLP ambitions under Policy 1.
  - The Proposed Development is also a key opportunity to reduce demand for waste to be land filled and promotes greater energy efficiency than the NELC Planning Permission using renewable sources in accordance with Policies 32 and 47 of the NELLP.
- In terms of character, visual amenity, landscape and heritage, NELC consider, given the near identical physical dimensions and appearance of the Proposed Development to the NELC Planning Permission, the existing industrial context of the area and the employment allocation of land surrounding the site for future development, the Proposed Development would accord with Policies 5, 22, 39 and 42 of the NELLP. In reaching this view NELC considered:
  - The maximum dimensions of the Proposed Development are the same as those approved within the NELC Planning Permission, which incorporated maximum dimensions to allow for a level of flexibility within such an envelope for operational alterations without the need for further consent.
  - Agreed viewpoints at short, medium and longer distance from the site have been considered.
  - The Proposed Development would be positioned directly behind (east) of the existing power station which is, itself, a substantial structure with two large chimneys (Sic.) (Note: The SHBPS has three large chimneys of approximately 75 metres (m) in height, see [AS-009]). Whilst the site adjoins open fields, it also adjoins other large industrial operations and when viewed from vantage

points identified NELC considered that the Proposed Development would nestle between the existing industrial developments, limiting the visual effects on the appearance and character of the area to less than significant.
    - The Proposed Development would not be detrimental to any asset identified in the ES. Impact on heritage assets would be limited by intervening distances and the Proposed Development's context of existing industrial development. Similarly, NELC does not consider there would be any impact on archaeology on the site due to previous development on the site which previously disturbed land below ground level.

- Regarding neighbouring land uses NELC considers HGV fuel deliveries and construction traffic related to the NELC Planning Permission would be routed away from residential areas limiting impacts on air quality, noise and vibration. This would be the same for the Proposed Development and can be enforced through the proposed Requirements of the DCO. As such NELC consider in overall terms that the Proposed Development accords with Policy 5 of the NELLP. In regard to neighbouring land uses NELC also considers:

    - The main impacts on receptors would be visual intrusion, noise, vibration, and air quality. NELC consider, given the similarity of the NELC Planning Permission to the Proposed Development and the intervening distances of these receptors from development, the impacts would be the same.
    - The immediate neighbouring land uses include Synthomer and NEWLINCS to the north, Lenzing Fibres to the far south and the existing SHBPS (in the Applicant's control) to the west. Being within an existing employment area and adjacent to allocated land, large commercial development is expected and are directed to such areas. As such, impacts upon these uses, including noise, vibration and air quality, are anticipated to be of a level that would be acceptable.
    - There are no residential dwellings within 500m of the site, only two within 1 kilometre (km) and eight within 2km. The closest settlement of Stallingborough is some 2km away.

- In consideration of highways NELC's LIR states the proposed traffic levels generated are almost identical to that previously deemed acceptable for the NELC Planning Permission and as with that scheme NELC considers that, subject to the Requirements of the DCO, the Proposed Development would accord with Policies 5, 36 and 38 of the NELLP. In reaching this view NELC commented as follows:

    - The Transport Assessment notes the Proposed Development would generate a substantial increase in traffic upon the network during the first years of construction and during the operational life of the plant, but these would be similar to that generated by the NELC Planning Permission.
    - The highway authority has not raised an objection to traffic levels, safety, capacity nor the HGV routing proposed, which is to and from the A180, via the A1173, Kiln Lane and Hobson Way.

Furthermore, NELC are content with the requirements in the dDCO to enforce construction traffic management, delivery vehicle routing, condition survey of South Marsh Road and a travel plan. NELC also noted that Highways England have not raised an objection to the Proposed Development.

- NELC note NR's concerns over the impact on its Kiln Lane and South Marsh Road level crossings. However, it pointed out that NR did not object to the NELC Planning Permission, which has identical traffic levels and routeing to that now proposed; to the discharge of planning conditions related to a vehicle routing agreement associated within the NELC Planning Permission; in respect of other major development within the South Humber Bank area; at Local Plan examination stage, which established large employment designations to the east of the rail line; or the new link road from Moody Lane/ Woad Lane junction to Hobson Way Roundabout, which has the potential to draw greater traffic to Kiln Lane.
- The transport assessment baseline and routing of staff cars were updated to reflect changes in context since the NELC Planning Permission, such as the link road which confirmed no significant alteration in impact. Alternate routes for traffic would also generate impacts on sensitive receptors and/ or generate concerns re air quality or junction capacity which indicates that the Kiln Lane route remains the most viable option.

- Turning to ecology, NELC noted the Applicant recognised the importance of the Humber Estuary's Site of Special Scientific Interest (SSSI), SAC, SPA and Ramsar site located some 175m west of the site, as well as local wildlife sites (LWSs) and sites of nature conservation importance within the area. Additionally, it recognised that the site itself has some, if limited, ecological value, but is still functionally related to the estuary and its birds. As such NELC noted the Applicant's detailed ES that assessed the impacts of the proposal on these surrounding areas and the species that rely upon them. NELC also stated:

  - The Proposed Development has been assessed and NELC's ecologist has not objected. Furthermore, it noted NE's indication that there is no fundamental reason in principle why the Proposed Development should not be permitted, but that further information would be required to ensure that there would be no adverse impacts on the Humber Estuary, and that discussions between the Applicant and NE continue.
  - NE raised questions with respect to air quality impacts at LWSs and discussions between the Applicant and NELC's ecologist were on-going with respect to this issue.
  - Subject to various mitigation works outlined with the dDCO and the remaining issues being resolved, the Proposed Development was considered to accord with Policies 6, 9 and 41 of the NELLP.
  - The mitigation works are critical and would be the subject of the Requirements of the DCO. These include the limitations on the timing and type of piling operations, screen fencing to the south, protection of various features and areas of site from development

(eg trees and ditches) and the creation of new grassland and water features to the west of the SHBPS.
    - The mitigation must include the contribution previously secured against the NELC Planning Permission. That s106 agreement secured a payment to assist in NELC's South Humber Gateway (SHG) Mitigation Strategy, which is NELC's strategic approach to promoting economic development on the South Humber Bank, whilst maintaining the area's functional relationship with the estuary through the creation of a network of smaller sites of wetland/ grass habitat creation to mitigate the impact on over wintering birds from the estuary.
    - It is important to secure the terms of that s106 agreement against the DCO, should it be granted. NELC state the mitigation measures that would be secured in the Development Consent Obligation [APP-032] are identical to those agreed within the NELC Planning Permission and would accord with Policies 6, 9 and 41 of the NELLP.

- In regard to pollution, air quality and contamination, NELC's LIR states the Applicant has obtained an EP from the EA in regard to the NELC Planning Permission and the emissions and the overall efficiency of the plant would be governed under such an EP, which is a separate legislative regime that the plant will be required to operate under. NELC also stated in its LIR:
    - The Proposed Development would have almost identical impacts on these elements as the NELC Planning Permission and both have been assessed by the NELC's Environmental Protection Team and, subject to the requirements in the dDCO, are deemed acceptable. This includes air quality which has been modelled (including cumulative impacts from other development) and has been found to remain within acceptable environmental standards ensuring there would be no significant impacts on the area, ecology or neighbours.
    - The lack of objection from the EA on such matters is critical and noted.
    - The remaining concerns raised by NE in relation to air quality within the estuary are being addressed by the Applicant. Providing they are resolved the Proposed Development is considered to accord with Policy 5 of the NELLP.

- In terms of drainage and flood risk, NELC's LIR states that the site is located within EA Flood Zone (FZ) 3. Regarding surface water drainage the Council noted that neither the EA nor NELC's Drainage Team objected to the Proposed Development. NELC also considered that subject to the DCO Requirements the Proposed Development would accord with Policies 33 (related to mitigating flood risk impacts and requires development to be supported by a site-specific flood risk assessment) and 34 (provision of adequate foul and surface water drainage) of the NELLP. NELC also noted:
    - the Proposed Development is supported by a site specific flood risk assessment, which, amongst other things, secures safe refuge for

people and critical infrastructure at 4.60 m above Ordnance Datum Newlyn (AOD) (plus climate change 2115) within buildings and construction would utilise suitable water resistant materials and methods to limit damage and down time in the event of catastrophic flood events.
    - The NELC Planning Permission's safe refuge, etc was approved at 4.55m AOD.
    - Surface water drainage will be limited to greenfield runoff rates with discharge into the existing land drains. This is achieved by the creation of a large attenuation pond designed conservatively to accommodate runoff during extreme events before release at a controlled level. This is proposed to be controlled through the DCO Requirements.
    - Within the assessment consideration has been to water quality and
    - Foul water drainage is likely to be dealt with by off-network methods, but this will be subject to the DCO Requirements.

- In regard to the Health and Safety Executive (HSE), NELC's LIR notes the site is close to several pipelines and hazardous installations, but the Proposed Development is very similar to the NELC Planning Permission to which the HSE did not advise against. Providing the Proposed Development accords with HSE's advice it would accord with policy 5 of the NELLP.

- In addition to the above the LIR notes:
    - There are no residential neighbours in close proximity to the site and agricultural fields separate the site from the nearest main settlements being the villages of Stallingborough, Healing and Great Coates.
    - The Proposed Development represents a significant investment in the area which will support the economic growth of the South Humber Bank, linking with growth aspirations for NELC.
    - The construction and operational phases will support local employment and job creation over a considerable period (30 years) which will further go to supporting the ambitions under Policy 1 of the NELLP.
    - The Proposed Development is also a key opportunity to reduce demand for waste to be land filled and promotes greater energy efficiency than the NELC Planning Permission using renewable sources in accordance with Policies 32 and 47 of the NELLP.

4.3.5. No specific issues were raised in the LIR in respect of the dDCO and no conflicts were identified with the development plan.

4.3.6. The Applicant and NELC signed a SoCG [REP4-006] agreeing all matters in respect of the effects of the Proposed Development, and that appropriate mitigation had been proposed and could be secured through the dDCO. No matters of disagreement exist between these parties.

Conclusion on LIR Issues

4.3.7. In summary, the LIR concludes that the Proposed Development and its impacts would be very similar to those of the NELC Planning Permission. NELC consider the Proposed Development accords with all relevant NELLP policies and is not considered either in isolation or cumulatively to significantly affect the character of the area, neighbouring land uses, ecology, highway network or the environment, subject to the Requirements set out in the dDCO and the revised s106 Agreement. Analysis of detailed matters raised in NELC's LIR are addressed in the Sections 4.11 to 4.22 of this report to ensure that they are considered as required by the SoS.

4.4. CONFORMITY WITH NATIONAL POLICY STATEMENTS

Introduction

4.4.1. This section sets out an overarching analysis of the conformity of the Proposed Development with the relevant NPSs, identified in Chapter 3 above as being NPS EN-1 (Overarching National Policy Statement for Energy) (NPS EN-1), NPS EN-3 (National Policy Statement for Renewable Energy Infrastructure) (NPS EN-3) and NPS EN-5 (Electricity Network Infrastructure) (NPS EN-5).

4.4.2. Under s104(3) of the PA2008, the SoS is required to decide the application in accordance with any relevant NPSs that have effect in relation to the application, subject to certain defined exceptions set out in subsections 104(4) to 104(8), none of which are applicable to this case. This section sets out an overarching analysis of the conformity of the Proposed Development with the relevant NPSs, identified in Chapter 3 above as being NPS EN-1, NPS EN-3 and NPS EN-5.

NPS EN-1, NPS EN-3 and NPS EN-5

4.4.3. The Applicant analysed the performance of the Proposed Development against relevant policies in NPS EN-1, NPS EN-3 and NPS EN-5 within its Planning, Design and Access Statement (PDAS) [APP-024]. The ES considers the principle of, and need for, the Proposed Development within the framework provided by the NPSs.

4.4.4. NPS EN-1 makes clear that there is a need for the United Kingdom (UK) to move away from fossil fuels for electricity generation. Nevertheless, it recognises the urgent need for energy infrastructure to achieve energy security with substantial weight being given to the contribution which projects would make towards satisfying this need. It also requires that the application should be assessed on the basis that the Government has demonstrated that there is a need for the types of infrastructure covered by the energy NPSs.

4.4.5. Additionally, paragraphs 3.6.1 and 3.6.2 of NPS EN-1 state that there is also a need for a mix of energy sources including fossil fuels to meet demand in a flexible manner.

4.4.6. Paragraph 4.4.1 of NPS EN-1 states that there is no general requirement to consider alternatives or to establish whether the Proposed Development represents the best option. However, paragraph 4.4.2 indicates that applicants are obliged to include within its ES information about the main alternatives studied and explain the main reasons for the applicant's choice. In some cases, there is also a need to consider alternatives under the Habitats Regulations whilst sections of NPS EN-1 dealing with biodiversity, flood risk and landscape and visual impacts also raise the issue of alternatives.

4.4.7. Section 5 of NPS EN-1 sets out potential generic impacts of energy infrastructure which must be taken into account in assessing projects. Further detail specifically applicable to renewable energy infrastructure is given in NPS EN-3, whilst details specifically applicable to electricity network infrastructure is given in NPS EN-5. These impacts are assessed, where relevant, in the following sections of this report

Conclusion on NPS Policy

4.4.8. Taking all relevant documents and policies into account, I conclude

- No instances of non-compliance with NPSs were identified by IPs;
- The need for the Proposed Development is established through the NPSs;
- The Proposed Development conforms to high-level policy in NPS EN-1, NPS EN-3 and NPS EN-5; and
- The compliance of the Proposed Development has been examined against policy detail and tests applicable to individual planning issues as set out in relevant NPS paragraphs, and this analysis is carried out in Sections 4.11 to 4.22 below.

4.5. CONFORMITY WITH DEVELOPMENT PLAN

4.5.1. The application site lies wholly within the administrative district of NELC. As recorded in Chapter 3 above, the LIR from NELC [REP1-018] identified that the development plan in force for the area comprises the NELLP, adopted in March 2018. No important and relevant issues were raised in the LIR that gave rise to in-principle breaches of relevant NPS policy or to objections to the Proposed Development. The LIR from NELC did not identify harm against or conflict with the development plan.

4.5.2. NELC signed a SoCG with the Applicant [REP4-006] agreeing all matters in respect to the effects of the Proposed Development, and that adequate mitigation would secure conformity with the development plan. No matters of disagreement exist between these parties and it was confirmed that due to the impacts of the Proposed Development being similar to those already found to be acceptable as part of the NELC Planning Permission, and being suitably controlled via the Requirements in Schedule 2 of the dDCO, and the s106 Deed of Variation (DoV), there were no relevant matters not agreed.

4.5.3. I have reviewed the development plan policies identified in NELC's LIR and I am not aware of any issues arising from it that conflict with

relevant policy directions arising from NPSs. Whilst NPSs are the primary source of policy for a decision under PA2008, development plan policies are important and relevant considerations. None of them indicate against the directions set out in NPS EN-1, NPS EN-3 or NPS EN-5.

4.6. APPLICATION OF OTHER POLICIES

4.6.1. The legislative and policy framework applicable to the assessment of this application is summarised at a high level in Chapter 3 above. Individual references to relevant legislation and policy detail are drawn out in sections 4.11 to 4.22 of this report. No IPs raised any concerns or objections regarding the Proposed Development's conformity against such legislation and policy.

4.7. THE PRINCIPLE OF THE DEVELOPMENT

'Fallback Position'

4.7.1. The Proposed Development site benefits from the NELC Planning Permission.

4.7.2. Throughout this Examination, I have been cognisant of the NELC Planning Permission. The Applicant's SoCG with NELC [REP4-006] stated *"The Proposed Development comprises the works contained in the Consented Development* [NELC Planning Permission]*, along with additional works not forming part of the Consented Development* [NELC Planning Permission] *('the Additional Works')…".* The Additional Works were summarised in that SoCG as:

- a larger air-cooled condenser (ACC), with an additional row of fans and heat exchangers;
- a greater installed cooling capacity for the generator;
- an increased transformer capacity; and
- ancillary works.

4.7.3. In terms of the NELC Planning Permission, the Applicant's submitted Examination documentation that contained information on the nature and content of the NELC Planning Permission. This included its Explanatory Memorandum [APP-006], PDAS [APP-024], the Development Consent Obligation [APP-032], the Proposed Development and Consented Development [NELC Planning Permission] Boundary Comparison Plan [APP-019] and submitted ES [APP-033 – APP-139].

4.7.4. From all I have seen and read, it is clear to me that the NELC Planning Permission is similar to the Proposed Development the subject of this DCO application, with the key differences being*:*

- a larger ACC, with an additional row of fans and heat exchanger, which allows a higher mass flow of steam to be sent to the steam turbine whilst maintaining the exhaust pressure and thereby increasing the amount of power generated;
- a greater installed cooling capacity for the generator. This is achieved by providing additional heat exchangers installed to the closed-circuit

cooling water system to allow the generator to operate at an increased load and generate more power;

- an increased transformer capacity. Depending on the adopted grid connection arrangement the capacity will be increased through an additional generator transformer operating in parallel with the NELC Planning Permission's proposed generator transformer or a single larger generator transformer. Both arrangements would allow generation of up to 95 MW; and
- ancillary works being required by the above works. Additional ancillary works and operations are required, such as new cabling or pipes, and commissioning to ensure that the apparatus has been correctly installed and will operate safely and as intended.

4.7.5. Whilst the Proposed Development would increase the gross electrical capacity from 49.9 MW to 95 MW, the Applicant has been clear that this is as a result of opportunities to improve the efficiency, and not an increase fuel throughput (which for the NELC Planning Permission is specified in the EP granted by the EA as up to 753,500 tonnes per annum (tpa)), nor by increasing the maximum sizes of the building dimensions. Indeed, NELC, in the Applicant's submitted SoCG [REP4-006], agree *"…that the design of the Proposed Development is not materially different from the Consented Development* [NELC Planning Permission] *…"*.

4.7.6. Furthermore, the Applicant's SoCG with NELC [REP4-006] agrees *"…the Consented Development* [NELC Planning Permission] *represents a 'fallback position' in planning terms which is available and can be implemented by the Applicant"* and that such a 'fallback position' *"…is relevant not only to the need for the Proposed Development and the principle of the use, but also to the environmental effects which arise."*

4.7.7. The dDCO, throughout all iterations [APP-005], [REP2-014], [REP3-003], [REP4-004], [REP5-003], [REP6-003] and [REP7-003] contain Article 5, which provides for how the Order and the Consented Development [NELC Planning Permission] interact, including how:

- the NELC Planning Permission would cease to have effect within the Order Limits;
- the Requirements apply to any development already undertaken under the NELC Planning Permission or about to take place within the Order Limits and which is comprised in the authorised development;
- any application for discharge of a condition listed in column (1) of Schedule 3 (deemed approval of matters referred to in the Requirements), would be treated as an application for discharge of the corresponding Requirement listed in column (2) of Schedule 3; and
- subject to exceptions, where details, plans or any other matters have already been approved or agreed by the relevant planning authority under a condition of the NELC Planning Permission, as set out in column (1) of Schedule 3 they would be deemed to have been approved for the purpose of the corresponding Requirement in column (2) of Schedule 3.

4.7.8. Bearing the above in mind, should the DCO be granted, any planning condition(s) identified in Column 1 of Schedule 3 of the DCO already submitted to NELC for discharge that remains undetermined by it at the point notice is served under Article 5, would be treated as an application for discharge of the corresponding Requirement attached to the DCO. Additionally, any planning conditions identified in Column 1 of Schedule 3 of the DCO that have already been discharged by NELC at the point notice is served under Article 5 would be deemed to have been approved for the purpose of the corresponding Requirement in column (2) of Schedule 3 of the DCO.

4.7.9. I also posed a number of questions to the Applicant and NELC, but with an opportunity for all IPs to comment thereon and on the respective responses, in regard to the status of that NELC Planning Permission, including the discharge of any pre-commencement conditions and whether that development had been implemented.

4.7.10. In response to ExQ1 [PD-006], both the Applicant [REP2-008] and NELC [REP2-018] confirmed that pre-commencement Conditions 10 (Construction Management Plan); 13(i) (Contamination Investigation), 13 part ii-iv (Contamination Investigation), and 18 (Delivery and Servicing) had been discharged. The Applicant also confirmed that piling, which was subject to pre-commencement condition 11, was to be subject to an application submitted to NELC seeking to vary or remove that condition. As a result, it considered that details to discharge Condition 11 (Piling) would no longer be required.

4.7.11. In regard to other pre-commencement conditions, the Applicant advised Conditions 4 (Final Design), 5 (External Building Materials), 7 (Hard Landscaping), 9 (Surface and Foul Water Drainage), 21 (Entrance, Highways Drainage and Parking), 22 (Road Conditions Survey) and 23 (UK Digital Vertical Obstruction File and Powerlines Notifications) are to be discharged during the enabling works phase, as set out in Table 5.2 of the ES Chapter 5 [APP-039], ahead of main works and that some information required to discharge these conditions would require detailed design information from the Engineering, Procurement and Construction (EPC) contractor, which could not be completed as the EPC contract had not at that point been awarded.

4.7.12. Responding to questions in ExQ2 [PD-010] concerning the implementation of the NELC Planning Permission (QB.1.1 and QB.1.4), the Applicant responded by confirming: the NELC Planning Permission had not, at that point in time, been implemented; no further discharge of pre-commencement conditions had taken place; an application under s73 of the Town and Country Planning Act 1990 (as amended) (TCPA1990) seeking to vary Conditions 3 and 11 to match the relevant dDCO requirements in relation to piling had been submitted to NELC (NELC Planning Reference DM/0273/21/FUL) and accepted as valid by it on 15 March 2021; the Applicant had not appointed a contractor to undertake the NELC Planning Permission, although it anticipated that this would be done in Quarter (Q) 2 of 2021; and that the NELC Planning Permission was likely to commence in Q2 of 2021.

4.7.13. By the close of the Examination no further updates had been received from the Applicant or NELC in regard to:

- whether DM/0273/21/FUL had been determined by NELC;
- the appointment of a contractor; or
- the implementation of the Proposed Development

4.7.14. It was noted however that the Examination closed well before the end of Q2 of 2021.

4.7.15. In the light of the above facts, I consider the Applicant was well advanced in discharging pre-commencement conditions, seeking variations or removal of other pre-commencement conditions through the submission of a s73 application to NELC, appointing a contractor and being able to lawfully implement the NELC Planning Permission.

4.7.16. Additionally, I consider that part of the purpose of the inclusion of Article 5 in the DCO is to prevent any further development implemented under the NELC Planning Permission and to provide for the Applicant to transfer conditions, which are either being sought to be discharged or already discharged under the NELC Planning Permission to a development being implemented under the DCO. The inclusion within the Article of a clause requiring the cessation of further development implemented under the NELC Planning Permission would be superfluous, if the Applicant had no intention of implementing the NELC Planning Permission.

4.7.17. Irrespective of whether the SoS for Business, Energy and Industrial Strategy (BEIS) makes the South Humber Bank Energy Centre (SHBEC) DCO or not, should the Applicant not have implemented the NELC Planning Permission they could still do so.

4.7.18. In consideration of the above factors, as a matter of planning judgement and in the circumstances of this particular Proposed Development, I am of the view that there is greater than a theoretical possibility of the NELC Planning Permission being implemented prior to the determination of this DCO application. Bearing this and the above factors in mind, I consider a 'fallback position' exists, and I have been cognisant of the NELC Planning Permission, as highlighted above, throughout this Report.

Need

4.7.19. The Applicant's PDAS [APP-024] accompanied the application and sets out its case for the need for the Proposed Development. This broadly relies on NPS EN-1 which recognises that energy is vital to economic prosperity and social well-being and, as such, it is important to ensure that the UK has secure and affordable energy (paragraph 2.1.2). It also makes clear the urgent need for new energy NSIPs to be brought forward as soon as possible (paragraph 3.3.15), the need for major investment in a range of forms of power generation (paragraph 2.2.1) and, in the context of reducing carbon emissions, to meet the Government's commitment to meet the UK's legally binding target to cut greenhouse gas (GHG) emissions (originally at least 80% by 2050, and now

committed to by the UK to achieve a 100% reduction in emissions by 2050).

Consideration of alternatives

4.7.20. NPS EN-1 and EN-3 do not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option. However, applicants are required to include within its ES information about the main alternatives studied and include an indication of the main reasons for the choice of site, taking into account the environmental, social and economic effects including where relevant commercial feasibility (paragraph 4.4.2). Furthermore, paragraph 4.4.3 of EN-1 advises that the consideration of alternatives should be carried out in a proportionate manner. Having formally assessed the alternatives identified by the Applicant in their ES, I consider the Proposed Development represents the best option for the choice of site, taking into account the environmental, social, economic effects and commercial feasibility.

Location

4.7.21. Details of the Proposed Development site (the Site) and the surrounding area are provided in Chapter 2 above and, with the exception of the Additional Works, are considered to be similar to the NELC Planning Permission.

4.7.22. The site is located within the confines of the existing SHBPS. The application sets out (in various places including [APP-024 and APP-040]) the reasons that the site has been selected by the Applicant as opposed to other potentially available sites. In essence Chapter 6 of the ES [APP-040], entitled "Need, Alternatives and Design Evolutions" states "*the Proposed Development is, in effect, the Consented Development* [NELC Planning Permission] *with additional infrastructure to increase the electrical output, necessarily located on the same Site as the Consented Development* [NELC Planning Permission]*, no further consideration of the suitability of the site has been undertaken for the Proposed Development"* (paragraph 6.4.6). The Applicant also states, *"careful consideration was given to the suitability of the Site and the location and layout for the Main Development Area..."* (paragraph 6.4.1). Alternative locations and designs were considered within the site, but the Applicant found none resulted in a more appropriate location or design.

4.7.23. I accept that the Site's location, within the SHBPS, is in an industrial area where energy generation is common. This weighs positively in favour of the Proposed Development. Similarly, the reuse of land within the existing SHBPS, which is previously developed land in planning terms, benefits from access to nearby electrical, gas and transport links. All of these factors would deliver a number of clear benefits, including the ability to utilise existing infrastructure and connections.

4.7.24. However, taking into account my Unaccompanied Site Inspection (USI) and the evidence presented in the Examination, it is also clear that the

location of the Site also has a number of potential disadvantages, primarily related to its proximity to nearby European sites.

4.7.25. Detailed consideration in regard to the potential disadvantages are set out in the remainder of this report.

Generating plant

4.7.26. The Applicant's PDAS [APP-024] sets out the design principles of the Proposed Development but is clearly focused on the 'fallback position' of the NELC Planning Permission.

4.7.27. The Site is highly suitable for energy generation and waste management due to its location, size, grid connections, access and separation from residential sensitive receptors.

4.7.28. The design of the Proposed Development has had regard to its immediate context and the functional requirements of its various components. A number of design principles guided the design of the Proposed Development. These related to efficiency, safety, durability, making use of the location, designing the main building with regard to its surroundings, avoiding impacts on the operation of SHBPS and the environment, retaining flexibility, securing opportunities for biodiversity, creating a safe and efficient access and providing appropriate internal circulation and landscaping.

4.7.29. In addition, a number of comments were received from statutory consultees in relation to environmental, safety, and access matters and have been given appropriate consideration by the Applicant.

4.7.30. The design of the Proposed Development complies with these design principles and addresses the comments of these statutory consultees and is secured via the Works Plans [APP-010] and Requirements in Schedule 2 of the dDCO (the current version of which was submitted at DL7 [REP7-003]).

Combined Heat and Power

4.7.31. As noted in Chapter 3, NPS EN-1 recognises the contribution that Combined Heat and Power (CHP) can make to reducing emissions. It requires that applicants either include CHP in the project or presents evidence in the application that the possibilities for CHP have been fully explored. Where a proposal is for thermal generation without CHP, applicants should explain why CHP is not economically or practically feasible, provide details of any potential future heat requirements in the area that the station could meet and detail the provisions in the proposed scheme for ensuring that any potential heat demand in the future can be exploited.

4.7.32. The Applicant has provided a report on the feasibility of operating the Proposed Development as a CHP plant [APP-025]. Although this identifies a number of theoretical heat users within a 15km radius of the Proposed Development, the Applicant's feasibility report indicates that provision of

CHP is not presently economically viable. However, it proposes to construct the Development as 'CHP-Ready', being designed to be available, with minimum modification, to supply heat in the future. The Applicant considers that this would represent Best Available Technology (BAT). To satisfy the BAT tests on an ongoing basis, the Applicant states it is committed to carrying out periodic reviews of opportunities for the supply of heat to realise CHP.

4.7.33. I accept that the provision of CHP is not presently economically viable but consider the Proposed Development should be constructed so as to be 'CHP Ready'. Requirement 35 of the dDCO relates to the provision of CHP and was subject to discussion in the ISH1. The current wording of Requirement 35 was the subject of discussion between the Applicant and NELC and I consider the current wording would secure the approval and provision of a scheme of CHP, that is acceptable to the Local Planning Authority, should Development Consent be granted.

Gas Connection

4.7.34. Details in relation to the proposed gas connections can be found in the Applicant's Gas Connection & Pipeline Statement [APP-022]. It is clear from this document that a new gas connection and pipeline will be required. The Gas Connection is associated development and would comprise an underground gas pipeline of up to 500 millimetres (mm) in diameter for the transport of natural gas.

4.7.35. The Applicant states it is not seeking consent to carry out works on the existing gas pipeline. Instead it proposes to connect via a new underground pipeline from the Proposed Development to one of the following options:

- the existing SHBPS Above Ground Installation (AGI), in order to provide a connection to the National Grid gas distribution network (Option A); or
- the existing SHBPS gas supply network, in order to provide a connection to the National Grid gas distribution network (Option B); or
- the Cadent local distribution network located to the north of the Site (Option C).

4.7.36. All three gas connection routes are identified in the application and shown on the Indicative Gas Connection Plan [APP-013]. The first (Option A) runs south out of the existing AGI and turns east to a point where it will join into the EfW Power Station. This route is approximately 195m in length.

4.7.37. The second route (Option B) runs east out of the existing SHBPS and then turns north for a short distance and then east, where it will join into the EfW Power Station. This route is approximately 217m in length.

4.7.38. The third route (Option C) runs east from the junction on South Marsh Road before turning south into the site. It then turns east again for a short distance before joining into the EfW Power Station. This route is approximately 315m in length.

4.7.39. The Applicant points out that both the SHBPS AGI (Option A) and the SHBPS gas supply network (Option B) lie within the SHBPS Site, although the AGI is excluded from the Proposed Development site. Additionally, the Applicant has confirmed that part of the pipeline route for Option C lies outside its ownership or the ownership of its parent companies. As such the Applicant states *"Any gas connection works outside of the Site, including works on the AGI (for Options A or B) or if required to connect to the local distribution network (i.e. Option C), do not form part of the Proposed Development, and the relevant undertaker will rely either on their statutory powers or obtain the relevant consents prior to any works commencing."* Additionally, the Applicant states that following the receipt of a feasibility study proposal from Cadent (Option C), such a connections agreement is unlikely to be pursued.

4.7.40. The final route is to be chosen at the detailed design stage by the Applicant, in conjunction with the EPC Contractor.

4.7.41. During the Examination, the Applicant's SoCG with NG [REP7-004] confirmed, as matters agreed, that the Applicant has provided for a potential gas connection between Work No. 1 (the generating station) and NGG's AGI. It also confirmed as matters agreed that *"Gas may be used as the fuel for auxiliary burners within the plant…"* and that if this option was chosen an application would be made under the 'Application to Offer' process. As such I am satisfied that appropriate gas connections between the generating station and NGG's AGI can be secured.

Electricity Connection

4.7.42. The Proposed Development includes a new connection to the electricity grid to enable the export of electricity from the EfW Power Station. This would be achieved in one of two ways. Firstly, an electrical connection could be provided by an underground or overground cable to the NGET 400 kV system at the existing SHBPS 400 kV substation, located within the SHBPS site. This route is approximately 110m in length. Alternatively, electrical connection could be provided by an underground cable to the Northern Powergrid 132 kV local distribution network by connecting to an existing transmission tower some 2km west of the SHBPS site on South Marsh Road.

4.7.43. The Applicant states it has accepted a Bilateral Connection Agreement and a Construction agreement from NGET for connection to the SHBPS 400 kV substation but rejected an offer from Northern Powergrid for the provision of a 132kV connection at the Site.

4.7.44. During the Examination, the Applicant's SoCG with NG [REP7-004] confirmed, as matters agreed, that:

- *"electricity from the Proposed Development will be exported to the NGET 400 kV system at the existing SHBPS 400 kV substation;*
- *The Applicant accepted NGET's offer of a Bilateral Connection Agreement and Construction Agreement for connection to the SHBPS 400 kV substation on 31st March 2020 (offer reference A/EPSHB/19/0606-1EN(0));*
- *The connection to the NGET system at the 400 kV substation will be made through underground or overground electrical cables to the terminal point for connection, which is expected to be at the substation boundary; and*
- *The Applicant's chosen Engineering, Procurement and Construction (EPC) contractor will undertake detailed design of the connection route within the Site."*

4.7.45. The Indicative Electrical Connection Plan [APP-014] shows the route for the cables (Work No. 2) and the connection locations. Further details can also be found in the Grid Connection Statement submitted with the application [APP-021].

4.7.46. Irrespective of the above, whichever of the grid connections as set out above is used, I am satisfied that appropriate electricity grid connections between the generating station and National Grid transmission system can be secured.

Design and Layout

4.7.47. In order to ensure a robust assessment of the likely significant environmental effects of the Proposed Development, the Applicant has adopted a 'Rochdale Envelope' approach and the application presents a worst-case assessment of potential environmental effects.

4.7.48. A PDAS [APP-024] was provided as part of the application. This document explains the design principles and concepts which were applied to the Proposed Development and how the Applicant has taken into account the context of the site and its wider setting. It sets out the design information being provided with the application, describes the approach and evolution of the design process and explains why the Applicant is seeking flexibility in the design of the Proposed Development. In addition, it identifies the key design principles and components, access arrangements and how the detailed design of the Proposed Development will be in accordance with the design details and parameters upon which the EIA is based.

4.7.49. As such the maximum dimensions for the layout of the Proposed Development, which are identical to those imposed through Condition 2 of the NELC Planning Permission, have been set and are as outlined in the table below:

Table 1: Maximum Design Parameters

Component	Dimensions
Main building - maximum height	59m AOD (including 2m parapet wall on boiler house)
Main building - maximum footprint	210m x 110m
Stack - height	102m AOD
Stack - diameter	3m per combustion line
Bunker - base maximum depth	-8m AOD

4.7.50. Additionally, the application was accompanied by indicative generating station plans, floor plans, sections and elevations [APP-012]; indicative Landscape Management Plan [APP-017] as well as works plans [APP-010].

4.7.51. The maximum design parameters, as set out in Table 1 above, are secured by Requirement 3 of the recommended Development Consent Order (rDCO). Irrespective of this, there are a number of elements of the Proposed Development that are yet to be determined and these include: detailed design (position and scale); and detailed design (appearance). These are secured by Requirements 5 and 6 respectively of the rDCO. Both Requirements require the submission of detailed design information for approval by the local planning authority prior to development commencing on the various works.

Conclusions on the Principle of Development

4.7.52. The need for energy generation is established through the NPS EN-1, whilst NPS EN-3 identifies that energy from the combustion of waste will play an increasingly important role in meeting the UK's renewable energy targets. I consider the Proposed Development would contribute to meeting this need, as well as play an important role in meeting the UK's renewable energy targets. Furthermore, I accept that the provision of CHP is not currently viable but consider that it should be required to be 'CHP ready', as secured through Requirement 35 of the rDCO.

4.7.53. The 'fallback position' is an important and relevant matter in the consideration of the Proposed Development. However, for the reasons set out in Section 4.10 below, should the DCO be made the maximum fuel throughput of Refuse Derived Fuel (RDF), of 753,500 tpa, should be controlled by specifying it within Schedule 1 (Authorised Development) as set out in the rDCO.

4.7.54. I am satisfied that sufficient consideration has been given to design and layout and sufficient information and justification has been provided in regard to the consideration of need and alternatives, including location, the nature of the power generation proposed, CHP and gas and electrical connections to satisfy the requirements of NPS EN-1.

4.7.55. Accordingly, I consider the Proposed Development meets the general requirements of NPS EN-1 in principle. I consider the specific impacts of the Proposed Development in Sections 4.11 – 4.22 further below.

4.8. ENVIRONMENTAL IMPACT ASSESSMENT

4.8.1. An ES accompanied the application [APP-033 to APP-139].

4.8.2. Chapter 2 of the ES sets out the methodology used [APP-036]. Its objective is to anticipate the changes or impacts that may occur to the receiving environment as a result of the Proposed Development, and to compare to the existing environmental conditions (the baseline) and those that would occur in absence of the Proposed Development (future baseline).

4.8.3. The EIA process involves identification of sensitive receptors that may be affected by impacts resulting from the Proposed Development and assesses the extent to which these receptors may experience significant environmental effects as a result. Where significant effects are identified, the ES proposes mitigation measures to avoid, reduce and offset the significance of the effect, expressed as residual effects after taking account of mitigation.

4.8.4. My assessment of the Proposed Development undertaken in Sections 4.11 – 4.22 of this report has been made in consideration of the environmental effects from the identified stages as set out in the ES.

4.8.5. Article 2 (Interpretation) of the dDCO identifies the documents proposed to be certified in the ES Post-examination. These include the: Access and Rights of Way Plan [APP-011]; Biodiversity Strategy [REP6-004]; Book of Reference [REP2-006]; ES [APP-033 to APP-139]; Indicative Landscape Strategy [APP-029]; Indicative Lighting Strategy [APP-031]; Land Plan [AS-002]; and Works Plans [APP-010]. Subject to my proposed amendments set out in Table 3 below (see Chapter 7 of this report), I accept the list to be correct and reflective of the documents submitted as part of the ES, as amended by the Biodiversity Strategy [REP6-004]; Book of Reference [REP2-006] and the Land Plan [AS-002].

4.8.6. The ES, as updated, sufficiently considers alternatives, including in terms of the location and nature of the power generation proposed to satisfy the requirements of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, as amended (the EIA Regulations). The ES is, in my view, adequate for assessing the environmental impacts of the Proposed Development and sufficient to enable the SoS for BEIS to take a decision in compliance with the EIA Regulations.

4.9. HABITATS REGULATIONS ASSESSMENT

4.9.1. The Proposed Development is one that has been identified as giving rise to the potential for Likely Significant Effects (LSE) on European sites and hence is subject to HRA. A separate record of considerations relevant to HRA has been set out in Chapter 5 of this report below.

4.9.2. However, at this point in this Chapter it is necessary to record that I have considered all documentation relevant to HRA as required by Section 4.3 of NPS EN-1, and have taken it into account in the conclusions reached here and in the Planning Balance (Chapter 6 below). Further, project design and mitigation proposals included in the ES and secured in the dDCO have been fully considered for HRA purposes.

4.9.3. Overall, I am satisfied that sufficient consideration has been given to alternatives, including the location and nature of the power generation proposed to satisfy the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended) (The Habitat Regulations). I am also satisfied on the adequacy of the data provided such that it does allow the SoS for BEIS to act as the competent authority to undertake an appropriate assessment (AA).

4.9.4. These issues are considered in further detail in Sections 4.11 – 4.22 and Chapters 5 and 6 below.

4.10. ENVIRONMENTAL PERMITTING REGIME

4.10.1. As stated in Chapter 3 of this report, the Proposed Development falls under the Environmental Permitting (England and Wales) Regulations 2016. As a result, elements of the Proposed Development would require an EP. An application is made separately and independently to the EA, which is the competent authority to issue and regulate EPs. For the purposes of this report, the process of applying for the EP is identified as the EP regime.

4.10.2. The Applicant's approach, as set out by the EA in it's RR [RR-005] and as agreed in the Applicant's completed SoCG with the EA [REP1-001], was to vary the existing EP for the SHBPS, which was varied by the EA in March 2020 to incorporate the NELC Planning Permission to increase the electrical output for the Proposed Development and transfer the Proposed Development into a new separate permit. This approach is also referred to by the EA in its letter dated 8 December 2020 [REP2-024] and its response to ExQ1 [REP2-023]. The Applicant confirmed in its 'Written summary of oral submissions made at ISH1 [REP4-012] that an application for the new separate EP was submitted to the EA and duly made on 23 December 2020. The Applicant has also confirmed that the EA are currently determining that submission.

4.10.3. The EA signed a SoCG with the Applicant [REP1-001] setting out the matters agreed, including in relation to the EP, including Energy efficiency, Noise and Emissions to Air, Use of BAT; Flood risk; Land Contamination and Water Resources (including Water Framework Directive Assessment), the Construction Environmental Management Plan

(CEMP), CHP, Biodiversity and PPs. The EA also confirmed that there were no matters that are not agreed.

4.10.4. The Applicant was not expecting the new separate EP application to be granted before the end of the Examination [REP4-012], but confirmed that the EA are currently determining its submission and that no substantial issues are anticipated because the permit will be very similar to that of the NELC Planning Permission which has already been granted. No reasons as to why the EP applications, as applied for, would not be granted were identified during the Examination.

4.10.5. Irrespective of the above, in the absence of an EP specific to the Proposed Development, I consider it important and relevant to control the maximum fuel throughput of RDF at 753,500 tpa. Accordingly, such a control is specified within Schedule 1 (Authorised Development) of the rDCO, attached at Appendix D of this Report, should the SoS be minded to make the DCO.

4.11. WASTE HIERARCHY AND FUEL AVAILABILITY

Policy Considerations

National Policy Statements

4.11.1. The NPSs, both EN-1 and EN-3 identify EfW as a type of infrastructure that is needed. Paragraph 2.2.4 NPS EN-1 states that the:

"…role of the planning system is to provide a framework which permits the construction of whatever Government – and players in the market responding to rules, incentives or signals from Government – have identified as the type of infrastructure we need in the places where it is acceptable in planning terms."

4.11.2. At paragraph 2.5.64, NPS EN-3 makes clear that waste combustion generating stations "...need not disadvantage reuse or recycling initiatives where the proposed development accords with the waste hierarchy." NPS EN-3 also makes it clear that for waste combustion generating stations, there should be an "*..assessment of the conformity with the waste hierarchy and the effect on relevant waste plans should be presented in a separate document to accompany the application"* (paragraph 2.5.69).

4.11.3. The assessment should accord with NPS EN-3 paragraphs 2.5.66 - 69:

- examine the conformity of the scheme with the waste hierarchy and the effect of the scheme on the relevant waste plan or plans where a proposal is likely to involve more than one local authority;
- set out the extent to which the generating station and capacity proposed contributes to the recovery targets set out in relevant strategies and plans, taking into account existing capacity; and
- the results of the assessment of the conformity with the waste hierarchy and the effect on relevant waste plans should be presented in a separate document to accompany the application.

4.11.4. NPS EN-3 paragraph 2.5.70 requires that the ExA should be satisfied, with reference to the relevant waste strategies and plans, that:

"...the proposed waste combustion generating station is in accordance with the waste hierarchy and of an appropriate type and scale so as not to prejudice the achievement of local or national waste management targets in England… Where there are concerns in terms of a possible conflict, evidence should be provided to the [ExA] *by the applicant as to why this is not the case or why a deviation from the relevant waste strategy or plan is nonetheless appropriate and in accordance with the waste hierarchy."*

4.11.5. Member States of the European Union (EU) are required by Article 4(1) of the revised Directive 2008/98/EC on Waste (Waste Directive) to apply the hierarchy in a priority order 'in waste prevention and management legislation and policy'. The Waste Directive was transposed into English law by the Waste (England and Wales) Regulations 2011 (2011 Regulations). The requirement to apply the hierarchy remains following EU-wide agreement on the Circular Economy Package (CEP), see Fuel Availability and Waste Hierarchy Assessment [APP-026].

Government review of waste policy in England 2011

4.11.6. This document published on 4 June 2011 contains actions and commitments which together set a clear direction towards a zero-waste economy. It acknowledges that:

"…while energy from waste has the potential to deliver carbon and other environmental benefits over sending waste to landfill, energy recovery also produces some greenhouse gas emissions. It is important to consider the relative net carbon impact of these processes, and this will depend on the composition of feedstocks and technologies used".

Waste and Resources Strategy for England 2018 (WRS)

4.11.7. The WRS and its Evidence Annex set out *"how our stock of material resources by minimising waste, promoting resource efficiency and moving towards a circular economy"* aims to maximise the value of resource use and minimise waste and its impact on the environment. There are five strategic ambitions (page 17) to:

- Work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025;
- Work toward eliminating food waste to landfill by 2030;
- Eliminate avoidable plastic waste over the lifetime of the 25 Year Environment Plan;
- Double resource productivity by 2050; and
- Eliminate avoidable waste of all kinds by 2050.

4.11.8. It also recognises that:

"Energy from waste (EfW) technologies include the controlled combustion of municipal waste or products derived from municipal waste in

specialised plant specifically to generate power and/or heat from waste feedstock. (Footnote 21 p20)."

4.11.9. Among the aims to promote UK-based recycling and export less waste to be processed abroad, is to *"...drive greater efficiency of Energy from Waste (EfW) plants"*. This includes a commitment (p77) to ensure all future EfW plants achieve recovery status. 'R1' Recovery status acts as a proxy for the energy-generating efficiency of facilities. Facilities which achieve the status are classed as a recovery operation for the purposes of the waste hierarchy and so are a level up from the bottom rung of 'disposal'.

4.11.10. The WRS at Chapter 4 sets out the Governments policy intentions for managing waste exports, with the primary aim to process more waste at home (p78). Additionally, the WRS welcomes *"...further market investment in residual waste treatment infrastructure"* (p79).

4.11.11. The WRS at paragraph 8.1.6 ('Ensuring data on the composition of residual waste is regularly updated') (p137) states:

"Residual waste is the mixed material that is typically incinerated for energy recovery or landfilled. Much of the products and materials contained in this waste could have been prevented, reused or recycled. This is inefficient not only because materials that hold value are being lost, but also incineration and landfill are the most expensive ways to treat waste."

Waste Management Plan for England (DEFRA) 2013 (WMPE)

4.11.12. The WMPE fulfils the Waste Directive's Article 28 mandatory requirements, and other required content as set out in Schedule 1 to the 2011 Regulations. The WMPE is a high-level document, which outlines waste that is generated and how those materials are managed. The WMPE provides an analysis of current waste management practices in England, and evaluates implementation of the objectives and provisions of the Waste Directive. It supports efficient energy recovery from residual waste of materials which cannot be reused or recycled (*"to get the most energy out of waste, not to get the most waste into energy recovery"*) and sets out that particular attention should be given to the location of the plant to maximise opportunities for heat use, and landfill or incineration without energy recovery should be the last resort for waste. In terms of demolition and construction waste, the plan details how the UK is committed to meeting its target under the Waste Directive of recovering at least 70% by weight, of construction and demolition waste by 2020.

Energy from Waste Debate Guide

4.11.13. Energy from Waste, A Guide to the Debate, 2014 (EfW Debate Guide), reflects that EfW needs to support, not compete with diversion from landfill and increased recycling, whilst not compromising waste reduction and reuse. Paragraph 150 states that in considering whether EfW is to be part of a waste strategy a key question is whether this would require new

infrastructure or if sufficient capacity exists elsewhere. In relation to the "proximity principle" paragraph 152 states:

"The proximity principle arises from Article 16, "Principles of self sufficiency and proximity", of the revised Waste Framework Directive (2008/98/EC), the EU legislation that governs waste management. The principle is often over-interpreted to mean that all waste has to be managed as close to its source as possible to the exclusion of other considerations, and that local authorities individually need the infrastructure required to do so. This is not the case." Indeed, the final part of the Article itself states, *"The principles of proximity and self-sufficiency shall not mean that each Member State has to possess the full range of final recovery facilities within that Member State". Clearly if not even the entire country needs to have the full range of facilities, a specific local authority does not have to. While there is an underlying principle of waste being managed close to its source, there is no implication of local authorities needing to be self-sufficient in handling waste from their own area."*

4.11.14. The 2014 revisions to the EfW Debate Guide stated principles that are likely to continue as key considerations for both government and the sector in the future. The first principle is *"Energy from waste must support the management of waste in line with the waste hierarchy"* so EfW should at least constitute recovery not disposal, and to be classed as recovery, EfW facilities must meet requirements set out in the Waste Directive, for example through attainment of R1 status such that an incineration plant taking mixed waste needs to be accredited to R1 status to not be regarded as "disposal". Further, the need to maintain economic EfW operation should not impede continuing improvements in prevention, reuse and recycling of the host community.

National Planning Policy for Waste (Department for Communities and Local Government, 2014) (NPPW)

4.11.15. The NPPW provides the planning framework to enable Local Authorities to put forward, through local waste management plans, strategies that identify sites and areas suitable for new or enhanced facilities to meet the waste management needs of their areas. It highlights that positive planning plays a pivotal role in among other things, driving waste management up the waste hierarchy, and encourages co-location of waste management facilities and utilisation of the heat produced as an energy source in close proximity to suitable potential heat customers. Information is also included in relation to non-waste developments, covering developments whose end function are not directly related to waste. Waste developments include landfills, waste disposal, waste treatment, waste recycling plants, and Household Waste Recycling Centres.

Planning Practice Guidance

4.11.16. Planning Practice Guidance (PPG) on Waste, October 2015, states (paragraph: 007 Reference ID: 28-007-20141016) that the aim of the self-sufficiency and proximity principles is for each Waste Planning

Authority (WPA) to manage all of its own waste, although there is no expectation that each local authority should deal solely with its own waste to meet these principles. Each WPA should manage its own waste, recognising that the ability to source waste from a range of locations/ organisations:

"...helps ensure existing capacity is used effectively and efficiently, and importantly helps maintain local flexibility to increase recycling without resulting in local overcapacity."

4.11.17. Information on the available waste management capacity in the relevant area informs forward planning in local plans of waste infrastructure required to meet the future needs of the area. This requires an assessment of future requirements for additional waste management infrastructure, with reference to forecasts for future waste arisings.

Yorkshire and Humber Waste Position Statement

4.11.18. The Yorkshire and Humber Waste Position Statement (YHWPS) was jointly produced by the seventeen WPA that make up the Yorkshire and Humber region. The Statement sets out some key background information about waste and waste planning in the area. It aims to inform the preparation and review of waste local plans with some of the key information likely to be relevant to the preparation of such plans. The YHWPS notes:

- *"Strategic planning for waste has an important role to play in helping to deliver such coordination and move waste up the hierarchy, as well as ensuring that an appropriate pattern of facilities is available, taking into account the needs of the area as well as other spatial planning objectives. In particular there is a need to help ensure that an integrated and adequate network of waste management facilities can be delivered in order to reduce the environmental impacts of managing waste;*
- *As well as being a generator of substantial volumes of waste, the area also hosts a wide range of waste management facilities. In 2012 the* Yorkshire and Humber *region had the second highest number of sites with environmental permits of any region in England. These include a number of waste management facilities which are likely to be of strategic significance, in terms of meeting waste management needs arising both in and outside the area; and*
- *At a regional level key interactions (both imports and exports) were with East Midlands, North East and North West regions. This is not surprising given the proximity of these areas to Yorkshire and Humber. However, significant imports from London were also noted in 2014 data. The majority of exports were waste for treatment, mainly to the North East and East Midlands but as overall imports exceeded exports it is likely that this is a result of market factors rather than significant shortages of capacity within* Yorkshire and Humber.*"*

4.11.19. The NPPF at paragraph 27 advises that in order to demonstrate effective and on-going joint working, strategic policy-making authorities should prepare and maintain one or more SoCG, documenting the cross-

boundary matters being addressed and progress in cooperating to address these.

North East Lincolnshire Local Plan 2013 to 2032 (adopted 2018)

4.11.20. NELC is a unitary authority with municipal waste collection and disposal responsibilities. The NELLP sets out the Council's vision and strategy for development, including why, where and how the Borough will grow and includes policies for waste management.

4.11.21. The NELLP states: *"The role of the Council is not to manage all of the waste generated in North East Lincolnshire, though the Council does hold contacts with operators to manage the waste that it collects from households, street sweepings, bins, and community recycling centres. The role of the planning system is to ensure that appropriate waste management facilities can come forward to provide capacity sufficient to meet the area's need for waste management capacity, when it is required, to ensure waste is managed in a sustainable manner" (Paragraph 16.1)*.

4.11.22. It also states: *"However, extensive movements of waste occur between waste planning authority areas, due to commercial contracts and the location of facilities. Many types of waste require specialist treatment, and it is not viable for every local authority area to be able to manage all of the waste it generates"*.

4.11.23. With respect to management of waste arising from within NELC's jurisdiction itself, the Plan sets out: *"The Council's draft Waste Needs Assessment (2015) suggests that no additional capacity is required to meet North East Lincolnshire's waste management needs"*. However, the Plan implicitly recognises the potential for developing new waste management capacity at Policy 47, by setting out a series of requirements for new waste facilities, including locational criteria which prioritise existing employment land and allocated employment sites. Paragraph 16.23 of the NELLP explains that this is due to their distance from residential areas and proximity to the A180 trunk road.

4.11.24. Additionally, NELLP Policy 47 also supports co-location of waste management facilities, to maximise efficiency and minimise adverse impacts, and promotes co-location with developments which could utilise the output of a waste facility, such as a district-heating scheme, or industrial process.

4.11.25. Policy 48 of the NELLP seeks to safeguard existing waste facilities such as the NEWLINCS EfW development, which is located in close proximity to the Proposed Development, from 'the encroachment of incompatible development' unless it is no longer operational or required.

The Applicant's case

4.11.26. The Applicant's position is that the Proposed Development is wholly in accordance with the waste hierarchy, and not prejudicial to the achievement of national or local waste management targets.

4.11.27. In terms of fuel availability, the Applicant assessed data for the combined regions of Yorkshire and Humber and the East Midlands, as well as for England. This was due to the fact that it recognised that fuel could potentially be sourced from further afield.

4.11.28. After assessing data for England in regard to waste sent to landfill in 2018, it found approximately 10.9 million tonnes of combustible waste was sent to landfill in England, of which just over 2.2 million tonnes was landfilled in Yorkshire and Humber or the East Midlands.

4.11.29. The Applicant also assessed data regarding Refuse Derived Fuel (RDF) and solid recovered fuel exported from the UK finding that the last three years' data shows a change from 3.2 million tonnes in 2017 to 2.6 million tonnes in 2019. Whilst lower, the Applicant points to the fact that this is still a substantial quantity. Furthermore, a report published by the Chartered Institute of Waste Management in 2018[12] indicates that some 24%, approximately 768,000 tpa, of the total exported left the country via the Humber Ports.

4.11.30. The Applicant recognised that the future of RDF exports would be unclear following the UK's departure from the EU and implications of taxes to be levied on imports of RDF in the EU and potentially other countries. However, it considers the projections indicate that even with higher recycling rates, waste will continue to be generated and will still need to be either processed into RDF and combusted or exported, or landfilled, whether in the UK or overseas.

4.11.31. In regard to EfW capacity in the UK, the Applicant considered 2019 data on EfW facilities currently operational and/ or under commissioning or under construction. The data excluded facilities combusting hazardous waste or biomass.

4.11.32. The Applicant states this data showed that in 2018, in England, a total of 10,792,000 tonnes of waste was combusted in operational EfW. The reported annual capacity of these facilities was 11,834,000 tonnes, giving a utilisation of 91%.

4.11.33. Additional EfW facilities with a capacity of 3,699,000 tonnes were either under construction, commissioning, or become operational since publication of the above data report, and an additional 330,000 tonnes of capacity was consented for operational EfW facilities. The Applicant considers, assuming these facilities achieve the same 91% utilisation as existing facilities, it can be expected that they will combust an additional 3,674,000 tonnes of waste when in operation, of which the sub-total for the East Midlands and Yorkshire and Humber would be some 1,012,000 tonnes of waste.

4.11.34. Taking existing operational EfW facilities, and those which are in active development (ie which are either in commissioning or construction

[12] https://www.circularonline.co.uk/wp-content/uploads/downloads/Presidential-Report-2018-RDF-Trading-in-a-Modern-World.pdf

phases) implies that the EfW plants in England are likely to combust approximately 15.3 million tonnes of waste when they are all in operation. Whilst the Applicant recognised further sites have been identified for potential EfW facilities and that these were progressing through various stages in the planning and permitting process, it exercised caution in evaluating how much capacity may potentially be provided by these facilities, since in many cases the facilities may be unlikely to be built for financial or technical reasons.

4.11.35. The Applicant's assessment also noted the pre-operational EfW facilities, which had confirmed financial close by March 2020, and that these would provide a further 0.89 million tonnes of capacity and, applying the same utilisation as existing facilities, would be expected to combust 0.81 million tonnes of waste, of which the sub-total for the East Midlands and Yorkshire and Humber would be 0.27 million tonnes of waste.

4.11.36. With regard to future residential waste generation and the Government's document 'Our Waste, Our Resources: A Strategy for England', which increased municipal waste recycling rates, the Applicant considered it necessary to allow for the effect of such increase rates on the quantities of residual waste available as feedstock for the Proposed Development.

4.11.37. Based on data for household waste generation and recycling rates, as published by DEFRA, they found in regard to waste from households that the recycling rate was 44.7% in 2018. The total amount of waste generated from households had declined from 22.36 to 22.03 million tonnes between 2014 and 2018, although this overall decline masks increases during certain years in the period.

4.11.38. The Applicant also found the impacts of future increases in recycling rates have been modelled based on the assumption that the CEP target recycling rate of 55% (by 2025) will be achieved for household waste by 2023. The Applicant considered this to be a conservative scenario (in terms of estimating residual waste quantities) given that it assumes considerable improvement in household recycling rates over a short period of time, whereas UK household recycling rates have plateaued in recent years.

4.11.39. Considering the low level of variation in waste generation (increases and decreases, rather than uniform decreases as might have been expected if policies were working) between 2014 and 2018, the Applicant assumes that overall household waste generation will remain at 2018 levels for the foreseeable future, although declines in per capita waste generation may be balanced out by population growth.

4.11.40. The Applicant excluded Commercial & Industrial (C&I) waste generation from its assessment due to uncertainty over trends over time and recycling rates (both current and future), potential increases in C&I waste recycling and reductions in residual C&I waste.

4.11.41. The Applicant estimates that the amount of residual household waste may decline by approximately 2.3 million tonnes

4.11.42. After an assessment of:

- the amount of fuel currently available, calculated as combustible waste currently being landfilled and RDF currently exported;
- the amount of fuel likely to be available taking into account other EfW facilities which are either in commissioning/ construction or likely to be built; and
- the amount of fuel likely to be available taking into account both existing and future EfW facilities and also an increase in Local Authority collected waste recycling rate from 44.7% to 55% by 2023,

the Applicant considers a total of 0.9 million tonnes a year (at a regional level) and 6.7 million tonnes a year (nationally) of combustible waste is likely to be available as fuel for the Proposed Development in 2023, even taking into account likely new EfW facilities and increases in recycling rates. The Applicant states that this is well in excess of the actual capacity of the Proposed Development and demonstrates that there is likely to be sufficient fuel available for the Proposed Development.

4.11.43. Turning to an assessment of the Waste Hierarchy, the Applicant is of the view the Proposed Development is compliant with NPS EN-3's statement that EfW has a role to play in terms of both waste management and energy generation. The Applicant is also of the opinion that NPS EN-3 confirms that EfW development is not inconsistent in principle with recycling and reuse initiatives.

4.11.44. With regard to the NPPW the Applicant considers there is a market need for the facility, as demonstrated in its Fuel Availability and Waste Hierarchy Assessment [APP-026], and that National Planning Policy explicitly recognises the fact that new facilities such as the Proposed Development serve catchment areas wider than just the WPA in which they are located and that it is consistent with the policies set out in the NPPW.

4.11.45. In terms of the Government document 'Our Waste, Our Resources: A Strategy for England', the Applicant considers the Proposed Development is supportive of the waste strategy insofar as it provides further R1 rated residual waste treatment infrastructure required by the strategy. The Applicant also considers that the Proposed Development is consistent with principle I of the EfW Debate Guide, since it is a recovery operation which will not compete with recycling and which has flexibility in terms of the calorific value and composition of the waste it receives.

4.11.46. Additionally, the Applicant considers the Proposed Development to be consistent with principle II of the Guide since the facility will produce both power and heat; and principles III and IV do not apply since the Proposed Development is not reliant on Government support.

4.11.47. In terms of the YHWPS, the Applicant recognises the strategic national importance of the region's waste management facilities and that there are considerable flows of waste into and out of the region. However, it was also noted that the YHWPS does not include any criteria against

which to assess the need for new waste management facilities and does not include any presumption against certain types of facility.

4.11.48. In regard to the NELLP, the Applicant considers that whilst the Proposed Development is not provided to meet the local authority's waste needs, the NELLP recognises and plans for facilities to serve other areas and the Proposed Development complies with the aims of Policy 47 by being located on employment land away from residential areas and in proximity to the A180 trunk road, and is co-located with an existing energy generation use and in reasonable proximity to some potential industrial users of heat. Additionally, the Proposed Development also minimises impacts generally, consistent with the wider aims of the Local Plan.

4.11.49. The Proposed Development does not represent an encroachment of incompatible development upon the NEWLINCS development and is therefore compliant with, and does not conflict, with NELLP Policy 48.

4.11.50. It must be noted that the officer's report for the NELC Planning Permission reflects the above analysis, stating that the proposals were *"...suitable against Policies… 47 of the NELLP and would not affect sites safeguarded under Policy 48"*. Furthermore, the NELC's LIR [REP1-018] is clear that the Proposed Development is the same type of development as the NELC Planning Permission and would have the same maximum throughput and built dimensions.

4.11.51. Overall, the Applicant considers the Proposed Development to be in conformity with the waste hierarchy as:

- the Proposed Development will be an R1 recovery operation, and therefore preferable to disposal operations such as landfill;
- there is no financial incentive for waste producers to send waste to the Proposed Development that could otherwise be reused or recycled;
- there is no long-term financial commitment by local authorities to the construction of the Proposed Development, and therefore no proposal that their waste is 'tied in' to the Proposed Development for its lifespan; and
- the waste that will be utilised by the Proposed Development is currently being managed at lower levels in the waste hierarchy (or at a similar level, but at overseas facilities), such that energy recovery at the Proposed Development will represent a preferable option.

4.11.52. In terms of the effect of the Proposed Development on waste plans and policies the Applicant concluded that in each case, the Proposed Development is considered to be consistent with the relevant plans and policies.

Views of IPs

4.11.53. UKWIN in its RR [RR-012], amongst other concerns, stated it considered the methodologies and assumptions adopted by the Applicant for the needs and climate change assessments to be flawed and as such UKWIN dispute them.

4.11.54. Paul Hamilton in his RR [RR-009], amongst other concerns, questioned whether the Proposed Development would burn local refuse or refuse shipped in from around the country. He also had concerns that the Proposed Development would promote waste production, rather than reducing and recycling waste.

4.11.55. Philippa Roddis in her RR [RR-010] said her principal submissions would be in regard to carbon emissions, sustainability and community benefits.

4.11.56. No further subsequent submissions were received from UKWIN, Paul Hamilton or Philippa Roddis and, other than the submission of their RRs, they took no further part in the Examination.

4.11.57. No other concerns were raised by IPs in respect of the waste hierarchy and/ or fuel availability or the assessments carried out by the Applicant in relation to these matters.

Examination

4.11.58. NELC's LIR [REP1-018] acknowledges the NELC Planning Permission and the fact that it is virtually identical to the Proposed DCO Development. The Council also state that the Proposed Development would in principle accord with the policies contained in the NELLP and represents a key opportunity to reduce demand for waste to be land-filled, whilst promoting greater energy efficiency than the NELC Planning Permission using renewable sources. As such NELC consider the Development would accord with Policies 32 and 47 of the NELLP.

4.11.59. In addition to the above, in the completed SoCG [REP4-006] NELC and the Applicant agree on the need for the Proposed Development and the principle of the use. They agree NPS EN-1 and 'Our Waste, Our Resources' individually and together establish a substantial need for projects of the same type as the Proposed Development, and that the location of such developments are not directed by these documents (paragraph 5.1.7).

4.11.60. This SoCG [REP4-006] also agrees the Proposed Development would use processed residual waste otherwise sent to landfill, while recovering energy, complying with NELC Local Plan Strategic Objective (SO) SO10 (Minerals and Waste) (paragraph 5.1.8) and the principle of EfW use on this site would be consistent with the position recognised in the YHWPS, which recognises the twin regional and national role of the region's waste management facilities and the considerable flows of waste into and out of the region (paragraph 5.1.9).

4.11.61. Furthermore, NELC agree in the SoCG [REP4-006] that the Site is suitable for the proposed use for the same reasons set out in NELC's report relating to the NELC Planning Permission, including:

- alternative sites have been appropriately considered;
- the location is suitable against Policy 47 'Future sites for waste facilities', and would not affect sites safeguarded under Policy 48 'Safeguarding waste facilities and related infrastructure';

- the Proposed Development broadly supports Policy 32 'Energy and low carbon living'; and
- within the Local Plan the justification for Policy 49 'Restoration and aftercare (waste)' identifies that waste disposal through means such as landfill is the least desirable waste management option available.

4.11.62. As such I consider that the Applicant and NELC are in agreement in regard to the need for the Proposed Development and on the volume of waste that could be processed at both the NELC Planning Permission and Proposed Development, which are identical at a maximum of RDF throughput of 753,500 tpa. However, in the absence of an EP specific to the Proposed Development at this time, I consider it important and relevant to control the maximum fuel throughput of RDF at 753,500 tpa.

4.11.63. Whilst UKWIN and Paul Harrison expressed concerns/ objections to the Proposed Development, neither party provided a WR or took part in the remainder of the Examination.

4.11.64. No evidence has been submitted to the Examination, which would lead me to conclude that the Proposed Development would not accord with the waste hierarchy or that sufficient fuel, diverted from sources lower down the waste hierarchy, would not be available.

4.11.65. NPS EN-1 and NPS EN-3 state that there is a need for new generation capacity, including the sort being provided by the Proposed Development and, as required by NPS EN-1, I give substantial weight to the contribution that the Proposed Development would make to satisfying that need.

Conclusion as to Waste Hierarchy and Fuel Availability

4.11.66. I consider the Applicant has demonstrated the Proposed Development is in conformity with the waste hierarchy and that sufficient fuel is available as a result of diverting waste that currently goes to either landfill or abroad, which is an aim of the WRS.

4.12. AIR QUALITY AND EMISSIONS

Policy Considerations

4.12.1. Paragraph 4.10.2 of NPS EN-1 sets out the different functions of the planning and pollution control systems in relation to air quality matters. It confirms that the planning system is concerned with the development and use of land in the public interest and in improving the natural environment, public health and safety and amenity. Pollution control is concerned with the use of measures to prohibit or limit the releases of substances to the environment to the lowest practicable level.

4.12.2. As set out in paragraph 4.10.3 of NPS EN-1, the SoS is required to focus on whether the project itself is an acceptable use of the land, and on the impacts of that use, rather than the control of processes, emissions or discharges themselves. It also indicates that the SoS is entitled to

assume that the relevant pollution control and environmental regulatory regimes will be properly applied and enforced and that the SoS should seek to complement but not duplicate them.

4.12.3. Paragraph 5.2.1 of NPS EN-1 notes that infrastructure development can have adverse effects on air quality involving emissions to air which can lead to adverse impacts on health, protected species and habitats. Levels for pollutants in ambient air are set out in the Air Quality Strategy for England. NPS EN-1 also notes that emissions from combustion plants are generally released through exhaust stacks and therefore the design of stacks, particularly height, is the primary driver for the delivery of optimal dispersion of emissions.

4.12.4. The SoS should give air quality considerations substantial weight where a project would lead to a deterioration in air quality in an area, new breaches of national air quality limits or substantial changes in air quality levels even where no breaches occur. Paragraph 5.2.10 of NPS EN-1 advises that account must be taken of any relevant statutory air quality limits.

4.12.5. NPS EN-3 provides details on the potential impacts that are specific to EfW generating stations, including air quality and emissions.

4.12.6. NPS EN-3 states that CO_2 will be assessed against the requirements of NPS EN-1. Compliance with the Waste Incineration Directive (WID) (subsequently replaced by the Industrial Emissions Directive) and the Large Combustion Plant Directive is controlled through the EP regime by the EA. Paragraph 2.5.43 states that where a waste combustion facility meets the requirements of the WID and will not exceed local air quality standards the SoS should not regard the proposed waste generating station as having adverse impacts on health.

4.12.7. The NPPF at Paragraph 186 states that planning decisions should sustain and contribute to compliance with relevant limit values or national objectives for pollutants and the cumulative impacts from individual sites in local areas.

4.12.8. SO3 (Economy) and SO10 (Minerals and waste), as well as Policies 7 (Employment allocations) 46 (Restoration and aftercare (waste) and 47 (Future requirements for waste facilities)), as set out in the NELLP are of relevance to the assessment of impacts of the Proposed Development. The Site is allocated as an 'Existing Employment Site' within the NELLP and surrounded by areas allocated as 'Employment Land'. Policy 47 establishes the principles for the location and operation of waste facilities within North East Lincolnshire and identifies the way developments should be located, designed and operated to minimise impacts and identifies the benefits of co-locating waste facilities with developments that could make use of the output of a waste facility, such as a district heating scheme, or industrial process.

The Applicant's Case

4.12.9. The Applicant's air quality assessment can be found in ES Chapter 7 (Air Quality) [APP-041] and ES Chapter 17 (Cumulative and Combined Effects) [APP-051]. These chapters consider the potential air quality impacts from the Proposed Development on human health and ecosystems during construction, operation and decommissioning, as well as the cumulative effects of emissions when taken with other committed developments in the area.

4.12.10. Chapter 7 was accompanied by ES Figures 7.1 (Air Quality Receptors and Diffusion Tube Monitoring Locations) [APP-064], Figure 7.2 (Ecological Air Quality Receptor Locations) [APP-065], Figure 7.3 (Annual Mean Maximum nitrogen dioxide (NO_2) Process Contribution - 2015 Meteorological Year) [APP-066] and Figure 7.4 (Short Term Maximum NO_2 Process Contribution - 2014 Meteorological Year) [APP-067]. It is also supported by Appendices 7A (Air Quality Dispersion Modelling Assessment) [APP-108] and 7B (Human Health Risk Assessment) [APP-109] in ES Volume III and Figure 17.1 (Cumulative Developments (Short List)) of the ES Volume II [APP-100].

4.12.11. The air quality assessment identifies key pollutants of concern resulting from construction and operation of the Proposed Development and that have potentially elevated background concentrations from other sources. These are NOx, carbon monoxide, ammonia and PM* (PM_{10} and $PM_{2.5}$).

4.12.12. The documentation goes on to conclude that emissions from construction activities and construction road traffic on air quality, and the impact of emissions on human health are considered to be negligible or not significant. However, the document does identify air quality impacts on the SPA, Ramsar site and SAC arising from NOx concentrations and acid deposition resulting from the Proposed Development in combination with other plans and projects during operation. I consider these matters further in Section 4.13 and Chapters 5 and 6 below.

4.12.13. Regardless of the above, the assessments on air quality indicate that any residual impacts can be controlled through the use of embedded mitigation in the CEMP. A list of the key elements of the CEMP can be found in the Outline CEMP [APP-107] that accompanied the application and includes the use of best practice measures, such as the adoption of a 'considerate constructors scheme'.

4.12.14. The CEMP and appropriate best practice measures would be secured through Requirement 15 of the dDCO [REP7-003]. Similarly, Requirement 33 of the dDCO requires the submission and agreement of a Decommissioning Plan and a Decommissioning Environmental Management Plan, which are intended to help ensure that effects on air quality can be similarly controlled and/ or mitigated during decommissioning.

Views of IPs

4.12.15. NE raised concerns in its RR [RR-008] in regard to the air quality impacts on the SPA, Ramsar site and SAC arising from NOx concentrations and

acid deposition in combination with other plans and projects during operation. However, I consider these matters further in Section 4.13 and Chapters 5 and 6 below.

4.12.16. The RR of Paul Hamilton [RR-009] raises concern about $PM_{2.5}$ and smaller, the related health impacts on the respiratory system and potential related long-term health problems and the ability for environmental monitoring of such PM*. He states he is not aware of any systems capable of continuous monitoring of such particles. Despite raising these concerns no further submissions have been received from Mr Hamilton and his concerns remained unqualified at the close of the Examination.

4.12.17. NELC in its LIR considered the Proposed Development to accord with policy 5 of the NELLP and noted that the Proposed Development would have almost identical impacts on these elements as the NELC Planning Permission. It considered that both developments had been assessed by its Environmental Protection Team and, subject to the requirements in the dDCO were deemed acceptable by that Team. NELC confirmed that this includes air quality which has been modelled (including cumulative impacts from other development) and have been found to remain within acceptable environmental standards ensuring there would be no significant impacts on the area, ecology, nor to neighbours.

4.12.18. Additionally, NELC noted that an environmental permit would be required for the Proposed Development and has been granted by the EA in relation to the NELC Planning Permission. NELC also highlighted the lack of an objection from the EA on such matters and that the emissions and the overall efficiency of the plant would be governed under the EP required to operate the plant under a separate legislative regime.

4.12.19. No other IPs raised concerns in regard to air quality or the assessments carried out by the Applicant in relation to this matter.

Examination

4.12.20. In ExQ1 [PD-006], I asked the Applicant questions around air quality (Q2.0.2 - Q2.0.3). These were intended to seek clarification on various matters, including prevailing wind direction and whether the stack heights would be specified in the EP and whether a Requirement to ensure the flue gases are emitted with a velocity of at least 15 m/s should be included in the DCO.

4.12.21. In its response to ExQ1 [REP2-008], the Applicant confirmed the prevailing wind direction is from the south-west and pointed to Figure 7A.2 in ES Appendix 7A: Air Quality Dispersion Modelling Assessment [APP-108], which shows the wind roses for the five years of meteorological data used in the air quality assessment (2013-2017). This confirms that the wind roses show the most frequent wind direction to be from the south-west in all years.

4.12.22. In addition to the above, the Applicant confirmed the stack height and maximum stack diameter, which is secured by Requirement 3 of the

dDCO, has been set to 102m AOD and 3m maximum diameter per combustions stream. It also pointed out the EP will include emissions limits, providing ultimate control regarding air emissions and that whilst the EP does not specify a minimum stack velocity, it does require the plant to operate in accordance with the permit application parameters and also requires the operator to demonstrate that adequate dispersion of emissions has occurred from the plant. On this basis, the Applicant argues that no additional requirement or control is needed for stack velocities or stack heights within the DCO.

4.12.23. The Applicant also refers to the signed SoCG between the Applicant and the EA [REP1-001], where the EA agreed with the approach taken, and that the EP provides adequate control on operational air emissions.

4.12.24. However, the ES Chapter on Air Quality and Emissions relies on the EP specific to the Proposed Development, which is yet to be granted by the EA, to control the maximum fuel throughput of RDF at 753,500 tpa. Therefore, in the absence of an EP specific to the Proposed Development, I consider it important and relevant to control the maximum fuel throughput of RDF by specifying the maximum fuel throughput in the DCO, should it be made. This would ensure the development would accord with the findings of the ES. Accordingly, such a control is specified in the rDCO at Schedule 1 (Authorised Development).

4.12.25. In ExQ2 [PD-010], I asked for a copy of the EA's Internal Briefing Note referred to by the Applicant in its Document entitled "Applicant's comments on Relevant Representations" [REP1-008] (paragraph 8.1.6). I also asked the Applicant and the EA whether any new monitoring methods and technologies have been developed, validated and standardised for use in regard to monitoring EfW plants, especially in regard to the monitoring of PM_* of PM_{10} µg/m^3 and $PM_{2.5}$ µg/m^3 emissions, as referred to in the EA briefing note.

4.12.26. The Applicant responded that it was not aware of any new monitoring methods or technologies that have been developed, validated, or standardised for use in regard to monitoring air emissions from EfW plants. Irrespective of this it advised that in carrying out the dispersion modelling assessment of emissions to accompany the EP application, a precautionary approach was undertaken by assuming that 100% of the total allowable PM_* emission occurs as both PM_{10} and $PM_{2.5}$ (ie all the total predicted change in PM_* concentrations) is assessed separately against the PM_{10} and $PM_{2.5}$ environmental standards. The Applicant considers that this demonstrates that even with this conservative assumption, particulate effects from the Proposed Development emissions are negligible.

4.12.27. I am satisfied that the Applicant's responses provide the necessary clarification and consider there are no outstanding matters in respect of air quality or emissions that need to be addressed.

Conclusions on Air Quality and Emissions

4.12.28. I am satisfied that there would be no significant air quality and emissions effects caused from construction and decommissioning activities of the Proposed Development. Emissions during the Proposed Development's operation would be controlled by specifying the fuel throughput, as detailed in Schedule 1 of the rDCO. Emissions during operation will also be controlled by the EP regime and, subject to rDCO Requirement 3 (Approved details…), which specifies minimum stack heights and maximum stack diameters, as attached to this report. With such controls in place, I am satisfied that there would be no significant air quality and emissions effects during operation.

4.12.29. I am also satisfied that the Proposed Development would accord with the relevant NPSs and that Requirement 15 (CEMP) and Requirement 33 (Decommissioning) are adequately secured in the rDCO and would ensure appropriate mitigation is carried out. With the above controls, including the control on maximum fuel throughput, air quality and emissions do not affect the planning balance and the air quality and emission effects are a neutral consideration.

4.13. BIODIVERSITY AND NATURE CONSERVATION

4.13.1. The site is located approximately 175m to the west of the Humber Estuary SAC, SPA and Ramsar Site all of which support internationally important populations of wintering birds. These sites are of international conservation value. The site is also located close to the Humber Estuary SSSI, which is of national conservation value, as well as recognised as a LWS. Further details can be found in Chapter 10 of the ES [APP-044].

Policy Considerations

4.13.2. Section 4.3 of NPS EN-1 sets out the policy considerations relevant to HRA. These are considered in Chapter 5 of this report.

4.13.3. NPS EN-1 at paragraph 5.3.3 sets out the importance of assessing, as part of the ES, the effects of the Proposed Development on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity.

4.13.4. Furthermore, paragraph 5.3.7 states that, as a general principle, development should aim to avoid significant harm to biodiversity and geological conservation interests including through mitigation. It also requires the Applicant to show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.

4.13.5. Paragraph 5.3.8 advises that the SoS, in taking decisions, should ensure that appropriate weight is attached to designated sites of international, national and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity and geological interests within the wider environment.

4.13.6. Additional policy guidance can be found in the NPPF which espouses a commitment to improving biodiversity, minimising impacts on it and supports development that integrates improved biodiversity as part of its design (paragraph 180d)). Likewise, local planning policy seeks to protect and enhance biodiversity and ensure ecological enhancement through good design.

4.13.7. Policies 6 (Infrastructure), 9 (Habitat Mitigation – South Humber Bank) and 41 (Biodiversity and Geodiversity) of the NELLP are of relevance to the provision of green infrastructure, including the creation, protection, enhancement and management of sites of biodiversity and geodiversity.

4.13.8. NELLP Policy 6 is NELC's policy related to infrastructure provision and provides the mechanism for ensuring that growth is delivered together with appropriate infrastructure.

4.13.9. NELLP Policy 9 relates to ecological mitigation on the South Humber Bank and supports a strategic approach to such provision against which all developers within the mitigation zone will be required to make appropriate contributions in lieu of meeting site specific requirements. It sets the thresholds and triggers for developer contributions, together with the mechanisms for determining the scale of contribution to be made. The mitigation zone is identified in the NELLP policies map.

4.13.10. NELLP Policy 41 (Biodiversity and Geodiversity) sets out a strategic approach which positively plans for the creation, protection, enhancement and management of sites of biodiversity and geodiversity. It acknowledges the hierarchy of international, national and locally designated sites and refers specifically to the designation process for local sites, linked to processes of monitoring and review.

Applicant's Case

4.13.11. Chapter 10 of the ES [APP-044] sets out the study areas in Table 10.2 (Desk study area and data sources), the significance criteria and describes the assessment methodology used. In addition, a Biodiversity Strategy (Version 2.0) [REP6-004] has been submitted, which considers measures to avoid impacts on the South Humber Estuary SPA/ Ramsar, as well as mitigation to avoid impacts on wintering and breeding birds.

4.13.12. The assessment considers the potential effects of the Proposed Development on ecological features, as well as: Statutory International Nature Conservation Designations within 10 km of the site (including the SAC, SPA and Ramsar sites); Statutory National and Local Nature Conservation Designations within 2 km (including the Humber Estuary SSSI); Non-Statutory Nature Conservation Designations within 2 km of the site, which consist of four LWS (Healing Cress Beds Stallingborough LWS; Sweedale Croft Drain LWS; Laporte Road Brownfield Site LWS; and Fish Ponds to the West of Power Station, Stallingborough LWS); habitat; protected and notable species (including breeding birds; wintering birds (on Site and in adjacent habitats); reptiles; water vole; otter; and aquatic invertebrates).

4.13.13. It considers that the design process for the Proposed Development has included consideration of ecological constraints and has incorporated, where possible, measures to reduce the potential for adverse ecological effects, in accordance with the mitigation hierarchy and relevant planning policy. The measures identified and adopted, during the construction, operation and decommissioning phases of the Proposed Development, include those that are inherent to the design of the Proposed Development, and those that can realistically be expected to be applied as part of construction environmental best practice, or as a result of legislative requirements.

4.13.14. The assessment identifies no significant adverse effects during construction on ecological receptors from air quality or noise and vibration disturbance on waterbirds feeding, roosting or loafing on the Pyewipe mudflats within the Humber Estuary SPA/ Ramsar. In relation to the field to the south of the Proposed Development that is considered to be functionally linked to the Humber Estuary SPA/ Ramsar, the assessment considers that mitigation controlling piling will sufficiently reduce the effects of noise and vibration to within ambient levels. Residual effects are therefore predicted to be minor adverse and not significant in this location.

4.13.15. In terms of the loss of functionally linked habitat to the Humber Estuary SPA/ Ramsar within the footprint of the Proposed Development, the Applicant proposes to address this through the delivery of alternative habitat for feeding, roosting and loafing birds, via the SHG strategic mitigation pathway in accordance with Policy 9 of the NELLP. Such mitigation, together with embedded mitigation to control surface water pollution during construction and operation is considered by the Applicant to mean there will be no adverse effects on the coastal and marine habitats of the Humber Estuary SAC/ SPA/ Ramsar/ SSSI.

4.13.16. The Applicant considers that mitigation for noise/ vibration and visual effects during construction will ensure that there is no disturbance to waterbirds in adjacent fields that are functionally linked to the Humber SPA/ Ramsar. The Applicant also refers to its report to inform HRA (HRA Signposting Report [APP-027]) for the Proposed Development which concluded that there will be no adverse effects on the integrity of the Humber Estuary SAC/ SPA/ Ramsar.

4.13.17. In terms of surface water pollution the assessment considers, with embedded mitigation and compliance with a CEMP during construction, the risk of pollution to the surrounding ditch network will be minimal and residual effects on the Humber Estuary will be neutral and not significant.

4.13.18. With regard to the residual effects on semi-improved grasslands, the assessment considers the impacts of construction to be minor adverse and not significant. Approximately 1 hectare (ha) of species-rich grassland will be created and managed in the ecological mitigation and enhancement area to the west of the SHBPS, to mitigate for losses of this habitat within the MDA. The area will be planted with a species-rich wildflower/ grassland seed mix and will aim to improve the biodiversity of

the grassland habitat within the Site, and be of higher ecological value than the area of semi-improved grassland habitat lost to the Proposed Development. The assessment recognises there is insufficient space within the Site boundary for like-for-like replacement and that there will therefore be a net loss of this habitat within the site, although the creation and management of a more species-rich grassland than that lost will partially offset any impacts on the overall biodiversity of the site. The assessment considers no significant residual adverse effects on this habitat, as a result of the Proposed Development, are anticipated.

4.13.19. In terms of residual effects of the construction of the development on water voles, the assessment considers the majority of water vole habitats identified on the site are outside the MDA boundary and will therefore not be directly affected. Embedded mitigation to control surface water run-off will ensure that the ditch habitats are not damaged during construction works. Additionally, mitigation to address the low risk of killing/ injury during works to install a culvert on Ditch 3 will provide legislative compliance for this species in respect of the Wildlife and Countryside Act 1981 (WCA81). As such no significant residual effects on water vole are anticipated.

4.13.20. During operation of the development, the Applicant considers that there will be no significant effects on ecology features and will not give rise to any significant adverse operational effects on ecology features including the Humber Estuary SAC/ SPA/ Ramsar/ SSSI.

4.13.21. Finally, habitats within the MDA were found to support breeding birds, water vole and otter. Additionally, the Applicant has assumed the MDA also support grass snake, due to the suitability of the habitat. It advise that mitigation for these species will be employed during construction to avoid killing/ injury and to ensure legislative compliance in respect of the WCA81. As a result, the assessment predicted that there will be no significant residual adverse effects on these species.

4.13.22. Overall, the Applicant considers that no significant residual adverse effects on habitats, as a result of the Proposed Development, are anticipated.

Views of IPs

4.13.23. NE disputed a number of the Applicant's conclusions set out above in its RR [RR-008]. Whilst NE advised that in its view there was no fundamental reason of principle why the Proposed Development should not be permitted, it considered that the Applicant had not provided sufficient evidence to establish that there would be no adverse effects in terms of the following matters:

- noise disturbance to SPA and Ramsar birds using the Humber Estuary foreshore (Pyewipe mudflats) from piling during construction;
- noise and vibratory disturbance to SPA and Ramsar birds using neighbouring functionally-linked land (fields to the north and south of

the application site) from piling during construction, and operation; and

- and air quality impacts on the SPA, Ramsar site and SAC arising from NOx concentrations and acid deposition in combination with other plans and projects during operation.

4.13.24. Despite the above concerns, NE stated in its RR [RR-008] that on the basis of the relevant proposed mitigation was secured in the DCO it was satisfied that the Proposed Development was not likely to result in significant/ adverse effects arising from:

- water quality, arising from foul water drainage during construction and operation on the Humber Estuary SAC, SPA or Ramsar site. This was on the basis that an on-site package treatment plant was the Applicant's preferred drainage option. NE were of the view that further consideration would be needed as part of the HRA if the Applicant decided to implement an alternative drainage option;
- air quality, arising from the project alone during construction and operation on the Humber Estuary SAC or Ramsar site;
- direct loss of functionally-linked land during construction and operation on the Humber Estuary SPA or Ramsar site;
- visual disturbance to SPA/ Ramsar site birds using the neighbouring functionally-linked land during construction and operation on the Humber Estuary SPA or Ramsar site; and
- lighting disturbance to SPA/ Ramsar site birds using the neighbouring functionally-linked land during construction and operation on the Humber Estuary SPA or Ramsar site.

4.13.25. NE also considered that the relevant mitigation was contained in dDCO Requirements 9 (Lighting scheme), 11 (Biodiversity protection), 12 (Biodiversity mitigation and enhancement) and 15 (CEMP). In addition, NE considered that surface water and foul water drainage must be undertaken in accordance with the principles set out in the Outline Drainage Strategy (ODS) [APP-137]. This is secured in the dDCO at Requirements 13 (Surface Water Drainage) and 14 (Foul Water Drainage).

4.13.26. NELC in its LIR [REP1-018] noted the proximity of the site to the Humber Estuary's SSSI, SAC, SPA and Ramsar site. It also noted LWSs and Sites of Nature Conservation Importance (SNCIs) within the area and that the site itself has some, if limited, ecological value but is still functionally related to the estuary and birds. NELC confirmed the scheme was assessed and that NELC's ecologist had not objected. Furthermore, it noted that NE indicated that there is no fundamental reason in principle why the Proposed Development should not be permitted, but that further information was required to ensure that there would be no adverse impacts on the Humber Estuary and that the Applicant and NE were in discussions with a view to resolving any remaining concerns

4.13.27. NELC's LIR [REP1-018] also notes NE raised questions with respect to air quality impacts at LWS and pointed out that discussions between the Applicant and NELC's ecologist were on-going with respect to this issue. Additionally, NELC considered that subject to various mitigation works

outlined within the draft DCO, the ecological mitigation proposed to be secured in the Development Consent Obligation [APP-032] (as revised by the Draft Development Consent Obligation [REP2-011] and completed in the DoV [REP6-009]) the Proposed Development would accord with Policies 6, 9 and 41 of the NELLP.

4.13.28. In terms of ecology NELC in the SoCG completed with the Applicant [REP4-006] confirm that the Proposed Development's impacts will be the same as the NELC Planning Permission and that subject to the securing of appropriate mitigation and the imposition of requirements there would be no additional effects on ecology. It also agreed that the Proposed Development will not result in any significant effects on local designated areas subject to appropriate mitigation secured through Requirements 11, 12 and 17 in the dDCO.

4.13.29. No other IPs raised concerns in regard to Ecology or the assessments carried out by the Applicant in relation to this biodiversity or nature conservation.

Examination

4.13.30. Following the publication of the ExA's REIS, the Applicant submitted an updated Biodiversity Strategy (Revision 2.0) [REP6-004], which supersedes the Biodiversity Strategy (Revision 1.0) [APP-030].

4.13.31. In ExQ1 [PD-006], I asked the Applicant a number of questions in relation to ecology. These included questions seeking clarification on: additional information sought by NE in terms of demonstrating LSEs can be ruled out; potential noise, including noise and piling impacts on wintering birds using the functionally linked fields; assumptions made, survey search radii and how they were chosen; qualifications of ecologists who undertook the surveys; the piling technique to be used and whether that technique has been assessed for LSEs; the potential impacts on air quality on LWS; the choice of foul drainage disposal; the indicative lighting strategy; enhancement measures proposed; and why only ecological receptors within 50m of the nearest construction activity were assessed in terms of construction dust and non-road mobile machinery emissions. Additionally, I sought a noise contour map, as recommended by NE in its RR [RR-008].

4.13.32. Further discussions between the Applicant and NE were held. These discussions, as well as further correspondence received during the Examination in relation to ExQ1, are set out in Chapter 5 (Findings and conclusions in relation to Habitat Regulations Assessment) of this report and are not set out here in detail in the interests of avoiding repetition. However, I note that NE's concerns were ultimately resolved.

4.13.33. The Applicant submitted an updated signed SoCG with NE for DL2 [REP2-003] with all matters agreed. NE confirmed at DL2 that the Applicant had provided it with further information in response to its RR and that as set out in the updated SoCG it had no outstanding queries and all relevant matters had been agreed.

4.13.34. Within the SoCG completed with NE [REP2-003], which was agreed subsequent to its RR, it was agreed that operational noise would not result in significant effects. Furthermore, in relation to construction noise from piling disturbing the SPA/ Ramsar birds using the Humber foreshore, NE noted that the Applicant had used significance criteria for disturbance to birds based on peak noise levels of 75dB LAmax being classified as a minor adverse impact and therefore not determined to be a LSE on bird behaviour.

4.13.35. Appendix 9 [REP2-010] of the Applicant's response to ExQ1 [PD-006] provided a more detailed response to NE's concerns in relation to noise and the request for evidence of the availability of undisturbed habitat to support the Applicant's argument that there were plenty of alternative foraging/ roosting areas if birds were displaced by noise and vibration impacts during construction and operation. Figures A to L of the Appendix contain LAeq and LAmax noise contour maps for drop hammer and CFA piling, as requested in ExQ1 (Question 10.0.35).

4.13.36. In terms of: proposed piling noise levels and operational noise levels attenuating across the Humber estuary foreshore and associated functionally-linked land; increase in noise levels that could disturb bird species using the Pyewipe mudflats; and noise and vibratory disturbance to SPA/ Ramsar birds using neighbouring functionally-linked land to the north and south of the application site during construction and operation, NE, in its response to ExQ1 [REP2-020], stated that it had clarified with the Applicant that in line with the mitigation hierarchy noisy works should be avoided during sensitive time periods for overwintering SPA and Ramsar bird species, where possible, but acknowledged that the Applicant wished to provide the contractors with as much flexibility as possible to work during the winter.

4.13.37. NE agreed that the alternative option of the avoidance of impact piling two hours either side of high tide during the wintering period (September to March inclusive) and any residual short-term disturbance impacts on overwintering birds would not result in adverse effects on the integrity of the Humber Estuary SPA and Ramsar site. This was provided that the piling works would not take longer than one month to complete, as suggested in the HRAR and other documents, and the mitigation measures were appropriately secured.

4.13.38. A Position Statement completed between the Applicant and NELC [REP6-008], confirmed that NELC is content with the updated definition of the Biodiversity Strategy set out in the dDCO, submitted in advance of DL6, the purpose of which was to link dDCO Requirement 17 (Piling) with the revision of the Biodiversity Strategy (Revision 2.0).

4.13.39. Having considered the evidence submitted regarding impacts on SPA and Ramsar bird species using the Pyewipe mudflats and functionally-linked land and bearing in mind dDCO Requirement 17, I consider that the Proposed Development would not result in noise and vibratory disturbance, either due to piling during construction or during operation. I am satisfied that the proposed measures are appropriate and would

effectively mitigate the predicted effects, and that they are properly secured in the dDCO.

4.13.40. In relation to air quality impacts, NE in its response to ExQ1 [REP2-020] agreed the Proposed Development would not result in adverse effects from in-combination effects from NOx and acid deposition.

4.13.41. I consider that the Applicant's approach to the assessment of in combination effects from NOx and acid deposition, as set out in the HRAR, ES Chapter 17 and further explained in the Applicant's comments on the RRs [REP1-008], is justified, and agree that the Proposed Development would not result in adverse effects on ecology/ biodiversity, due to the predicted NOx and acid deposition, including effects in combination with other plans or projects.

4.13.42. In relation to the direct loss of functionally-linked land, reference to the SHG Mitigation Strategy, contained in Policy 9 of the NELLP, designed to mitigate impacts associated with the loss of land functionally linked to the Humber Estuary SPA and Ramsar site. In NELC's LIR [REP1-018] it referred to the need for a contribution to the SHG Mitigation Strategy from the Applicant totalling £105,378 (based on site area). The Council described the SHG Mitigation Strategy as a strategic approach to promoting economic development on the South Humber Bank whilst maintaining the area's functional relationship with the estuary through the creation of a network of smaller sites of wetland/ grass habitat creation to mitigate the impact on overwintering birds from the estuary. NELC stated that the contribution secured by the existing s106 agreement and proposed variation related to the Cress Marsh wetland site should be secured prior to the granting of the DCO, noting that this was the Applicant's intention. The Council confirmed that the proposed ecological mitigation measures, including measures contained in the SHG Mitigation Strategy, were identical to those agreed for the NELC Planning Permission and deemed to accord with Policies 6, 9 and 41 of the NELLP

4.13.43. NE consider this to be an acceptable approach to mitigate for the loss of waterbird-supporting habitat and are satisfied in regard to the Applicant's commitment to a financial contribution towards the SHG strategic mitigation land. The Applicant submitted the executed s106 DoV [REP6-009] at DL6, that does not bind the Mortgagee. Whilst it is acknowledged that a confirmatory deed, which intended to bind the Mortgagee to the DoV, was attached at Appendix 1 of the DoV, this was unsigned and undated.

4.13.44. A DoV [REP6-009), was submitted at DL6 (23 April 2021). However, the DoV was completed without the Mortgagee being bound to it. The Applicant in their covering letter submitted at DL6 stated: *"A Section 106 deed of variation has been signed by NELC and by the Applicant and completed, dated 19 April 2021… As well as carrying over to the DCO the substantive provisions of the existing Section 106 agreement for the Consented Development* [NELC Planning Permission]*, this stipulates that a notice may not be issued pursuant to Article 5 of the DCO (i.e. preventing development) until a confirmatory deed with the mortgagee*

has been signed (or evidence provided that there is no longer a mortgagee)".

4.13.45. My R17 letter [PD-013] dated 28 April 2021 was issued, in part, as a result of the Mortgagee not being bound to the DoV and sought views of the Applicant and NELC in regard to:

- why the interests of the Mortgagee, Lloyds Bank plc, were not bound to the Original Deed completed by the parties as part of the planning permission granted by NELC under its reference DC/1070/18/FUL. The parties were also asked to comment on the implications of this fact in regard to the DoV [REP6-009] submitted at DL6, which took effect on the 19th April 2021, and whether the Mortgagee would be bound by the DoV;
- whether the confirmatory deed, attached to the DoV at Appendix A, would achieve its intention. In consideration of these matters the Applicant and NELC were asked for legal submissions by DL7 (5 May 2021), on the enforceability of the s106 agreement (as varied) on the Mortgagee, if it took possession: (a) if the DCO is granted; and (b) if the DCO were to be refused. These parties were also asked to suggest any alternative ways to secure the habitats mitigation, should a s106 agreement which binds the Mortgagee to the Original Deed not be signed by the Mortgagee by the close of the Examination .

4.13.46. In response to my R17 letter, dated 28 April 2021, the Applicant [REP7-007] and NELC [REP7-010] explained that due to the use of out of date Land Registry information, Lloyds Bank plc's interest in the land was not identified and therefore only the parties included in that Land Registry information had completed the Original Deed. Both parties stated that the exclusion of the Mortgagee was not deliberate. The Applicant also explained that Lloyds Bank plc consent to be party to the DoV was sought, but that it had not been possible to achieve that within the course of the Examination. This position had not change by the close of the Examination.

4.13.47. As such the Applicant proposed an approach which required a confirmatory deed, which was appended to the DoV, to be completed by the Mortgagee that acknowledges the DoV has been entered into with its consent. The Applicant pointed to Clause 4 of the DoV, which prevents implementation of the DCO or the issuing of a notice pursuant to Article 5 until either Lloyds Bank plc has entered into the confirmatory deed (to give its consent to the DoV) or Lloyds Bank plc's charge has been discharged.

4.13.48. As such, the Applicant considered that if the charge remains in place, development under the DCO could not take place until Lloyds Bank plc are joined to the DoV through the confirmatory deed, and NELC would have enforcement powers under the TCPA1990 available to ensure that position is achieved. Should Lloyds Bank plc's charge on the land have been discharged by the time the DCO is implemented, then its agreement to the confirmatory deed would no longer be relevant to the site nor to the obligations in the Original Deed.

4.13.49. Furthermore, the Applicant considers that if the Mortgagee took possession of the land, pursuant to its charge prior to development commencing under the DCO, then its interest would not be bound by the Original Deed. However, it considered that this scenario is relatively unlikely, but is a possibility, and there are two ways in which the risk of development taking place free of the development consent obligations could be avoided. These would be through the existing provisions of the dDCO, and/ or the inclusion of additional provisions.

4.13.50. In terms of existing provisions of the dDCO the Applicant points to the fact that only it (EP Waste Management Ltd) would have the benefit of the DCO, as the defined 'undertaker'. Unlike a planning permission, the DCO does not run with the land. Whilst there is a power to transfer the benefit of the DCO, this would require the consent of the SoS in many cases, and in all cases can only be done by written agreement with the Applicant. Therefore, even if Lloyds Bank plc did take possession of the land, it would only be in a position to lawfully carry out works pursuant to the DCO if the benefit of it had been transferred to it by the Applicant. As Lloyds Bank plc does not come within any of the exceptions in Article 9(4)(a) to (c) of the DCO, the consent of the SoS would be required for this to occur. Additionally, if the Mortgagee took possession of the site and purported to carry out works pursuant to the DCO without having the benefit of the DCO, it would be committing a criminal offence and would be liable to enforcement under s160 of the PA2008 ('Development without development consent'). Such provisions would be enforceable by NELC, as the Local Planning Authority.

4.13.51. In terms of potential additional provisions, the Applicant within the dDCO [REP7-003] included Article 5(12), which if included within the final DCO must be complied with prior to serving an Article 5 notice (which itself must be done before commencing works under the DCO), and requires that one of the following to have taken place, to the satisfaction of the relevant planning authority:

- The charge is discharged;
- Lloyds Bank plc provides its consent to the planning/ development consent obligations binding the land; or
- If Lloyds Bank plc has taken possession of land within the Order Limits, then anyone who has an interest in the land at the relevant time must bind its interest to the planning obligations/ development consent obligations.

The SoS is able to incorporate such a provision within Article 5 of the DCO by virtue of s120(3) and/ or s120(4) of the PA2008.

4.13.52. Additionally, the same powers of the PA2008 could be used by the SoS to directly impose an obligation to pay the South Humber Gateway (SHG) mitigation contribution (referred to in the Original s106 agreement as the 'Habitat Contribution'). Such an obligation would need to be phrased negatively, preventing construction of Work No. 1 starting until the SHG Mitigation Contribution has been paid to the relevant planning authority, matching the terms of the S106 agreement (as now varied).

4.13.53. In response to my R17 letter [PD-013] dated 28 April 2021, NELC [REP7-010] advised that it supported the approach set out by the Applicant, as outlined above, and acknowledge that the Applicant has sought to provide a Confirmatory Deed, as appended to the DoV, which when signed would bind Lloyds Bank plc to the DoV. Additionally, NELC confirmed that it is content that further security is provided through the DoV preventing the implementation of the DCO or service of a Notice pursuant to Article 5 until either:

- Lloyds Bank plc has entered into the confirmatory deed (to give consent to the DoV); or
- it is confirmed that Lloyds Bank plc's charge has been discharged.

4.13.54. NELC also confirmed that it considers enforcement powers under the TCPA1990 are available to it to ensure these provisions are complied with in the event that Lloyds Bank plc took over the site and developed without adherence to the provisions of the DoV, due to the signing of the Confirmatory Deed. In response to the Applicant's suggestions regarding the existing provisions in the DCO, NELC confirmed it had discussed the response of the Applicant to my questions, through various drafts, and support the Applicants current approach outlined.

4.13.55. In terms of 'Potential additional provisions', NELC have advised that the Applicant has shared the revised draft of Article 5, in particular, Article 5(12) with it, and that one of three actions would be required to be completed and confirmed by the NELC, as Local Planning Authority, before the DCO can be activated. As such the Council considered that these amendments would bind Lloyds Bank plc, were it to retain its charge, to the consent obligations before the Proposed Development under the DCO could commence through the service of a notice on NELC.

4.13.56. Despite the responses of both the Applicant [REP7-007] and NELC [REP7-010] in relation to concerns raised by me in regard to the submitted Deed of Variation (DoV), I consider there remains a risk, albeit small, that the mortgagee could take possession of the property and sell to a third party free from the obligations of the s106 agreement (the requirement to pay the SHG mitigation contribution (referred to in the Original s106 agreement as the 'Habitat Contribution')). As such, I consider the imposition of an additional Requirement (See Requirement 38 in the rDCO at Appendix D) to be the clearest, neatest and safest way to secure payment of the SHG mitigation contribution (the Habitat Contribution), which is essential to mitigating the effect of the Proposed Development on the Humber Estuary SPA and Ramsar site and is critical in enabling the SoS to positively conclude an appropriate assessment (AA) required to be undertaken by the Conservation of Habitats and Species Regulations 2017 (as amended) (The Habitat Regulations).

4.13.57. I consider exceptional circumstances that justify the use of a negatively worded Requirement exist. Additionally, I consider such a Requirement to be necessary; relevant to planning; relevant to the Proposed Development to be granted by the DCO; enforceable; precise; and

reasonable in all other respects. The exceptional circumstances I refer to above are:

- the securing of the SHG mitigation contribution (referred to in the Original s106 agreement as the 'Habitat Contribution') is essential in regard to mitigating the impact of the Proposed Development on the adjacent designated National Site Network and Ramsar site and in regard to enabling the SoS, as the competent authority, to positively conclude an AA required to be undertaken by The Habitats Regulations;
- NELC have previously failed to bind the interests of the mortgagee to the terms of the original s106 agreement, completed between NELC and the Applicant, when NELC granted Planning Permission for the NELC Planning Permission. As such despite the submission of a DoV, with an appended but unsigned confirmatory deed, I consider there remains a risk, albeit small, that the mortgagee could take possession of the property and sell to a third party free from the obligation of the s106 agreement (the requirement to pay the SHG mitigation contribution (referred to in the Original s106 agreement as the 'Habitat Contribution')).
- The Applicant has failed to adequately satisfy me in regard to the risk mentioned above and that without the imposition of such a Requirement the SoS, as the competent authority, would not be able to positively conclude an AA as required to be undertaken by the Habitat Regulations.

4.13.58. I consider this is clear evidence that the delivery of the Proposed Development would otherwise be at serious risk without the imposition of the Requirement referred to in the preceding paragraph.

4.13.59. In consideration of the above, I am satisfied all ecological, biodiversity and nature conservation concerns raised by IPs have been adequately addressed during the Examination, subject to:

- Requirements 9, 11, 12, 14, 15, and 17 of the rDCO (as set out in the rDCO attached at Appendix D of this report); and
- the imposition of an additional Requirement (Requirement 38) (as set out in the rDCO attached at Appendix D of this report), which secures the SHG mitigation contribution, originally agreed to and secured through the s106 agreement attached to the NELC Planning Permission, being paid to the relevant planning authority prior to the commencement of the Proposed Development. (Note: The original s106 agreement referred to the SHG mitigation contribution as the 'Habitat Contribution').

Conclusions on Biodiversity and Nature Conservation

4.13.60. Given the evidence presented, subject to the Requirements and additional Requirement referred to in the preceding paragraph being secured in the DCO, I consider that NE's concerns regarding ecological effects have been adequately dealt with by the Applicant; and the ecological, biodiversity and nature conservation issues have been

adequately assessed and that the requirements of NPS EN-1 are met. As such the ecological, biodiversity and nature conservation effects are a neutral consideration in the planning balance.

4.14. LANDSCAPE AND VISUAL EFFECTS

4.14.1. The Site is not located in any national or regional designation for landscape protection. It falls within an area characterised by open, low lying, flat landscape with open views. Its immediate locality contains large scale structures and buildings, together with ancillary structures (including overhead electrical cables), which combine to significantly degrade the surrounding rural landscape character. Further details on the Site itself and the surrounding area can be found in Chapter 3 of the ES [APP-037].

Policy Considerations

4.14.2. Paragraph 5.9.1 of NPS EN-1 notes that the landscape and visual effects of energy projects will vary on a case by case basis according to the type of development, its location and the landscape setting of the Proposed Development. Exhaust stacks and their plumes are described as having the most obvious impact on landscape and visual amenity for thermal combustion generating stations. Paragraph 5.9.5 requires the Applicant to carry out a landscape and visual assessment.

4.14.3. NPS EN-1 notes that virtually all nationally significant energy infrastructure projects will have effects on the landscape, and that projects need to take account of the potential impact. Having regard to siting, operational and other relevant constraints, the aim should be to minimise harm, providing reasonable mitigation where possible and appropriate.

4.14.4. Paragraph 5.9.18 of NPS EN-1 recognises that all proposed energy infrastructure is likely to have visual effects for many visual receptors around proposed sites and therefore it is necessary to judge whether the effects outweigh the benefits of the project.

4.14.5. Section 5.9 states:

"The landscape and visual assessment should include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project. The applicant's assessment should also take account of any relevant policies based on these assessments in local development documents in England… The applicant's assessment should include the effects during construction of the project and the effects of the completed development and its operation on landscape components and landscape character. The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include light pollution effects, including on local amenity, and nature conservation (Department of Energy and Climate Change (DECC), 2011a)."

4.14.6. Article 10(3)(b) PA2008 requires the SoS to have regard, in designating an NPS, to the desirability of good design. Section 4.5 of NPS EN-1 sets out the principles of good design that should be applied to all energy infrastructure.

4.14.7. NPS EN-3 states at paragraph 2.4.2: *"Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity, and in the design of the project to mitigate impacts such as noise and effects on ecology."*

4.14.8. NPS EN-3 states at paragraph 2.5.52: *"The IPC should expect applicants to seek to landscape waste/ biomass combustion generating station sites to visually enclose them at low level as seen from surrounding external viewpoints. This makes the scale of the generating station less apparent, and helps conceal its lower level, smaller scale features. Earth bunds and mounds, tree planting or both may be used for softening the visual intrusion and may also help to attenuate noise from site activities (DECC, 2011b)."*

The Applicant's Case

4.14.9. Chapter 11 of the ES [APP-045] assesses the landscape and visual effects during all phases of the project based on the maximum extent of the Proposed Development. It identifies the Zone of Theoretical Visibility (ZTV) [APP-073] based on a stack height of 102m AOD. The application is also accompanied by Works Plans [APP-010] and Indicative Generating Station Plan, Floor Plans, Section and Elevations [APP-012]. Requirements 5 and 6 of the dDCO includes provision for the submission of detailed design to be submitted for approval by the local planning authority. This includes position and scale (Requirement 5) and appearance (Requirement 6).

4.14.10. A total of 9 representative viewpoints, which the Applicant considers illustrate the typical range of views of the Proposed Development were submitted with the DCO application. These were agreed with NELC and can be found in Figures 11.6A to 11.14A and Figures 11.6B to 11.14B of the ES [APP-075 - APP-092]. These representative viewpoints are also described in Table 11.2 of ES Chapter 11 [APP-045].

4.14.11. In addition to the above, a series of photomontages and wireframes have been prepared and presented in Figures 11.15 to 11.18 in ES Volume II [APP-093 – APP-096] which illustrate the likely visibility of the Proposed Development at four of the assessed viewpoints (Viewpoints 1 (Farmshop Hotel, A180) [APP-093]; 5 (Beechwood Farm Carvery) [APP-094]; 7 (Immingham South Footpath (South East)) [APP-095]; and 9 (Middle Drain Footpath (South East)) [APP-096]).

4.14.12. The Applicant's assessment identifies that during construction and operation of the Proposed Development, the magnitude of impact from eight of the viewpoint locations is either low (viewpoints 1, 2, 3, 4, 5, 7 and 8) or very low (viewpoint 6). The significance of effect on the same viewpoints, during construction and operation, is shown to be minor

adverse (not significant) (viewpoints 1, 2, 3, 4, 5, 7 and 8) or negligible adverse (not significant) (viewpoint 6). The exception is viewpoint 9 (Middle Drain Footpath) where the magnitude of impact during construction and operation is medium, with the significance of effect during construction and operation being identified as moderate adverse (significant) due to visual effect on visual amenity from that Viewpoint 9 as a result of the close distance and height of the proposed structures.

4.14.13. Using professional judgement, the Applicant considers the impacts on landscape character and visual amenity are very similar to those identified at the construction stage of the Proposed Development. For landscape this is as a result of: the scale and nature of the Proposed Development in relation to the existing industrial structures; complexes present in close proximity and the wider landscape and current proposals for industrial developments in the locality. For visual amenity this is as a result of the visibility of the decommissioning and demolition activities being similar or slightly less than construction due to the maturity of existing perimeter planting.

4.14.14. In considering these impacts the Applicant highlights the NELC Planning Permission, stating the predicted impacts as a result of the Proposed Development are similar to those that would be associated with the NELC Planning Permission. This is because the nature and overall scale of construction activity required for the Proposed Development (with the potential to impact on landscape character and visual amenity) being similar to the activity required for the NELC Planning Permission.

4.14.15. As such, the construction of the Proposed Development is predicted to have no additional impact on landscape and visual receptors compared to the construction of the NELC Planning Permission.

4.14.16. In terms of operation the Applicant considers the increase in traffic, and potential noise and light impacts, associated with the Proposed Development will be the same as those associated with the NELC Planning Permission and that no additional landscape and visual impacts are predicted when compared to the operation of the NELC Planning Permission.

4.14.17. With regard to decommissioning, the Applicant points out that the nature and scale of decommissioning activities required for the Proposed Development would be the same as those required for the NELC Planning Permission, so the decommissioning of the Proposed Development would be predicted to have no additional impact on landscape and visual receptors compared to the decommissioning of the NELC Planning Permission.

4.14.18. In terms of mitigation and enhancement measures, the Applicant advises the existing plantation to the north-west of the existing power station (which is required for the continued screening of SHBPS as well as screening of the Proposed Development) will be retained and will benefit from future maintenance and management to retain its existing screening and ecological function. The existing plantations to the west

and south-west of SHBPS will also be subject to the same maintenance and management regime. See the Indicative Landscape Strategy [APP-029]

4.14.19. Chapter 17 of the ES [APP-051] considers the cumulative and combined effect of the Proposed Development when taken with other nearby projects and this is considered further below in paragraph 4.22.32 to 4.22.39 and Chapters 5 and 6.

Views of IPs

4.14.20. NELC in its LIR [REP1-018] state the development would be a substantial structure with the main building having a maximum footprint of 210m by 110m and a maximum height of 59m AOD. The Council also note the height of the proposed two chimneys of up to 102m AOD. NELC confirm these maximum dimensions are the same as those approved within the NELC Planning Permission, which incorporated maximum dimensions to allow for a level of flexibility within such an envelope for operational alterations without the need for further consent.

4.14.21. NELC consider the Proposed Development would be positioned directly behind (east of) the existing SHBPS, which is itself a substantial structure. Whilst the Council noted the site adjoins open fields, it also adjoins other large industrial operations and when viewed from vantage points identified, NELC considered that the Proposed Development would nestle between the existing industrial developments limiting the visual impact on the appearance and character of the area to less than significant.

4.14.22. NELC's LIR [REP1-018] and SoCG [REP4-006] with the Applicant confirmed the viewpoint locations were suitable to assess for the impacts on views for sensitive receptors, such as residents and visitors to the area, due to the construction and operation of the Proposed Development. The SoCG [REP4-006] also confirmed that of the viewpoints considered, only one visual amenity receptor (Viewpoint 9: Middle Drain Footpath) was predicted to experience a significant adverse effect during construction, operation and decommissioning. NELC agreed with the Applicant that this is as a result of the close distance and heights of the proposed structures and that no specific mitigation measures are proposed, since it is difficult to avoid or mitigate this effect due to the size of the buildings and its structures.

4.14.23. The Applicant's SoCG with NELC concludes that the assessment does not identify any significant effects on landscape and that the Proposed Development's impacts will be the same as the NELC Planning Permission and there will be no additional effects on the landscape or on visual amenity.

4.14.24. Given the near identical physical dimensions and appearance of the Proposed Development to the NELC Planning Permission, the existing industrial context of the area and the employment allocation of land surrounding the site for future development, NELC stated in its LIR

[REP1-018] the Proposed Development accords with the NELLP Policies 5 (Development Boundaries), 22 (Good Design in New Development) and 42 (Landscape).

4.14.25. No other IPs raised concerns in regard to landscape or visual amenity or the assessments carried out by the Applicant in relation to these matters.

Examination

4.14.26. The 'fallback position', referred to above, is an important and relevant consideration in terms of landscape and visual amenity impacts of the Proposed Development.

4.14.27. I undertook an USI [EV2-001] and took a Procedural Decision to accept high-resolution Unmanned Aerial Vehicle (UAV) video footage, which was taken in accordance with a flight plan submitted by the Applicant at DL3 [REP3-014]. The UAV video footage [AS-009] was taken from within and adjoining the site and was accepted into the Examination as an AS on 9 March 2020. The reasons for accepting the UAV video footage into the Examination are set out in Chapter 1 above.

4.14.28. During my USI, I visited a number of the representative viewpoints identified in the ES. These gave me an appreciation of the site, its surrounding industrial and agricultural context and its relationship within the wider landscape and nearby heritage assets. I agree that the viewpoints in Figures 11.6A to 11.14A and Figures 11.6B to 11.14B of the ES [APP-075 to APP-092] provide representative views of the site.

4.14.29. Although indicative plans showing the generating station, floor plans, sections and elevations have been submitted [APP-012], they are indicative. Irrespective of this, it was clear from my USI and the submitted UAV video footage that the visual impact of the Proposed Development would be as a result of the size and height of the main building and from the proposed stacks, both of which would be visible close up and from further afield. However, it would be seen in the context of the existing industrial sites and I observed a number of existing stacks in the near vicinity of the site, including the adjoining SHBPS and NEWLINC's. As a result, bearing in mind the 'fallback position' of the NELC Planning Permission, which are identical to the building parameters of the Proposed Development, I do not consider the Proposed Development would appear unduly prominent or out of place.

Conclusions on landscape and visual

4.14.30. Taking the above into consideration and based on the evidence presented, bearing in mind the 'fallback position' of the NELC Planning Permission and having viewed the site from a number of representative viewpoints, I am satisfied that the Proposed Development is unlikely to have a significant effect on landscape or visual amenity and meets the requirements of NPS EN-1 and NPS EN-3. Furthermore, I am satisfied that Requirements 5 and 6 of the rDCO will provide further opportunities to mitigate the visual impact of the Proposed Development on its

surroundings. As such, the landscape and visual effects are a neutral consideration in the planning balance.

4.15. TRAFFIC AND TRANSPORT

Introduction

4.15.1. This section considers the potential environmental effects of the Proposed Development during construction, operation (including maintenance) and decommissioning in regard to traffic and transport.

Policy Considerations

4.15.2. NPS EN-1 states that the transport of materials, goods and personnel to and from a project, during all project phases can have a variety of impacts on the surrounding transport infrastructure. At paragraph 5.13.2, it states that the consideration and mitigation of transport impacts is an essential part of Government's wider policy objectives for sustainable development. Paragraphs 5.13.3 and 5.13.4 state that the Applicant should undertake a Transport Assessment (TA) for any project likely to have a significant transport implication, and where appropriate the Applicant should prepare a Travel Plan.

4.15.3. Where proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels requirements should be considered to mitigate the adverse impacts. Paragraph 5.13.8 advises that where mitigation is needed, possible demand management measures must be considered if feasible and operationally reasonable as a first measure. Water-borne or rail transport is also preferred over road transport at all stages of the project where cost-effective.

4.15.4. Paragraph 5.13.11 indicates that requirements may be attached to a consent, including to control numbers of HGV movements to and from the site in a specified period during its construction.

4.15.5. NPS EN-3 states at paragraph 2.5.13 that throughput volumes are not, in themselves, a factor in decision-making as there are no specific minimum or maximum fuel throughput limits for different technologies or levels of electricity generation. However: *"the increase in traffic volumes, any change in air quality, and any other adverse impacts as a result of the increase in throughput should be considered by the IPC in accordance with this NPS and balanced against the net benefits of the combustion of waste..."*

4.15.6. Paragraph 2.5.24 states:

"Biomass or EfW generating stations are likely to generate considerable transport movements. For example, a biomass or EfW plant that uses 500,000 tonnes of fuel per annum might require a large number of heavy goods vehicle (HGV) movements per day to import the fuel. There will also be residues which will need to be regularly transported off site."

4.15.7. Furthermore, Paragraph 2.5.25 states:

"Government policy encourages multi-modal transport and the IPC should expect materials (fuel and residues) to be transported by water or rail routes where possible. Applicants should locate new biomass or waste combustion generating stations in the vicinity of existing transport routes wherever possible. Although there may in some instances be environmental advantages to rail or water transport, whether such methods are viable is likely to be determined by the economics of the scheme. Road transport may be required to connect the site to the rail network, waterway or port. Therefore, any application should incorporate suitable access leading off from the main highway network. If the existing access is inadequate and the applicant has proposed new infrastructure, the IPC will need to be satisfied that the impacts of the new infrastructure are acceptable as set out in Section 5.13 of EN-1."

National Planning Policy Framework

4.15.8. The NPPF at paragraph 111 states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Development Plan

4.15.9. Policies Policy 5 of the NELLP requires the suitability of the proposal, with regards to access and traffic generation levels, to be considered, whilst Policy 36 of the NELLP is the development plan's policy that promotes sustainable transport use. Policy 38 of the NELLP sets out NELC's requirements for parking.

The Applicant's Case

4.15.10. ES Chapter 9 [APP-043] sets out the policy context, relevant guidance and considers the transport and traffic impacts of the Proposed Development during construction, operation, and decommissioning. The ES also includes a TA [APP-115 – APP-120] which assesses the traffic and transport implications of the Proposed Development.

4.15.11. Section 9.3 sets out the assessment methodology and significance criteria. It considers three possible construction scenarios and assesses the traffic and transport impacts from all three. The possible construction scenarios are:

- construction of the NELC Planning Permission pursuant to the Planning Permission starting in Q2 2020 and taking approximately three years to complete, with the Additional Works also being constructed within the same construction period, following the grant of the DCO (potentially beginning in Q3 2021, approximately half way through the construction programme for the NELC Planning Permission). Note: At the time of the close of the Examination (10 May 2021) the NELC Planning Permission had not been implemented;
- construction of the Proposed Development in a single circa three-year construction phase commencing shortly after the DCO is awarded in

Q3 2021 (with no construction pursuant to the Planning Permission); or

- construction of the Proposed Development in a single circa three-year construction phase commencing up to five years after the DCO is awarded, in Q3 2026 (again, with no construction pursuant to the Planning Permission).

4.15.12. The Applicant's assesses the 'worst case' scenario to be commencement in Q3 of 2026, in terms of highway/ junction capacity, due to baseline traffic flow data being higher.

4.15.13. Tables 9.17, 9.18 and 9.19 of ES Chapter 9 [APP-043] consider the 2021, 2022 and 2027 base, plus committed development and construction traffic (24-hour Annual Average Daily Traffic (AADT)) respectively. The Applicant considers that, applying the rules set out in this Chapter, due to the low number of existing vehicles using South Marsh Road the Proposed Developments construction traffic will result in:

- a greater than 30% increase in traffic on South Marsh Road (East of Hobson Way) (105% increase) if the peak of construction traffic is in 2021.
- a greater than 30% increase in traffic on South Marsh Road (East of Hobson Way) (104% increase) if the peak of construction traffic is in 2022.
- a greater than 30% increase in traffic on South Marsh Road (East of Hobson Way) (99% increase) if the peak of construction traffic is in 2027.

4.15.14. In terms of the effects of the Proposed Development during construction on: severance; pedestrian amenity; fear and intimidation; accidents and safety; and driver delay, the Applicant classified:

- severance; pedestrian amenity; fear and intimidation, as minor adverse (not significant) and;
- accidents and safety and driver delay as negligible adverse (not significant).

4.15.15. These classifications were assigned by the Applicant for the following reasons:

- Severance – minor adverse (not significant) – the change in total traffic associated with construction whilst greater than 90% on South Marsh Road (East of Hobson Way) is considered to be caused by low current usage of that road, bearing in mind the link sensitivity is considered to be low;
- Pedestrian Amenity – minor adverse (not significant) – considering the change in total traffic (or HGV component) associated with construction (assessed as greater than 100% on South Marsh Road (East of Hobson Way)) but recognising the link sensitivity to be low with no pedestrian footways provided on this section of the Road;
- Fear and Intimidation – minor adverse (not significant) – whilst the change in total traffic associated with construction is greater than

90% on South Marsh Road (East of Hobson Way) it is evident that there is low current usage of that road and the link sensitivity is low;
- Accidents and Safety – negligible adverse (not significant) - There being zero Personal Injury Accidents (PIAs) on South Marsh Road (East of Hobson Way) in the last five years and as such the traffic associated with construction will have no significant effect on this; and
- Driver Delay– negligible adverse (not significant) – following junction modelling that led to this conclusion.

4.15.16. The Applicant's TA found the environmental effects associated with construction traffic on all other links within the study area would be classified as negligible adverse (not significant).

4.15.17. Once operational the ES Chapter 9 [APP-043] states the Proposed Development is likely to employ around 56 staff, resulting in around 112 vehicular movements throughout the day. 57 car parking spaces are proposed to be provided on Site, which is considered to be a suitable level of on-site parking provision to accommodate the proposed staffing levels at the Site, as well as catering for an adequate level of visitor provision.

4.15.18. In terms of HGV traffic generated during the operation of the Proposed Development, this will relate to deliveries of fuel and consumables, as well as related to the removal of bottom ash and flue gas treatment (FGT) residues. The ES anticipates a total of 624 HGV movements (312 in and 312 out) will occur during operations per day, which is identical to the estimates of HGV traffic generated during the operation of the NELC Planning Permission. As set out in Section 7.1 of the ES Appendix 9A (Transport Assessment) [APP-115] this figure of HGV movements consists of:

- 242 HGV deliveries of fuel (484 HGV movements in total per day);
- 5 HGV deliveries of consumables (10 HGV movements in total per day); and
- 65 HGVs collecting bottom ash and/ or FGT residues (130 HGV movements in total per day).

4.15.19. In terms of operational traffic impacts of the Proposed Development on the road traffic network, considering all three scenarios (operations commencing in: 2023; 2024; or 2029), the ES indicates:

- In 2023 - A greater than 30% increase in traffic on South Marsh Road (East of Hobson Way), with an 87% increase in total traffic and a 281% increase in HGVs. Hobson Way (North of South Marsh Road) shows an increase in total traffic of 13% and an increase in HGV traffic of 113% and Kiln Lane (West of Hobson Way) shows an increase in total traffic of 11% and an increase in HGV traffic of 39%. (ES Chapter 9 Table 9.21 [APP-043]);
- In 2024 – A greater than 30% increase in traffic on South Marsh Road (East of Hobson Way), with an 86% increase in total traffic and a 277% increase in HGVs. Hobson Way (North of South Marsh Road) shows an increase in total traffic of 14% and an increase in HGV

traffic of 113%, whilst Kiln Lane (West of Hobson Way) shows an increase in total traffic of 11% and an increase in HGV traffic of 39%. (ES Chapter 9 Table 9.22 [APP-043]);

- In 2029 - a greater than 30% increase in traffic on South Marsh Road (East of Hobson Way), with an 83% increase in total traffic and a 267% increase in HGVs. Hobson Way (North of South Marsh Road) shows an increase in total traffic of 13% and an increase in HGV traffic of 110% and Kiln Lane (West of Hobson Way) shows an increase in total traffic of 11% and an increase in HGV traffic of 38%. (ES Chapter 9 Table 9.23 [APP-043]).

4.15.20. In terms of South Marsh Road and Hobson Way, the Applicant considers this to be due to the low number of existing vehicles using South Marsh Road and Hobson Way. For all other links within the study area the environmental effects associated with operational traffic was classified in the ES as negligible adverse (not significant) in 2023, 2024 and 2029 scenarios.

4.15.21. Considering all three scenarios (operational in 2023, 2024 and 2029) in regard to severance; pedestrian amenity; fear and intimidation; accidents and safety; and driver delay, the Applicant's ES concluded in terms of:

- Severance and Fear and Intimidation - in all three scenarios the overall effect on:
  - South Marsh Road (East of Hobson Way) was classified as minor adverse (not significant), due to the low current usage of that road, bearing in mind the link sensitivity is considered to be low;
  - Hobson Way (North of South Marsh Road) and Kiln Lane (West of Hobson Way) were classified as negligible adverse (not significant), due to link sensitivity being considered to be low given a pedestrian footway is provided on the western side of Hobson Way and southern side of Kiln Lane (West of Hobson Way).
- Pedestrian Amenity – in all three scenarios the overall effect on:
  - South Marsh Road (East of Hobson Way) and Hobson Way were classified as minor adverse (not significant), due to the link sensitivity being low with no pedestrian footways provided on South Marsh Road (East of Hobson Way) and in terms of low HGV usage of Hobson Way and the link sensitivity being considered to be low given a pedestrian footway is provided on the western side of that carriageway.
  - Kiln Lane was classified as negligible adverse (not significant) due to the link sensitivity being considered to be low given a pedestrian footway is provided on the southern side of the carriageway.
- Accidents and safety – Due to zero PIAs on South Marsh Road (East of Hobson Way) in the last five years, a single PIA on Hobson Way (North of South Marsh Road) in the last five years and three PIAs on Kiln Lane (West of Hobson Way) in the last five years, the Proposed

Development, in terms of accidents and safety has been classified as negligible adverse (not significant). In terms of:

- South Marsh Road (East of Hobson Way) this is due to the traffic associated with the operation of the Proposed Development having no significant effect on this.
- Hobson Way (North of South Marsh Road) this is due to traffic flows over this period (1,220 AADT) and the length of the link (1.2 km) the calculated accident rate is 374 accidents per billion vehicle kilometres. Compared with the national average rate which in 2016 was 480 accidents per billion vehicle kilometres it is considered that Hobson Way has low sensitivity, which with low magnitude increases in traffic will result in a negligible adverse (not significant) effect.
- Kiln Lane (West of Hobson Way) when considering traffic flows over this period (2,854 AADT) and the length of the link (1.8 km) the calculated accident rate is 319 accidents per billion vehicle kilometres. Compared to the national average rate which in 2016 was 480 accidents per billion vehicle kilometres it is considered that Kiln Lane has low sensitivity, which with low magnitude increase in traffic will result in a negligible adverse (not significant) effect.

- Driver Delay– negligible adverse (not significant) – following junction modelling that led to this conclusion.

4.15.22. In terms of decommissioning, the activities involved in the decommissioning process for the Proposed Development are not yet known in detail, as it has a design life of approximately 30 years. Some traffic movements associated with the removal (and recycling, as appropriate) of material arising from demolition and potentially the import of materials for land restoration and reinstatement would be expected. However, vehicle numbers are expected to be much lower than those experienced during the construction and it is considered that the percentage increase in traffic due to decommissioning would be classified as negligible adverse (not significant).

4.15.23. Notwithstanding the above, when comparing the Proposed Development and NELC Planning Permission, the forecast construction traffic is the same for both Developments. The Applicant states this is due to the conservative assumptions made in its TA for the NELC Planning Permission also being appropriate for the Proposed Development, given the nature and overall scale of construction activity required and given the limited additional works required to enable the generating station to generate up to 95 MW.

4.15.24. Whilst the baseline traffic flows assumed for the Proposed Development and NELC Planning Permission construction traffic assessments are slightly different, overall conclusions in the Applicant's TA are the same – namely that there will be no significant effects on severance, pedestrian amenity, fear and intimidation, accidents and safety, or driver delay. As such, the construction of the Proposed Development is predicted to have

no additional effects compared to the construction of the NELC Planning Permission.

4.15.25. Furthermore, the same methods for managing construction traffic are proposed to be applied for both the NELC Planning Permission and the Proposed Development. The Applicant considers, notwithstanding the limited effects resulting from the Proposed Development on the surrounding highway network the following mitigation measures during the construction phase would assist to reduce any perceived overall impacts. These include:

- the implementation of a Construction Worker Travel Plan (CWTP) aimed at identifying measures and establishing procedures to encourage workers to ensure that vehicle occupancy rates used in the TA as a basis for analysis are achieved (a Framework CWTP is provided in Annex 27 of the TA in Appendix 9A of the ES [APP-120]). The Applicant indicates such measures could include:
  - managing the number and use of parking spaces on-site to ensure that the number of vehicles arriving at the Site is controlled;
  - encouraging contractors to provide minibuses for transporting their workers from key points of construction worker origin to the Site;
  - implementing a construction worker car share scheme; and
  - providing secure parking for bicycles; and
- implementation of a Construction Traffic Management Plan (CTMP) identifying measures to control the routing and impact that construction HGVs and Abnormal Indivisible Load (AIL) deliveries will have on the local road network during construction (a Framework CTMP is provided in Annex 28 of the TA in Appendix 9A of the ES [APP-120]). Measures could include:
  - HGV routing plan communicated to all drivers during their induction;
  - local signage strategy;
  - limiting construction delivery hours to 07:00 – 19:00 Monday to Saturday where possible;
  - management of abnormal load deliveries;
  - 24-hour contact name and number for members of the public should there be any issues relating to construction traffic;
  - consultation with AIL Officers at Highways England and NELC at the earliest opportunity on the programme and plan for delivery of AILs; and
  - make the public aware of when AIL deliveries are taking place via social media, local radio and the local press.

4.15.26. The Applicant has agreed with NELC, as set out in the SoCG [REP4-006], that the dDCO secures the submission of a final CTMP by means of Requirement 16 (CTMP), which must accord with the submitted framework CTMP provided in Annex 28 of the TA in Appendix 9A of the ES [APP-120]). Requirement 16 (CTMP) also requires the details submitted pursuant to that Requirement to be approved by NELC, in consultation with NR, as the Unitary Authority for the area within which

the Site lies. Outline details of the CTMP [REP1-009] were submitted at DL1.

4.15.27. Accesses to the site are identified in the Works Plans [APP-010]. Operational access to the site would be via a new access at the eastern end of the adopted section of South Marsh Road. This will cater for all vehicle movements to and from the Proposed Development. This new access lies within the Order Limits.

4.15.28. The Applicant's TA [APP-115 – APP-120] concludes that no material impact in terms of highway capacity or safety will occur and that the Proposed Development represents acceptable development in highways and transport terms.

4.15.29. Chapter 17 of the ES [APP-051] considers the cumulative and combined effects, including in relation to transport and traffic, and does not identify any likely significant adverse impacts associated with the Proposed Development - either on its own or in combination with other developments.

Views of IPs

4.15.30. NELC in its LIR [REP1-018] states the proposed traffic levels generated are almost identical to that previously deemed acceptable within the NELC Planning Permission and, as with that scheme it considers, subject to the requirements in the DCO, the Proposed Development would accord with Policies 5, 36 and 38 of the NELLP.

4.15.31. In reaching the above view NELC states:

- The TA notes the Proposed Development would generate substantial increase in traffic upon the network during the first years of construction and during the operational life of the plant, but these would be similar to the NELC Planning Permission;
- NELC, as highway authority, has not raised an objection to traffic levels, safety, capacity nor HGV routing proposed, which is to and from the A180, via the A1173, Kiln Lane and Hobson Way. Furthermore, NELC are content with the Requirements in the dDCO to enforce construction traffic management, delivery vehicle routing, condition survey of South Marsh Road and a travel plan. NELC also noted that Highways England have not raised an objection to the Proposed Development;
- NELC note NR's concerns over the impact on its Kiln Lane and South Marsh Road level crossings. However, it points out that NR did not object:
    - to the NELC Planning Permission, which had identical traffic levels and routeing to that now proposed;
    - to the discharge of planning conditions related to the vehicle routing agreement associated within the NELC Planning Permission;
    - in respect of other major development within the South Humber Bank area;

- at Local Plan examination stage, which established large employment designations to the east of the rail line; or
- the new link road from Moody Lane/ Woad Lane junction to Hobson Way Roundabout which has the potential to draw greater traffic to Kiln Lane; and

- The TA baseline and routing of staff cars were updated to reflect changes in context since the NELC Planning Permission, such as the link road, which confirmed no significant alteration in impact. Alternate routes for traffic would generate impacts on sensitive receptors and/ or generate concerns re air quality or junction capacity, which indicates that the Kiln Lane route remains the most viable option.

4.15.32. Only two other IPs referred to Traffic and Transport impacts in their RRs. NR [RR-001] and Royal Mail [RR-004].

4.15.33. NR's RR initially objected to the Proposed Development, due to concerns related to the designated route providing HGV access to the site and the fact it traversed the Kiln Lane level crossing. However, following negotiations between the Applicant and NR, agreement was reached between the parties in regard to the project and the modifications made by the Applicant in its dDCO. These modifications included NR being defined in Article 2; the need to consult with NR being incorporated into Requirements 16 and 24; the inclusion of an additional Requirement (Requirement 37), which prohibits HGVs accessing and egressing the Proposed Development via South March Road (West of Hobson Way) and the inclusion of agreed PPs. As a result of the parties reaching agreement NR subsequently withdrew its objection [AS-008];

4.15.34. Royal Mail Group in its RR [RR-004] raised concerns related to potential road disruption and closures, which it considered could have the potential to impact on its operations. However, the SoCG with Royal Mail [REP2-005] submitted at DL2 confirmed that its concerns had been resolved, as set out in paragraph 4.6.1 of that document.

Examination

4.15.35. A SoCG was completed between the Applicant and Highways England [REP1-002]. Within the SoCG these parties agreed the history of consultation with Highways England in regard to both the NELC Planning Permission and the Proposed Development subject to the DCO application. These parties also agreed that following the submission of the DCO application, and a review of the TA, Highways England had no objections to the Proposed Development, subject to the mitigation measures that would be secured through Requirements 16 (CTMP); 24 (Delivery and servicing plan); and 25 (Operational travel plan) of the dDCO.

4.15.36. The Applicant and Highways England agreed in their SoCG [REP1-002] that the measures included within the dDCO Requirements provide appropriate mechanisms by which to mitigate the construction and operational traffic impacts of the Proposed Development. I am satisfied

that the Requirements agreed between these parties contain suitable measures to ensure that construction traffic, traffic related to delivery and servicing and traffic related to operational travel would be suitably managed and controlled.

4.15.37. Furthermore, bearing in mind the relatively low number of existing vehicles using South Marsh Road and Hobson Way, I consider the percentage increases of operational traffic flows, as discussed in paragraph 4.15.19 above, not to be meaningful. Consequently, I am satisfied that no detriment to amenity or the surrounding area in general will arise in regard to the percentage increases in traffic flow identified for this reason.

4.15.38. In ExQ1 [PD-006], I asked questions related to traffic and transport that primarily sought clarification from the Applicant, NR and NELC in regard to NR's objection to the Proposed Development, as set out in its RR [RR-001] and WR [REP2-019]. The responses of these parties are contained in the Applicant's response [REP2-008], NELC's responses [REP2-018]; and as attached to NR's Position Statement [REP3-015]. At the Open Floor Hearing [EV4-001] NR verbally confirmed it had reached agreement with the Applicant in regard to the wording of Definitions, Requirements and PPs in the dDCO, as well as reaching a provisional position in regard to a side agreement between the parties.

4.15.39. Consequently, NR withdrew its objection by letter [AS-008] on 8 February 2021, following agreement on the wording of Definitions, Requirements and PPs in the dDCO and having entered into a side agreement with the Applicant. I am satisfied that the parties have reached agreement on these matters and that the dDCO contains suitable wording and Requirements to ensure that construction traffic would be suitably managed and controlled. I am also satisfied that at the close of the Examination there were no outstanding issues between these parties in regard to the DCO submission.

4.15.40. The 'fallback position', referred to above, is an important and relevant consideration in terms of traffic and transportation impacts that may arise from the Proposed Development.

4.15.41. As part of my USI, I travelled parts of the strategic and local road networks. My USI [EV2-001] was undertaken by car and on foot. My observations can only be a general impression of conditions at the relevant locations visited, which was that the strategic and local road network was free flowing and free of any congestion. Nothing in what I observed caused me to question the findings/ conclusions from the data presented in the Examination.

4.15.42. It is noted that the Applicants ES Chapter 9 [APP-043] related to Traffic and Transport bases it's transport movements for fuel deliveries on a maximum fuel throughput of RDF at 753,500 tpa. However, in the absence of an EP specific to the Proposed Development, this would not be controlled unless specified within the DCO. As such, I consider it

important and relevant to control the maximum fuel throughput of RDF by specifying it within the rDCO at Schedule 1 (Authorised Development).

4.15.43. Subject to the above Requirements and controls, I do not consider there to be any unresolved matters in respect of traffic and transportation.

Conclusions on Traffic and Transportation

4.15.44. Taking the above matters into account, I find that the TA set out in the ES meets the requirements of NPS EN-1. Furthermore, subject to specifying the maximum fuel throughput of the Proposed Development, as set out in the rDCO attached to this report, I am satisfied that no significant traffic or transportation effects are likely to arise from the Proposed Development either alone or in combination with other developments.

4.15.45. In addition, I consider the control and management measures secured through Requirements 16 (CTMP); 24 (Delivery and servicing plan); and 25 (Operational travel plan) of the dDCO, would be sufficient to mitigate any likely adverse effects of the Proposed Development to an acceptable level.

4.15.46. Accordingly, I find the requirements of NPS EN-1 in respect of traffic and transportation impacts have been met and the traffic and transportation effects are a neutral consideration in the planning balance.

4.16. WATER QUALITY, FLOOD RISK AND FLOOD RESILIENCE

Introduction

4.16.1. This section addresses the potential effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development on surface water, flood risk and drainage.

Policy Considerations

National Planning Statements

4.16.2. Section 5.7 of NPS EN-1 states that development and flood risk must be taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk. All applications for energy projects of 1 ha or greater in FZ1 and all proposals for energy projects located in FZs 2 and 3 in England should be accompanied by a Flood Risk Assessment (FRA).

4.16.3. Paragraphs 5.7.13 to 5.7.16 of NPS EN-1 set out the need for development to pass a Sequential Test, then an Exception Test if development is to be considered permissible in a high-risk FZ area.

4.16.4. Section 5.15 of NPS EN-1 addresses water quality and resources recognising that infrastructure development can have adverse effects on

groundwater, inland surface water, transitional waters and coastal waters. The possibility of adverse impacts on health or on protected species and habitats could arise and result in a failure to meet environmental objectives established under the Water Framework Directive (WFD). Activities that discharge to the water environment are subject to pollution control whilst the abstraction licensing regime regulates activities that take water from the water environment.

4.16.5. Where the project is likely to have effects on the water environment applicants should undertake an assessment addressing water quality, water resources and physical characteristics of the water environment according to paragraph 5.15.2 of NPS EN-1.

4.16.6. NPS EN-3 provides the following general guidance relating to flood risk assessments and climate change pertaining to renewable energy production facilities:

- consider how the proposal would be resilient to effects of rising sea levels and increased risk from storm surge and tidal flooding resulting from climate change; and
- consider how plant will be resilient to increased risk of flooding and increased risk of drought affecting river flows.

National Planning Policy Framework

4.16.7. Paragraphs 152 to 169 of the NPPF outline the development requirements in terms of climate change and all sources of flood risk confirming the requirement for a site-specific FRA. Paragraph 159 confirms that inappropriate development should be avoided in areas at the highest risk of flooding and where development is necessary in those areas it should be made safe without increasing flood risk elsewhere.

Non-Statutory Technical Standards for Sustainable Drainage Systems (2015) (NSTSfSD)

4.16.8. The NSTSfSD was published in March 2015 and is the current guidance for the design, operation and maintenance of SuDS. The standards set out the following:

- peak run-off rates should be as close as is reasonably practicable to the predevelopment equivalent values ('greenfield' rate), but should never exceed the pre-development run-off rate;
- the drainage system should be designed so that flooding does not occur on any part of a development site for a 1 in 30 year rainfall event, and that no flooding of a building (including basement) would occur during a 1 in 100 year rainfall event; and
- pumping should only be used when it is not reasonably practicable to discharge by gravity.

4.16.9. The Proposed Development will also be considered by the EA in terms of the Land Drainage Act 1991 and the Water Resources Act 1991. Consent

from the EA will be required for any proposed discharges to controlled waters.

Regional Policy

East Inshore and East Offshore Marine Plans

4.16.10. The East Inshore and East Offshore Marine Plans (Defra, 2014) are guidance documents for developers to ensure the sustainable development of the marine area and protection of the marine ecosystem.

4.16.11. The East Inshore Marine Plan area includes the coastline stretching from Flamborough Head to Felixstowe, extending out to the seaward limit of the territorial sea (approximately 12 nautical miles). It also includes:

- any area submerged at mean high water spring tide;
- the waters of any estuary, river or channel, so far as the tide flows at mean high water spring tide; and
- waters in any area which is closed (permanently or intermittently) by a lock or other artificial means against the regular action of the tide, but into and from which seawater is caused or permitted to flow (continuously or from time to time).

4.16.12. This includes the tidal limits for the Humber Estuary, which incorporates areas of North East Lincolnshire. The East Inshore Marine Plan states *"A clean and healthy marine environment, including healthy beaches and good water quality, are important to tourism and recreation"*.

4.16.13. I note that no works are required within the river or to flood defences within the East Inshore Marine Plan area in proximity to the site and therefore no Deemed Marine Licence is required.

Grimsby and Ancholme Catchment Flood Management Plan (EA, 2009)

4.16.14. The role of Catchment Flood Management Plans (CFMP) are to identify flood risk management policies which will assist all key decision makers in the catchment to deliver sustainable flood risk management for the long term. The Grimsby and Ancholme CFMP considers all types of inland flooding, from rivers, ground water, surface water and tidal flooding, but not flooding directly from the sea (coastal flooding).

4.16.15. The Site is located within the Grimsby and Ancholme CFMP study area. This region specific CFMP explores flood risk from surface water, groundwater, main rivers and ordinary watercourses but does not account for tidal flooding. It identifies the Oldfleet Drain (a main river) to be a main source of fluvial flood risk to the Humber Trade Zone Industrial Area, which includes the site and surrounding area. However, no other site-specific information is contained in the report.

Flamborough Head to Gibraltar Point Shoreline Management Plan (2010)

4.16.16. The Site is potentially vulnerable to tidal flooding from the Humber Estuary and the Site location falls into 'Sub Area 4: Immingham, Grimsby and Buck Beck' of the local Flamborough Head to Gibraltar Point Shoreline Management Plan (SMP).

4.16.17. The purpose of an SMP is to identify the most sustainable approach to managing the flood and coastal erosion risks to the coastline in the short-term (0 to 20 years), medium term (20 to 50 years) and long term (50 to 100 years).

4.16.18. The report identifies the Site to be in an area of low to high flood risk depending on the flood source, where the Lead Local Flood Authority and the EA are already working towards managing the risk. However, it is also an area that will be affected by climate change due to the low-lying land and its coastal location, and so will need ongoing maintenance and defence improvements.

4.16.19. **Humber Flood Risk Management Strategy (EA, 2008**)

4.16.20. The Site lies within 'Area 24 - Immingham to West Grimsby' of the Humber Flood Risk Management Strategy. Policies to manage the risk of flooding in this area are: defences here will be improved as necessary to protect the large number of people, businesses and nationally important industry from tidal flooding; develop plans to improve the defences near North Killingholme and Stallingborough within the next five years; and the EA will work closely with other authorities and developers to ensure the risk is managed effectively together.

Anglian Water Surface Drainage Policies

4.16.21. AW Surface Drainage Policy indicates discharge rates and volumes are to be limited to the equivalent greenfield runoff rate (with on Site attenuation for all events up to the 1 in 100 rainfall event plus climate change). It also sets out flooding must also not occur on any part of the Proposed Development for the 1 in 30 year rainfall event.

Development Plan

4.16.22. Policies 33 (Flood Risk) and 34 (Water Management) of the NELLP are considered to be most relevant to this Section (Water Quality, Flood Risk and Flood Resilience) of this report. Policy 33 of the NELLP seeks to mitigate flood risk impacts and requires development to be supported by a site-specific FRA. Policy 34 of the NELLP requires that proposals consider adequate arrangements for foul and surface water drainage.

Flood Risk Assessments

4.16.23. A number of FRAs are also relevant, and these include:

- The North and North East Lincolnshire Strategic Flood Risk Assessment (NELC, 2011) and Addendum (NELC, 2016);
- North and North East Lincolnshire Preliminary Flood Risk Assessment (Entec, 2011)

- North East Lincolnshire Local Flood Risk Management Strategy (Amec Foster Wheeler, 2016)

The Applicant's Case

4.16.24. ES Chapter 14 [APP-048] assesses the potential effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development on surface water, flood risk and drainage. A separate FRA was provided, in two parts, as ES Appendix 14A (Part 1) [APP-135] and ES Appendix 14A (Part 2) [APP-136]. Additionally, an ODS was submitted (ES Appendix 14B [APP-137]).

4.16.25. Additionally, it cross refers to ES Chapter 12: Geology, Hydrogeology and Land Contamination [APP-046] due to the overlap between the two subject areas.

Flood Risk

4.16.26. The Site is located in an area of high flood risk (FZ3a). However, the Applicant points out that although shown in FZ3a, the Site benefits from the presence of tidal defences along the south bank of the Humber Estuary which are maintained by the EA. Nevertheless, as the Site falls within FZ3a, the application of both the sequential and the exception test is required.

4.16.27. The FRA [APP-135] (Part 1) and [APP-0136] (Part 2) notes that the site is allocated in the NELLP as an existing employment area and is safeguarded as such. The Applicant states that a Sequential Test is required to assess flood risks across strategic development sites and the NPPF and PPG recommends that the test be applied at all stages of the planning process to direct new development to areas with the lowest probability of flooding (FZ1). However, the PPG also confirms that:

"The Sequential Test does not need to be applied for individual developments on sites which have been allocated in development plans through the Sequential Test".

(Paragraph: 33. ID Reference: 7-33-20140306)

4.16.28. The Applicant highlights Section 2.1 of NELC's Flood Risk Sequential and Exception Tests' Guidance Note (NELC, 2016), which states that the Sequential Test is not required when:

"The Council has already sequentially tested the site as part of an allocation for development within the development plan".

4.16.29. The ES note the site is located within FZ3 and that the Proposed Development is for power generation, which is identified in the NELLP (paragraphs 12.17-12.19) as an important type of employment use. The Applicant notes the Local Plan process considered the most appropriate sites allocated for such uses taking into account flood risk and the ES recognises that the site has been allocated as an 'existing employment area' being part of the operational area of the existing SHBPS, and is

therefore safeguarded for such uses. As such the Applicant considered that the Local Plan allocation process dealt with the Sequential Test and that the Site is a suitable and preferred site, in flood risk terms, for the Proposed Development. Therefore, on the basis of the NELLP allocation, the Applicant suggests the Proposed Development has passed the Sequential Test.

4.16.30. Indeed paragraph 5.7.12 of NPS EN-1 advises that when seeking development consent on a site allocated in a development plan through the application of the Sequential Test, Applicants need not apply the Sequential Test, but should apply the sequential approach to locating development within the site. The FRA and ES Chapter 14 indicate that the Applicant has adopted such an approach in this instance.

4.16.31. The FRA [APP-135 and APP-136] also identifies and assesses the risks from all forms of flooding. It considers:

- Risk of surface water flooding within the MDA from elsewhere or generated within the Site is considered to be 'low' to 'very low';
- Risk of groundwater flooding within the MDA is considered to be 'low' to 'medium';
- That there is no flood risks posed to the site from artificial sources, such as canals or reservoirs, as there are none in close proximity; and
- in terms of foul drainage, as the nearest public sewer is over 1 km from the site, there is no flood risk to the site from foul drainage sources.

4.16.32. Additionally, the FRA indicates that the Proposed Development, with appropriate mitigation, such as places of safe refuge and critical equipment being located above 4.6m AOD, will be safe for its lifetime taking into account climate change over the lifetime of the Proposed Development and would not increase flood risk elsewhere.

4.16.33. Based on the information provided by the EA, the FRA [APP-135 and APP-136] determines that during the existing scenario the Site is at a 'low' risk of flooding from tidal sources resulting from overtopping of the defences during events that exceed a 0.5% Annual Exceedance Probability (AEP) (1 in 200 chance) of flooding.

4.16.34. It does, however, acknowledge that the above assessment changes should the defences fail and a breach occur during the existing scenario (i.e. during either a 0.5% or 0.1% AEP (1 in 1000 chance) event). Furthermore, it acknowledges that during a future scenario resulting from climate change up to 2115, the impacts are more significant and the site would potentially be at a 'high' risk of flooding as a result of the defences overtopping during events that include and exceed a 0.5% AEP (1 in 200 chance) of flooding, or in the event that the defences were to breach during either the 0.5% or 0.1% AEP (1 in 1000 chance) events.

4.16.35. As such, appropriate mitigation measures are proposed to mitigate this residual risk and ensure the occupiers of the site are safe and critical equipment can continue to function at the site in the event of such inundation, thus satisfying the requirements of the Exception Test.

4.16.36. The mitigation, as set out in the FRA [APP-135 – APP-136], includes: elevating critical equipment above 4.60m AOD; the provision of safe areas to ensure the occupiers of the site are safe; and consideration of incorporating flood resilience and resistance measures into the detailed design of the Proposed Development. Requirement 22 (Flood Risk Mitigation) and 23 (Flood Warning and Evacuation Plan) of the dDCO [REP7-003] requires such measures to be submitted to and agreed with NELC.

4.16.37. In addition to the above mitigation the FRA [APP-135 and APP-136] also indicates mitigation might include: developing a Flood Emergency Response Plan; signing up to the Floodline Warnings Direct service; providing flood resistance and resilience measures into the design of the buildings; and designing for failure, maintenance and capacity exceedance of the surface water drainage network.

Surface and Foul Water Drainage

4.16.38. Chapter 14 of the ES [APP-048] identifies Statutory Undertakers, including bodies that may receive runoff or discharges from the Site during construction, operation and decommissioning of the Proposed Development. It includes information on surface water drainage, whilst also stating that the options for foul water drainage disposal are set out in Section 1 of the ODS (ES Chapter 14B [APP-137]). The ODS seeks to provide a strategy for surface water runoff that is appropriate to the nature and scale of the Proposed Development, which will meet the necessary requirements of current planning guidance. It also considers potential foul drainage options and states:

"…a connection to foul sewer appears to be unfeasible due to the distance from the Site to the nearest existing foul sewer (over 1 km). As septic tanks are not favoured by the Environment Agency due to the potential risk of soil and groundwater pollution, it is currently considered that an on Site package treatment plant is the most likely preferred solution for foul drainage. Treated flows would be discharged to one of the surface water ditches on Site, and ultimately to the Humber Estuary. The volume contribution is expected to be too small to require a Permit. The package treatment plant would be located within the Main Development Area. Details will be developed and agreed at the detailed design stage in accordance with a DCO requirement."

4.16.39. Requirements 13 (Surface Water Drainage) and 14 (Foul Water Drainage) of the dDCO [REP7-003] would secure details of both the Surface and Foul Water Drainage, including future maintenance in accordance with the relevant sections, as specified in the Requirements, in accordance with the ODS [APP-137].

Ground Conditions and Hydrogeology

4.16.40. Chapter 14 of the ES [APP-048] overlaps with ES Chapter 12 (Geology, Hydrogeology and Land Contamination) [APP-046]. Chapter 12 of the ES [APP-046], together with Appendices 12A (Phase 1 Geo-environmental and Geotechnical Desk Study Report File 1 - Main Document Figures and

Annex 1 [APP-129] and Phase 1 Geo-environmental and Geotechnical Desk Study Report File 2 - Annex 2 [APP-130]), 12B (Ground Investigation Factual Report) [APP-131] and 12C (Ground Investigation Interpretive Report) [APP-132], identifies the relevant legal and policy context and describe the existing geological and hydrogeological conditions at the site. It sets out the significance criteria and describes the assessment methodology employed. It goes on to assess the likely nature and extent of existing sources of contamination which may be present and the potential impacts to the existing geological and hydrogeological conditions likely to arise as a result of the Proposed Development. It considers the potential risks to people, surrounding land uses, ecological receptors, soils and groundwater and identifies the measures required to ensure that sufficient mitigation is put in place to minimise any significant effects.

4.16.41. The Applicant has identified a number of potential impacts during construction, operation and decommissioning including:

- impacts on soil resources;
- impacts on human receptors;
- impact on controlled waters; and
- impact on development infrastructure.

4.16.42. However, a number of mitigation measures are proposed to manage any of these potential impacts. These included the submission of, and agreement to, a CEMP, which will include:

- a range of measures associated with mitigating potential impacts associated with land contamination;
- management measures to minimise the risk of any contaminated surface water runoff from the site during the site preparation, earthworks and construction phase so that it does not have a detrimental effect on the receiving watercourse and the underlying aquifers; and
- the provision of a Materials Management Plan (MMP).

4.16.43. A CEMP that secures these measures will be secured by Requirement 15 (CEMP) of the dDCO [REP7-003].

4.16.44. The Phase 1 Geo-environmental and Geotechnical Desk Study Report [APP-129 and APP-130], consider:

- the risks to future Site users to be low;
- the risks to controlled waters is moderate to high;
- the risks to development infrastructure is moderate to low.
- the risks to construction/ maintenance workers would be moderate/ low and to off Site receptors moderate/ low to very low; and
- the risks to potential on-site flora and fauna are considered low to very low.

4.16.45. Of the 36 Resource/ Receptor and Impacts identified in Chapter 12 [APP-046] 30 were considered to be Negligible Adverse (Not Significant)

and 6 were considered to be Minor Adverse (Not Significant). None were identified as Moderate Adverse or Major Adverse. I have seen nothing in the evidence which would lead me to conclude otherwise and consider Requirement 15 (CEMP) of the dDCO [REP7-003] is sufficient to ensure safeguards are put in place.

4.16.46. In addition, the dDCO [REP7-003] requires:

- a scheme of investigation and remediation of contamination to be submitted to NELC for its approval, in consultation with the EA (Requirement 19);
- the implementation of any remediation approved by Requirement 19 (Requirement 20); and
- a Requirement that deals with procedures in case of unexpected contamination being found (Requirement 21).

4.16.47. The EA has indicated that such Requirements would adequately address the risks associated with contaminated land and groundwater.

Views of IPs

4.16.48. NELC in its LIR [REP1-018] stated the site is located within FZ3, as defined by the EA and that, sequentially as an allocated site within the NELLP, the Proposed Development complies with Policy 33 of the NELLP and the relevant provisions of the NPPF.

4.16.49. The Council also confirm that the Proposed Development submission was supported by a Site Specific FRA, which amongst other things, ensures critical infrastructure and safe refuge for people would be set above 4.60m AOD (plus climate change 2115) within buildings and construction would utilise suitable water resistant materials and methods to limit damage and down time in the event of catastrophic flood events.

4.16.50. The LIR [REP1-018] further notes the NELC Planning Permission was designed to a level of 4.55m AOD, which was considered appropriate at that time. With regard to surface water drainage NELC acknowledge in its LIR that this will be limited to greenfield runoff rates, with discharge into the existing land drains. The Council confirm that this would be achieved by the creation of a large attenuation pond designed conservatively to accommodate runoff during extreme events before release at a controlled level and that this would be controlled through the DCO Requirements.

4.16.51. NELC's LIR [REP1-018] notes that within the assessment consideration has been had to water quality and that whilst foul water drainage will be subject to the DCO Requirements, it is likely to be dealt with by off network methods. Off network methods include either an on Site package treatment plant, which the Applicant has indicated is the most likely preferred solution for foul drainage at this time, or the foul water drainage being tankered away to an appropriate disposal facility by a licensed waste disposal contractor.

4.16.52. The EA in its WR [REP2-024] indicated it had no objection to the Proposed Development, as submitted. It confirmed that all issues in

respect of the required flood risk mitigation, groundwater protection and land contamination had been agreed between them and the Applicant. The EA also advised that they had no further comments to make in regard to water quality, foul water drainage or pollution prevention. The EA also confirmed in the SoCG signed with the Applicant [REP1-001] that there were no matters that were not agreed.

4.16.53. AW in its WR [REP2-025] confirmed that it was in principle supportive of the Proposed Development, subject to the imposition of PPs, as agreed in the dDCO, and imposition of appropriate Requirements (Requirements 13 (Surface Water Drainage) and 14 (Foul Water Drainage)), as set out in the SoCG completed with the Applicant [REP1-005].

4.16.54. North East Lindsey Drainage Board, in its WR [REP2-016], did not raise any concerns or objections to the Proposed Development and noted the surface water discharge would be limited to the greenfield rate.

4.16.55. No other concerns were raised by IPs in respect of Water Quality, Flood Risk and Flood Resilience or the assessments carried out by the Applicant in relation to it. Similarly, no concerns were identified in relation to hydrogeology or ground conditions.

Examination

4.16.56. In ExQ1 [PD-006] I posed a number of questions in respect of the measures to be implemented to manage flood risk; how liquid effluent is to be dealt with on site, especially during shutdown of the plant for repairs/ maintenance; and what facilities are being provided during the construction phase of the Proposed Development, where necessary, to ensure controlled discharge of any surface water runoff that might occur.

4.16.57. The Applicant in response [REP2-009], confirmed:

- Measures to manage flood risk, which could be implemented, are detailed in its ES Appendix 14A: FRA [APP-135 and APP-136]. The Applicant highlighted that the signed SoCG with the EA [REP1-001], which covers the agreement that has been reached in respect of various matters, including flood risk and includes agreement specifically in relation to the measures in question. The Applicant confirmed the specific wording of Requirement 22 (Flood Risk Mitigation) of the dDCO (most recent version [REP7-003]) was agreed with the EA and this is also agreed in the SoCG [REP1-001];
- Liquid effluent will be stored on site and tankered off by suitable contractor; or discharged to a foul sewer, although the latter is unlikely due to the nearest foul sewer being located more than 1km from the Site;
- the facilities provided during construction were assumed as embedded mitigation and include measures that would be considered to be best practice on construction sites to control discharge of surface water runoff which may occur. The Applicant confirms such measures may include, but are not limited to, the measures detailed in Tables 3.6-3.8 of the Outline CEMP [APP-039]. Additionally, it

confirmed the suitability of these measures were deemed acceptable by consultees, including the EA and AW. These positions are recorded in the SoCG completed with the respective parties (EA [REP1-001] and AW [REP1-005]);

- The primary source of effluent during periods of shutdown will be the boilers during periods of planned maintenance and that any excess effluent will be temporarily stored in tanks/ pits then removed from the site by tankers for disposal at suitably licenced facilities or, if feasible, discharged to foul sewer (see above); and
- The Applicant also confirms the volume of other process effluents produced during shutdown periods will be minimal, as the systems will be offline and that no particular provisions need to be put in place during shutdown periods for liquid effluents. Additionally, liquids held on site, including effluent and fuel will not be allowed to leachate into the underlying ground.

4.16.58. In addition to the above, the Applicant also confirmed discharge/ disposal of site runoff/ material and/ or disposal of potentially contaminated water will be agreed in advance with the EA, AW, NELC and North East Lindsey Internal Drainage Board where appropriate (and permits obtained as required).

4.16.59. The EA agreed in the SoCG [REP1-001]:

- in terms of flood risk and flood resilience:
  - the FRA submitted with the DCO application was undertaken using the EA's published Tidal Climate Change Allowances and that whilst Climate Change Allowances have been updated since production of the FRA, hydraulic modelling outputs (hazard maps) used in the FRA are still considered 'best available information' and fit for purpose in the assessment;
  - flood resilience and resistance measures will be incorporated into the Proposed Development and that sufficient information has been provided by the Applicant in relation to flood risk, including flood resilience, and that no further mitigation is necessary beyond that set out in the DCO application would be required;
  - no flood alleviation/ storage schemes are affected by the Proposed Development; and
  - The wording of Requirement 22 (Flood Risk Mitigation) of the dDCO (Current version of the dDCO is [REP7-003]), which includes flood resilience, is acceptable.
- In terms of surface water:
  - The ES provides a satisfactory assessment of the potential pollution risks to surface water (including waterbodies classified under the WFD), groundwater and land quality during construction and operation of the Proposed Development and that the mitigation measures identified are appropriate; and
  - Requirements 13 (Surface water drainage), 14 (Foul water drainage), 17 (Piling) and 19-21 (Investigation and remediation of contamination) will ensure that the identified mitigation measures

are applied and that these will prevent impacts on surface water and groundwater.

4.16.60. Furthermore, the SoCG sets out that an EP has been granted by the EA for the NELC Planning Permission as part of the SHBPS permit and the approach to varying that EP to increase the electrical output for the Proposed Development and transfer the Proposed Development into a new separate permit has been agreed between the Applicant and the EA. Additionally, in response to ExQ1 [PD-006], the Applicant confirmed [REP1-008], as clarified in its Written Summary of Oral Submissions following the DCO Issue Specific Hearing [REP4-012], that an application for an EP, seeking to separate the SHBPS and SHBEC EP (the current operational EP (EP Reference EPR/MP3235LY/V009)) had been 'duly made' to the EA and is under consideration by the EA. It is noted that the completed SoCG between the EA and the Applicant [REP1-001] agreed *"there is no reason to suppose that a permit will not be issued"*, albeit a caveat made clear that the statement was made 'without prejudice'. The EP application, that was 'duly made' to the EA remained under consideration by the EA at the close of the Examination. However, there is no evidence before me to lead me to the conclusion it will not be granted by the EA.

4.16.61. The EA agreed in the Applicant's SoCG [REP1-001] that Requirements 13 (Surface water drainage), 14 (Foul water drainage), 17 (Piling) and 19-21 (Investigation and remediation of contamination) of the dDCO (Current version [REP7-003]) would ensure that the identified mitigation measures are applied and that this would prevent impacts on surface water and groundwater. Furthermore, the SoCG recorded that the mitigation, management and enhancement measures outlined within the outline CEMP [APP-107], includes the necessary principal controls to adequately manage environmental risks associated with the construction of the Proposed Development including, but not limited to, pollution control measures and waste management. It is also agreed that appropriate measures for controlling the environmental effects of construction would be secured by Requirement 15 (CEMP) of the dDCO (current version [REP7-003]).

4.16.62. Within the SoCG completed between NELC and the Applicant [REP4-006], it was agreed that, subject to appropriate mitigation from Requirements 22 and 23 and the requirements of the EP, there would be no unacceptable impacts regarding water resources, flood risk and drainage as a result of the Proposed Development. Furthermore, North East Lindsey Drainage Board, in its WR [REP2-016], did not raise any concerns or objections to the Proposed Development and noted the surface water discharge would be limited to the greenfield rate.

4.16.63. The Marine Management Organisation (MMO) did not make a RR, nor did it seek to register as an IP. The Applicant in its response to my ExQ1 REP2-008] confirmed that as no works are proposed below the Mean High Water level, which is located approximately 175 m from the Site boundary, no licence or consent is required from the MMO in regard to

the Proposed Development. I have no substantive reasons to take a different view.

4.16.64. The EA has not raised any concerns in relation to the Proposed Development being located within FZ3, nor has it raised any concerns or objections in regard to the Applicant's submitted FRA or its position, or the position of NELC, in regard to the Sequential or Exception Tests. Indeed, the EA in the SoCG completed with the Applicant [REP1-001] agreed that the Applicant had adequately assessed the effects of the Proposed Development in terms of flood risk and surface water in its ES (Chapter 14) [APP-048] and ES Appendix 14A: FRA [APP-135 – APP-136]. The EA also agreed the assessment undertaken was appropriate for the scale, nature and location of the Proposed Development and makes appropriate recommendations for mitigation, which are included in draft Requirements 22 (Flood risk mitigation) and 23 (Flood warning and evacuation plan) in the dDCO (current version dDCO [REP7-003]).

4.16.65. The EA agreed in the SoCG [REP1-001] that *"…sufficient information has been provided by the Applicant in relation to flood risk and no further mitigation is necessary beyond that set out in the DCO application"*. From the evidence before me, having regard to the Sequential and Exception Tests, I am satisfied that the Proposed Development is acceptable in terms of its location and in regard to all matters related to water quality, flood risk and flood resilience.

Conclusions on Water Quality, Flood Risk and Flood Resilience

4.16.66. I am satisfied that the Proposed Development would have no significant environmental effects in terms of water quality or flood risk and would be flood resilient over its lifetime. The EA has already varied an existing EP for the SHBPS in regard to the NELC Planning Permission and the EA agreed in the SoCG completed with the Applicant [REP1-001] that an approach to vary that EP has been agreed, there is no reason to suppose that a permit will not be issued. Indeed, such an EP application has been 'duly made' to the EA and was under consideration by the EA at the close of the Examination. There is no evidence before me to suggest that the EP application currently under consideration by the EA would not be granted. As such, I consider that the SoS can be satisfied that potential releases from the Proposed Development can be adequately regulated under the Environmental Permitting Regime, as outlined in paragraph 4.10.7 of NPS EN-1.

4.16.67. I am content that adequate mitigation measures relating to water quality, flood risk and flood resilience are secured in the rDCO, including under Requirement 13 (surface water drainage), Requirement 14 (foul water drainage), Requirement 15 (CEMP), Requirement 17 (Piling), Requirement 19 (Investigation and Remediation of Contamination), Requirement 20 (implementation of Remediation Scheme), Requirement 21 (Procedure in Case of Unexpected Contamination), Requirement 22

(Flood Risk Mitigation), Requirement 23 (Flood Warning and Evacuation Plan) and Requirement 33 (Decommissioning).

4.16.68. The Proposed Development would thus accord with relevant legislation and policy requirements, including those of NPS EN-1, NPS EN-3 and the WFD, and water quality, flood risk and flood resilience effects are a neutral consideration in the planning balance.

4.17. NOISE AND VIBRATION

Introduction

4.17.1. This section addresses the potential environmental effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development with respect to noise and vibration.

Policy Considerations

National Policy Statements

4.17.2. Section 5.11 of NPS EN-1 refers to the Government's policy on noise as set out in the Noise Policy Statement for England, recognising that excessive noise can have impacts on the quality of human life, health, and the use and enjoyment of areas of value and areas with high landscape quality. Noise resulting from a Proposed Development can also have adverse impacts on wildlife and biodiversity.

4.17.3. Factors which will determine noise impact include construction, the operational noise from a development and its characteristics, the proximity of the Proposed Development to noise sensitive premises and the proximity to quiet places and to designated biodiversity sites.

4.17.4. Paragraph 5.11.8 of NPS EN-1 requires projects to demonstrate good design through the selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, utilise landscaping, or noise barriers to reduce noise transmission.

4.17.5. Paragraph 5.11.9 of NPS EN-1 requires that, when determining the application, the SoS should not grant development consent unless satisfied that the proposals will:

- avoid significant adverse impacts on health and quality of life from noise;
- mitigate and minimise other adverse impacts on health and quality of life from noise; and
- where possible, contribute to improvements to health and quality of life through the effective management and control of noise.

4.17.6. NPS EN-3 advises in addition, specific considerations to apply to biomass and EfW generating stations. Sources of noise and vibration may include:

- delivery and movement of fuel and materials;
- processing waste for fuel at EfW generating stations;

- the gas and steam turbines that operate continuously during normal operation; and
- external noise sources such as externally-sited ACCs that operate continuously during normal operation.

4.17.7. NPS EN-3 also advises that the applicant's ES should include a noise assessment of the impacts on amenity in case of excessive noise from the project as described in Section 5.11 in NPS EN-1.

National Planning Policy Framework

4.17.8. Paragraph 185 of the NPPF advises that new development should take account of the likely effects of pollution on health, living conditions and the natural environment and in doing so should mitigate and reduce to a minimum adverse impacts resulting from noise from new development and avoid noise giving rise to significant adverse impacts on health and quality of life.

National Planning Practice Guidance

4.17.9. The PPG related to Noise, reiterates guidance on noise policy and assessment methods, notes that:

"The subjective nature of noise means that there is not a simple relationship between noise levels and the impact on those affected. This will depend on how various factors combine in any particular situation". (Paragraph: 006 Reference ID: 30-006-20190722).

Development Plan

4.17.10. Policy 5 of the NELLP outlines the generic considerations that are applied when considering all development proposals. This policy is reflective of core principles and considerations set out in National Planning Policy. The generic considerations of this policy provide the basis for considering whether the Proposed Development should be supported and approved.

The Applicant's Case

4.17.11. ES Chapter 8 - Noise and Vibration [APP-042] provides an assessment for the Proposed Development's noise and vibration emissions from construction, operation (including maintenance) and decommissioning of the Proposed Development, and its practical effects. The assessment is supported by:

- Appendix 8A – Noise Perception and Terminology [APP-110];
- Appendix 8B – Consultation with NELC Environmental Health Officer [APP-111];
- Appendix 8C - Noise Monitoring [APP-112];
- Appendix 8D - Noise Assessment Construction Activities [APP-113];
- Appendix 8E - Noise Modelling [APP-114];
- Figure 8.1: Noise Sensitive Receptors and Monitoring Locations [APP-068]; and
- Figure 8.2: Predicted Noise Levels at Ecological Receptors [APP-069].

4.17.12. Noise Sensitive Receptor (NSR) locations, considered to be representative of the nearest and potentially most sensitive receptors to the application site, have been identified. The locations of these and the noise monitoring locations are shown in ES Figure 8.1 [APP-068] and the noise monitoring locations alone are in Table 8.4 of Chapter 8 (Noise and Vibration) [APP-042]. In order to define existing sound conditions at these receptors, long-term unattended ambient sound measurements were undertaken at Poplar Farm, Cress Cottage and the south-eastern Site boundary (Humber Estuary), whilst attended short-term monitoring was undertaken at the Estuary edge (along the wall bordering the Humber Estuary) and Mauxhall Farm, Immingham.

4.17.13. The noise monitoring locations were agreed with NELC in respect of the NELC Planning Permission and were not changed in relation to the current Proposed Development. The long-term noise measurements were undertaken continuously between Wednesday 25th July and Wednesday 1st August 2018. Short-term attended noise measurements were undertaken during the day on Wednesday 25th July 2018. All noise measurements were undertaken in accordance with BS 7445-1:2003 (Description and measurement of environmental noise. Guide to quantities and procedures). Weather conditions during the long-term surveys were generally dry with low wind speeds. There were some periods of rain and thunderstorms; the data collected during these periods were omitted from the monitoring results.

4.17.14. ES Chapter 8 [APP-042] notes that as a construction contractor has not yet been appointed, site-specific details of the construction activities, programme and number and type of construction plant are not yet available. Therefore, detailed construction noise predictions at specific NSR have not been undertaken. Rather, indicative construction noise predictions have been adopted using calculation methods set out in BS 5228:2009+A1:2014 (Code of practice for noise and vibration control on construction and open sites (BSI, 2014a)), based on information for similar construction projects, including noise emissions from a variety of anticipated construction activities, including drop hammer piling.

4.17.15. Bearing the above in mind, representative baseline sound levels were determined and are set out in Tables 8.12 to 8.14 in the ES Chapter 8 [APP-042]. The minimum representative levels taken from across the survey sites for background sound levels are:

- Day - ranging between 47 dB L_{A90} and 65 dB L_{A90},
- Night - ranging between 41 dB L_{A90} and 52 dB L_{A90}; and

The minimum representative levels taken from across the survey sites for ambient sound levels are:

- Day - ranging between 51 dB $L_{Aeq,t}$ and 67 dB $L_{Aeq,t}$,
- Night - ranging between 49 dB $L_{Aeq,t}$ and 61 dB $L_{Aeq,t}$.

4.17.16. The Applicant considers that during the construction of the Proposed Development, noise levels at the closest residential NSRs are predicted to

fall well below the ambient noise levels. As such the Applicant predicts no significant effects on residential properties.

4.17.17. The Applicant confirms its commitment to mitigate the impacts of piling noise on waterbirds, by restricting piling to a limited period and limited times during the winter months so as to reduce the moderate adverse (significant) effect at Receptor (R) 4 (field to south of the Site) to minor adverse effect (not significant).

4.17.18. Due to the distance to the nearest NSRs, vibration incident on residential properties from the construction of the Proposed Development has been scoped out. At the Humber Estuary R3 vibration levels are estimated to be just perceptible, resulting in a minor adverse effect which is classified as not significant, particularly when considered in the context of existing sources of vibration within the Estuary, such as waves. At the ecological areas to the north and south of the Site (R4 and R5) vibration levels from piling are estimated to be significant at the closest parts of the fields to the Site, but reduce with distance. The effects on birds using these fields have been assessed by the consideration of piling noise effects, and the vibration effects are considered to be the same as set out in relation to R3 above, but with mitigation measures to be implemented for piling noise the residual vibration effect will reduce to negligible adverse (not significant).

4.17.19. During the operation of the Proposed Development, noise levels predicted at the closest residential NSRs are expected to fall well below the measured background noise levels. Therefore, no significant noise effects are predicted.

4.17.20. With regard to construction traffic noise, the Applicant considers, as described in ES Chapter 9 (Traffic and Transport [APP-043], see paragraph 9.6.63) that the forecast construction traffic associated with the Proposed Development is the same as the forecast construction traffic associated with the NELC Planning Permission. It considers this is because the conservative assumptions made for the TA for the NELC Planning Permission are also considered to be appropriate for the Proposed Development. This assessment is made given the nature and overall scale of construction activity required for the Proposed Development, and the limited additional works required to enable the generating station to generate up to 95 MW. In addition, the same methods for managing construction traffic are proposed for both the NELC Planning Permission and the Proposed Development. (See ES Chapter 9 [APP-043] Section 9.5.)

4.17.21. Furthermore, in terms of changes in road traffic noise, the Applicant's ES Chapter 8 [APP-042] predict sound levels to increase by 0.2 dB during construction. This will result in negligible effects (not significant) at the selected residential NSRs (R1 - Poplar Farm; R2 - Cress Cottage/ Field Cottage; and R6 - Mauxhall Farm). The resulting increase in noise levels from construction traffic is shown to fall below the Lowest Observable Adverse Effect Level (LOAEL) at all selected NSRs.

4.17.22. As such, the Applicant states the construction traffic for the Proposed Development is predicted to have no additional noise and vibration impact compared to the construction of the NELC Planning Permission.

4.17.23. In respect of vibration effects on NSRs, ES Chapter 8 [APP-042] sets out that using drop-hammer piling would be considered as a worst-case scenario, based on professional judgement, and given the significant distance of residential receptors (>500m) from the application site. Using this worst-case scenario, the Applicant considered that no significant vibration is expected to result from the construction of the Proposed Development and as such further assessment of vibration at residential receptors was scoped out. The Applicant also considers this to be the case in respect of damage to residential buildings caused by vibration.

4.17.24. At ecological receptors located along the Humber Estuary to the east of the Site, noise levels are predicted to fall below ambient noise levels during the operation of the Proposed Development. No significant effects are predicted.

4.17.25. At the ecological receptors located immediately north and south of the Proposed Development (R4 and R5), noise levels at the closest parts of the fields to the Site are predicted to exceed ambient noise levels during operation. The ecological impact assessment (see Chapter 10: Ecology [APP-044], paragraphs 10.6.76 to 10.6.79) concludes that as the majority of waterbirds will be located in the central and eastern parts of the fields to the south and central and northern parts of the fields to the north, the effects on waterbirds will be neutral (not significant).

4.17.26. The Applicant advises that sensitive ecological receptors are located at the Humber Estuary and at fields that are understood to be functionally linked to the Estuary located to the north and south of the Site (see receptors R3, R4 and R5 on Figure 8.1 of the ES Volume II [APP-068]). Using the same basis of assessment as the preceding paragraph, the Applicant identified that vibration from piling works could affect ecological receptors. However, it has been agreed with NE that the impact of such piling works can be adequately mitigated through restrictions on when such activities can take place and their duration.

4.17.27. In terms of decommissioning, the nature of such works are anticipated to be similar to that of the construction works for the Proposed Development (with the exception of piling, which is not required for decommissioning). Therefore, noise levels at the closest NSRs are expected to fall below the ambient noise levels. No significant effects are predicted.

Views of IPs

4.17.28. NELC in its LIR [REP1-018] stated the Proposed Development site is located within an existing employment area, adjacent to land allocated for employment, where large commercial development is directed. As such, the Council considers impacts upon these uses, including impacts from noise, vibration and air quality are anticipated to be of a level that

would be acceptable. The LIR notes large commercial development is located in the area, including immediate neighbouring land uses such as Synthomer and NEWLINCS to the north, Lenzing Fibres to the far south and the existing SHBPS (in the Applicant's control) to the west.

4.17.29. The Council also confirms in its LIR [REP1-018] there are no residential dwellings within 500m of the site, two within 1km and eight within 2km of the site. The closest settlement, Stallingborough, is located just over 2km away and the main impacts on such residential receptors would include noise and vibration. However, NELC considers the Proposed Development to be acceptable, given the intervening distances these receptors would be from the Proposed Development, and the similarity and impacts of the NELC Planning Permission to the Proposed Development.

4.17.30. NELC's LIR [REP1-018] notes that, as with the NELC Planning Permission, HGV fuel deliveries and construction traffic for the proposed DCO development would be routed away from residential areas limiting impacts resulting from noise and vibration. The Council also notes that such HGV routing will be controlled through the proposed Requirements specified in the DCO.

4.17.31. Overall, NELC's LIR [REP1-018] states that the proposed DCO development would accord with Policy 5 of the NELLP.

4.17.32. NE in its RR [RR-008], amongst other matters concerning air quality, considered the main issues to include:

- Noise disturbance to SPA/ Ramsar birds using Humber Estuary foreshore during construction; and
- Noise and vibratory disturbance to SPA/ Ramsar birds using neighbouring functionally linked land (fields to north and south) during construction and operation.

4.17.33. No other concerns were raised by IPs in respect of noise and vibration or the assessments carried out by the Applicant in relation to it.

Examination

4.17.34. To avoid duplication of considerations, the matters raised by NE as outlined in paragraph 4.17.32 above are considered in the Biodiversity and Nature Conservation section above (Section 4.13) and in Chapters 5 and 6 of this report.

4.17.35. In the SoCG completed between the Applicant and NELC [REP4-006], those parties agreed NE's views on the matter of piling noise and vibration would be relevant to NELC's views. The Applicant and NELC also noted the agreement of NE to the mitigation methods, and the wording in draft Requirement 17 (Piling) securing these (in the submission version dDCO [APP-005]) was confirmed in paragraphs 4.35-4.38 of the SoCG with NE [REP2-003]. This wording has been retained in subsequent drafts, including the most recent dDCO [REP7-003].

4.17.36. The SoCG completed with NELC [REP4-006] also agreed:

- construction noise will also be controlled in accordance with standard impact avoidance measures, which will be implemented as part of the final CEMP secured through Requirement 15 (CEMP) of the dDCO;
- noise and vibration impacts resulting from the operational phases of the Proposed Development would not result in significant effects upon sensitive receptors;
- best practice measures to reduce noise will be considered during the detailed design stage and this could include plant selection, sound reducing cladding, louvres/ baffles and an acoustically treated stack;
- operational noise emissions would be controlled through an EP issued by the EA;
- the ES confirms that the Proposed Development's impacts will be the same as the NELC Planning Permission and there will therefore be no additional effects on ecology and that the Proposed Development will not result in any significant effects on local designated areas and appropriate mitigation has been secured through Requirements 11 (Biodiversity Protection), 12 (Biodiversity Mitigation and Enhancement) and 17 (Piling) in the dDCO [APP-005];
- the nature of decommissioning works is likely to be similar to that of construction works (with the exception of piling, which is not required for decommissioning) and therefore no significant noise or vibration effects are predicted; and
- The Proposed Development accords with Policy 5 (Development boundaries), Policy 6 (Infrastructure), Policy 9 (Habitat Mitigation - South Humber Bank) and Policy 41 (Biodiversity and Geodiversity) of the NELLP.

4.17.37. In regard to noise and vibration, the SoCG completed with NELC [REP4-006] concludes the effects of the Proposed Development will be the same as the NELC Planning Permission, with only negligible increases in noise from the Additional Works. As such those parties agree there will be no additional effects and subject to mitigation secured by Requirements 15 (CEMP) and 17 (Piling), there would be no unacceptable impacts upon noise and vibration receptors as a result of the Proposed Development.

4.17.38. In addition to the above, NELC in its LIR [REP1-018] noted the location of the Proposed Development in an allocated employment area, with adjoining land also allocated from employment uses, where large commercial development is directed and impacts of noise and vibration are anticipated to be of a level that would be acceptable.

4.17.39. PHE in its RR [RR-011] confirmed that it is satisfied with the methodology used in the ES to undertake assessments and acknowledged that the ES has not identified any issues which could significantly affect public health.

4.17.40. In ExQ1 [PD-006] I asked a number of questions related to noise and vibration, to which the Applicant adequately responded [REP2-008].

4.17.41. It is clear to me that the 'fallback position' of the NELC Planning Permission is an important and relevant matter in the consideration of this DCO application. The Proposed Development is similar to the NELC Planning Permission, with the exception of the Additional Works. The layout of the Proposed Development, together with the illustrative details position, scale and appearance are appropriate to the nature of the development proposed and subject to appropriate requirements will secure good design that will ensure:

- the containment of noise within buildings, wherever possible;
- optimisation of plant layout to minimise noise emissions; and
- the provision of appropriate landscaping to reduce noise transmission.

4.17.42. Bearing the above in mind, in the absence of an EP specific to the Proposed Development, I consider it important and relevant to control the maximum amount of RDF to that specified in the submitted DCO documentation and the NELC Planning Permission (753,500 tpa). This would ensure that noise and vibration level will not increase as a result of increased fuel deliveries. As such, I have specified the maximum fuel throughput of RDF within the rDCO at Schedule 1 (Authorised Development).

4.17.43. Subject to the above, I am satisfied that the Proposed Development will avoid significant adverse impacts on health and quality of life from noise and vibration; mitigate; and minimise other adverse impacts on health and quality of life from noise and vibration.

Conclusions on noise and vibration

4.17.44. Taking the above matters into account, subject to specifying the maximum RDF throughput, as set out in Schedule 1 (Authorised Development) of the rDCO and the imposition of: Requirements 5 (Detailed Design (Position and Scale)); 6 (Detailed Design (Appearance)); 15 (CEMP); 16 (Construction Traffic Management and Travel Plan); and 17 (Piling), as set out in the rDCO attached to this report, I consider the Applicant has adequately assessed the impact of noise and vibration arising from the construction, operation and decommissioning of the Proposed Development on residential NSRs. In my view, the application meets the requirements of NPS EN-1 in that regard and I consider the noise and vibration effects are a neutral consideration in the planning balance.

4.18. GROUND CONDITIONS AND CONTAMINATION

Introduction

4.18.1. This section addresses the potential impacts and effects of the construction, operation (including maintenance) and decommissioning of the Proposed Development on ground conditions and land quality.

Policy Considerations

4.18.2. In regard to pollution control and other environmental regulatory regimes NPS EN-1 Section 4.10 details that issues relating to discharges or emissions from a proposed project which may affect air quality, land quality and the marine environment, or which include noise and vibration may be subject to separate regulation under the pollution control framework or other consenting and licensing regimes. Before consenting any potentially polluting developments it should be confirmed that:

- the relevant pollution control authority is satisfied that potential releases can be adequately regulated under the pollution control framework; and
- the effects of existing sources of pollution in and around the site are not such that the cumulative effects of pollution when the Proposed Development is added would make that development unacceptable, particularly in relation to statutory environmental quality limits.

4.18.3. In terms of biodiversity and geological conservation Section 5.3 of NPS EN-1 states that:

"Where the development is subject to EIA the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity".

4.18.4. In addressing land use matters Section 5.10 of NPS EN-1 notes that the reuse of previously developed land for new development can make a major contribution to sustainable development. It also advises that for developments on previously developed land applicants should ensure that they have considered the risk posed by land contamination.

4.18.5. NPS EN-1 Section 5.15 relates to water quality and resources and states that:

"Where the project is likely to have effects on the water environment, the applicant should undertake an assessment of the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment as part of the ES or equivalent. The ES should in particular describe:

- *the existing quality of waters affected by the proposed project and the impacts of the proposed project on water quality, noting any relevant existing discharges, proposed new discharges and proposed changes to discharges;*
- *existing water resources affected by the proposed project and the impacts of the proposed project on water resources, noting any relevant existing abstraction rates, proposed new abstraction rates and proposed changes to abstraction rates (including any impact on or use of mains supplies and reference to Catchment Abstraction Management Strategies);*

- *existing physical characteristics of the water environment (including quantity and dynamics of flow) affected by the proposed project and any impact of physical modifications to these characteristics; and*
- *any impacts of the proposed project on water bodies or protected areas under the Water Framework Directive and source protection zones (SPZs) around potable groundwater abstractions."*

National Planning Policy Framework

4.18.6. Paragraph 183 of the NPPF states that planning decisions should ensure that a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities. The NPPF also encourages the use of previously developed land.

Development Plan

4.18.7. Policy 5 of the NELLP outlines the generic considerations that are applied when considering all development proposals. This policy is reflective of core principles and considerations set out in National Planning Policy. The generic considerations of this policy provide the basis for considering whether the development proposed should be supported and approved.

The Applicant's Case

4.18.8. Chapter 12 (Geology, Hydrogeology and Land Contamination) [APP-046] of the ES overlaps with Chapter 14 of the ES [APP-048]. Chapter 12 [APP-046], together with Appendices 12A (Phase 1 Geo-environmental and Geotechnical Desk Study Report File 1 - Main Document Figures and Annex 1 [APP-129] and Phase 1 Geo-environmental and Geotechnical Desk Study Report File 2 - Annex 2 [APP-130]), 12B (Ground Investigation Factual Report) [APP-131] and 12C (Ground Investigation Interpretive Report) [APP-132], identifies the relevant legal and policy context and describes the existing geological and hydrogeological conditions at the Site.

4.18.9. This chapter [APP-046] sets out the significance criteria and describes the assessment methodology employed. It goes on to assess the likely nature and extent of existing sources of contamination which may be present and the potential impacts to the existing geological and hydrogeological conditions likely to arise as a result of the Proposed Development. It considers the potential risks to people, surrounding land uses, ecological receptors, soils and groundwater and identifies the measures required to ensure that sufficient mitigation is put in place to minimise any significant effects.

4.18.10. The Applicant has identified a number of potential impacts during construction, operation and decommissioning including:

- impacts on soil resources;
- impacts on human receptors;
- impact on controlled waters; and
- impact on development infrastructure.

4.18.11. However, a number of mitigation measures are proposed to manage these potential impacts. These include the submission of an agreement to a CEMP, which will include:

- a range of measures associated with mitigating potential impacts associated with land contamination;
- management measures to minimise the risk of any contaminated surface water runoff from the Site during the site preparation, earthworks and construction phase so that it does not have a detrimental effect on the receiving watercourse and the underlying aquifers; and
- the provision of a MMP.

4.18.12. These measures are secured in Requirement 15 (CEMP) of the dDCO [REP7-003].

4.18.13. The Phase 1 Geo-environmental and Geotechnical Desk Study Report [APP-129 and APP-130], considers:

- The risks to future Site users to be low;
- The risks to controlled waters is moderate to high;
- The risks to development infrastructure is moderate to low.
- The risks to construction/ maintenance workers would be moderate/ low and to off Site receptors moderate/ low to very low; and
- The risks to potential on site flora and fauna are considered low to very low.

4.18.14. Of the 36 Resource/ Receptor and Impacts identified in Chapter 12 [APP-046] 30 were considered to be Negligible Adverse (Not Significant) and 6 were considered to be Minor Adverse (Not Significant). None were identified as Moderate Adverse or Major Adverse. I have seen nothing in the evidence which would lead me to conclude otherwise and consider Requirement 15 (CEMP) of the dDCO [REP7-003] is sufficient to ensure safeguards are put in place.

4.18.15. In addition, the dDCO [REP7-003] requires: a scheme of investigation and remediation of contamination to be submitted to NELC for its approval, in consultation with the EA (Requirement 19); implementation of any remediation approved by Requirement 19 (Requirement 20); and procedures to be implemented in case of unexpected contamination (Requirement 21). The EA has indicated that such Requirements would be adequate to address the risks associated with contaminated land and groundwater.

Views of IPs

4.18.16. NELC in its LIR [REP1-018] stated the Proposed Development would have almost identical impacts in regard to contamination as the NELC Planning Permission and that its Environmental Protection Team, assessed both proposals which were deemed to be acceptable, subject to the Requirements in the dDCO (current version [REP7-003]). The Council noted the lack of objection from the EA on such matters. As such, it

considered the Proposed Development accords with Policy 5 of the NELLP.

4.18.17. The EA in its WR [REP2-024] indicated it had no objection to the Proposed Development, as submitted. It also confirmed that all issues in respect of groundwater protection and land contamination had been agreed between it and the Applicant and that the EA had no further comments to make in regard to foul water drainage or pollution prevention. The EA also confirmed in the SoCG signed with the Applicant [REP1-001] that there were no matters that were not agreed.

4.18.18. AW in its WR [REP2-025] confirmed that it was in principle supportive of the Proposed Development, subject to the imposition of PPs, as agreed by it in the dDCO, and imposition of appropriate Requirements (Requirements 13 (Surface Water Drainage) and 14 (Foul Water Drainage)), as set out in the SoCG completed with the Applicant [REP1-005].

4.18.19. No other concerns were raised by IPs in respect of ground conditions or contamination or the assessments carried out by the Applicant in relation to it.

Examination

4.18.20. The 'fallback position', referred to above, is an important and relevant consideration in terms of ground conditions and contamination impacts that may arise from the Proposed Development.

4.18.21. In ExQ1 [PD-006] I posed a number of questions, including whether:

- targeted ground investigation works across the site had been undertaken, including in regard to 'aggressive ground conditions' and whether a factual and interpretative report had been prepared;
- testing and assessment of the soils beneath the Site had been undertaken to determine the level of risk; and
- whether a scheme of ground investigation works had been designed in accordance with Appendix 12A: Phase 1 Geo-Environmental and Geotechnical Desk Study Report [APP-129] (paragraph 7.4).

4.18.22. I also asked questions in regard to the Phase 2 Ground Investigation and Assessment (Appendix 12B: Ground Investigation Factual Report [APP-131] and Appendix 12C: Ground Investigation Interpretive Report [APP-132]).

4.18.23. In response to ExQ1, the Applicant [REP2-008] confirmed:

- detailed information on ground conditions provided by the Phase 2 Ground Investigation and Assessment will inform the design of the Proposed Development;
- the testing and assessment of soils beneath the site had been undertaken and submitted as part of the Investigation Factual Report [APP-131] and the Ground Investigation Interpretive Report [APP-132].

4.18.24. Indeed, in terms of ground conditions and contaminated land the Applicant advised in its response to ExQ1 [REP2-008] that the condition imposed by the NELC Planning Permission related to the submission of further details concerning ground conditions and contamination (Condition 13) was discharged by NELC on 12 June 2019 (Condition 13(i), NELC reference DM/0486/19/CND) and 17 September 2020 (Condition 13(ii-iv), NELC reference DM/0626/20/CND).

4.18.25. NELC in its response to ExQ1 [REP2-018], noted the EA would take the lead on land contamination matters and it would respond in accordance with its advice and specialisms. Within the SoCG completed with the Applicant [REP4-006] NELC agreed, subject to appropriate mitigation through dDCO Requirements 15 (CEMP) and 17 (Piling) and the requirements of the EP, there would be no unacceptable impacts with regard to geology, hydrogeology or contamination as a result of the Proposed Development. As such, the Council considered the Proposed Development is acceptable in accordance with Policy 5 (Development boundaries) of the NELLP.

4.18.26. In the Applicant's SoCG completed with the EA [REP1-001], it was agreed the ES provides a satisfactory assessment of the potential pollution risks to surface water (including waterbodies classified under the WFD), groundwater and land quality during construction and operation of the Proposed Development and that the mitigation measures identified are appropriate.

4.18.27. It also agreed an EP has been granted by the EA for the NELC Planning Permission as part of the SHBPS EP and the approach to varying that EP, to increase the electrical output for the Proposed Development and transfer the Proposed Development into a new separate permit, has been agreed between the parties (the Applicant and the EA).

4.18.28. Additionally, in response to ExQ1 [PD-006], the Applicant confirmed [REP2-008], as clarified in its Written Summary of Oral Submissions following the DCO Issue Specific Hearing [REP4-012], that a separate application for an EP had been made to the EA. That EP application seeks to separate the SHBPS and SHBEC EP (the current operational EP (EP Reference EPR/MP3235LY/V009)). At the close of the Examination the EP application was under consideration by the EA.

4.18.29. I noted that the completed SoCG between the EA and the Applicant [REP1-001] agreed *"there is no reason to suppose that a permit will not be issued",* albeit a caveat made clear that the statement was made 'without prejudice'. The EP application, that was 'duly made' to the EA remained under consideration by the EA at the close of the Examination. However, there is no evidence before me to lead me to the conclusion it will not be granted by the EA.

4.18.30. The EA also agreed with the Applicant (SoCG [REP1-001]), that the inclusion of dDCO Requirements 13 (Surface water drainage), 14 (Foul water drainage), 17 (Piling) and 19-21 (Investigation and remediation of contamination) would ensure that the identified mitigation measures are

applied. The wording of these Requirements was also agreed in this SoCG [REP1-001].

4.18.31. In its WR [REP2-024], the EA stated it was satisfied with all matters relating to contamination and ground water protection. This is reflective of the EA's position as set out in the SoCG completed with the Applicant [REP1-001].

Conclusion in respect of ground conditions and contamination

4.18.32. I am satisfied that the Proposed Development accords with all relevant legislation and policy requirements in respect of ground conditions and contamination and that relevant matters are adequately provided for and secured in the rDCO. This includes Requirement 13 (Surface Water Drainage), Requirement 14 (Foul Water Drainage), Requirement 15 (CEMP), Requirement 17 (Piling), Requirement 19 (Investigation and Remediation of Contamination), Requirement 20 (Implementation of Remediation Scheme), Requirement 21 (Procedure in Case of Unexpected Contamination) and Requirement 33 (Decommissioning).

4.18.33. The Proposed Development would therefore accord with relevant legislation and policy requirements, including NPS EN-1 and NPS EN-3 and these matters relating to ground conditions and contamination are thus a neutral consideration in the planning balance.

4.19. CULTURAL HERITAGE

Policy Considerations

National Planning Statements

4.19.1. NPS EN-1 Part 5 identifies the construction, operation and decommissioning of energy infrastructure as having the potential to result in adverse impacts on the historic environment. This includes both designated and non-designated heritage assets. Consideration should be given to the significance of any heritage assets and whether the development would affect their setting. There should be a presumption in favour of the conservation of designated heritage assets. Loss affecting any designated assets should require clear and convincing justification. Any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development.

National Planning Policy Framework

4.19.2. The NPPF describes the setting of a heritage asset as the surroundings in which a heritage asset is experienced. A core planning principle in the NPPF is to conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations (paragraph 189). When considering the impact of Proposed Development on the significance of a designated heritage asset, great weight should be given to the asset's conservation, and the more important the asset, the greater should be

that weight (paragraph 199). Any harm or loss of designated heritage assets requires clear and convincing justification (paragraph 200). Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal (paragraph 202).

Development Plan

4.19.3. Policy 39 of the NELLP seeks to protect, conserve and, were appropriate, enhance the historic environment, including archaeology.

The Applicant's case

4.19.4. ES Chapter 13 [APP-047] assesses the effect of the Proposed Development on cultural heritage (Heritage Assessment), whilst ES Appendix 13A [APP-133] provides a Gazetteer of Cultural Heritage Assets and Appendix 13B [APP-134] provides Historical Maps and Aerial Photographs.

4.19.5. The Heritage Assessment [APP-047] is a desk-based assessment, undertaken in order to identify the known cultural heritage resources within defined study areas, as well as assessing the potential for unknown archaeological remains to be present at the application site. It considers a study area with a 5km radius from the application site for designated heritage assets (see ES Figure 13.1 [APP-097]) and archaeological events (see ES Figure 13.2 [APP-098]). Additionally, a study area with a 1km radius from the application site, was used to identify non-designated heritage assets.

4.19.6. Data sources for the identification of heritage assets included, amongst other sources:

- National Heritage List for England;
- NELC's Historic Environment Record (report date: 17 October 2019);
- NELC's website for Planning History and Conservation Area information;
- Heritage Gateway;
- Archaeological Data Service;
- National Library of Scotland; and
- the Applicant's ZTV (See Figure 11.4 ES Volume II [APP-073]).

4.19.7. Whilst the Applicant's assessment was desk-based it states its assessment of the significance of heritage assets, and their setting, was determined by a site visit.

4.19.8. The Applicant considers the historic environment to be characterised by small built up settlements and that the significance of those assets, within the settlements, would not be adversely affected by the Proposed Development. However, it also considers that the Proposed Development would potentially have limited impact on assets located on the edge of the nearby settlement and high level designated heritage assets, which have taller elements, such as churches.

4.19.9. It states that in terms of the NPSs and NPPF impacts affecting the significance of heritage assets must be considered in terms of harm and there is a requirement to determine whether the level of harm amounts to 'substantial harm' or 'less than substantial harm'. The Applicant also states there is no direct correlation between the significance of effect as reported in this ES and the level of harm caused to heritage significance, but have worked on the basis that a major significant effect on a heritage asset would equate to substantial harm, whilst a moderate significant effect would result in less than substantial level of harm to the significance of the asset.

4.19.10. The Applicant highlights the NELC Planning Permission as the fallback position and states there will be no physical impact upon any designated heritage assets during construction and there will be no effect on buried archaeology. This is due to the fact that the site has been extensively worked as part of the construction of the SHBPS in the late 1990's and that any surviving remains were removed during this process.

4.19.11. The Applicant considers that whilst the operation of the Proposed Development will result in an increased amount of traffic, and potential for increased noise and light levels within the MDA, due to the industrial context of the location there will be no perceptible increase over the existing situation. As such it concluded there will be no impact on the significance of the designated and non-designated heritage assets identified.

4.19.12. In regard to decommissioning impacts, the Applicant considers that these will be temporary and will be similar to the predicted construction impacts. It also considers the impacts will not be significantly greater than those reported during construction and that mitigation is not considered necessary. On this basis the Applicant argues that the Proposed Development would be in conformity with NPS EN-1 and NPS EN-3, in regard to the impact of development on designated and non-designated heritage assets.

4.19.13. Irrespective of the above, the Applicant's Heritage Assessment indicates that there will be a minor adverse (not significant) effect upon the Church of St. Peter and St. Paul (NHLE 1379845) during construction of the Proposed Development due to the Church's location on the edge of Stallingborough, which is to the west of the Site. Its location results in the Site forming part of the setting of the designated heritage asset and the Proposed Development will change the setting by the addition of a new structure. However, the Applicant also states the Proposed Development will have a negligible effect on the significance of the asset and will not result in a change in the understanding of the asset.

4.19.14. In addition to the above, the Applicant's Heritage Statement also indicates there will be a minor adverse (not significant) effect upon the Church of St. Nicolas, Great Coates; (NHLE 1379845) during construction of the Proposed Development. This is due to the Church's location on the edge of Little Coates and its setting being impacted through the construction of a new structure. However, the Applicant also states, that

although the Site forms part of the setting, the Proposed Development will not affect the significance of the asset.

4.19.15. In both cases, the Applicant considers the effect of the Proposed Development to constitute less than substantial harm in line with NPS EN-1 paragraph 5.8.14 and paragraph 202 of the NPPF.

Views of IPs

4.19.16. HE in a representation accepted as an AS [AS-001] advised "*…have reviewed the current documentation and would defer comments to the Local Planning Authority's archaeology and conservation specialists."* As such HE confirmed that it had not submitted a RR.

4.19.17. Additionally, the Applicant submitted a SoCG completed with HE [REP1-006] that agreed a suitable assessment of heritage and archaeological effects had been undertaken to inform the application. HE also agreed that there would be no effects on the significance of the scheduled monuments within the wider 5 km study area caused by changes to their setting, due to the distance of the assets from the Proposed Development and intervening screening by buildings and vegetation and that impacts to the historic environment resulting from the Proposed Development would be limited to assets located on the edge of the nearby settlement and high level designated heritage assets which have taller elements, such as churches.

4.19.18. Of those high level designated heritage assets impacted, HE agree with the Applicant that the effects on the Church of St Peter and Paul, Stallingborough (Grade II*) and the Church of St Nicolas, Great Coates (Grade I), would be minor adverse (not significant), due to the additional works that form the Proposed Development, over and above the NELC Planning Permission are insignificant relative to the works that comprise the NELC Planning Permission.

4.19.19. NELC in its LIR [REP1-018] stated that the impact on heritage assets would be limited by intervening distances and the Proposed Development's context of existing industrial development. The Council confirmed that the Proposed Development is not considered to be detrimental to assets identified in the Applicant's ES and deemed that there would not be any impact on archaeology on site due to previous development on the site, which would have disturbed land below ground level.

4.19.20. No other IPs in RRs and WRs raised concerns in respect of heritage matters or the assessments carried out by the Applicant in relation to it.

Examination

4.19.21. Taking all important and relevant heritage asset matters into account, the ExA has given most careful consideration to the impact of the development of heritage assets, especially in relation to the Infrastructure Planning (Decisions) Regulations 2010 (The Decisions Regulations) and relevant policy. NPS EN-1 has provided the basis for its

consideration, supported by relevant parts of the NPPF and the development plan.

4.19.22. The 'fallback position', referred to above, is an important and relevant consideration in terms of impacts on cultural heritage that may arise from the Proposed Development.

4.19.23. Whilst recognising the importance of conserving both designated and non-designated heritage assets, in the present case, I am mindful that the Proposed Development will be seen within the existing industrial context with large stacks, industrial buildings and associated pylons already prominent in the skyline and the fact that the Proposed Development site benefits from the NELC Planning Permission, which is very similar to the current Proposed Development, and represents an acknowledged 'fallback position' as referred to in the preceding paragraph.

4.19.24. The Proposed Development will result in the erection of tall structures. However, these are not intended to be significantly different from those forming part of the NELC Planning Permission. Whilst the Proposed Development will be visible from designated and non-designated heritage assets, including high level structures, such as churches including the Church of St Peter and Paul, Stallingborough and the Church of St Nicolas, Great Coates, the new structures will be seen within the existing industrial context with large stacks, industrial buildings and associated pylons already prominent in the skyline. As such, I consider the Proposed Development will have a neutral impact on the non-designated heritage assets and the majority of designated heritage assets.

4.19.25. I concur with the opinion of the Applicant and NE that the Proposed Development would have less than substantial harm on the designated heritage assets identified of the churches of St Peter and Paul, Stallingborough and St Nicolas, Great Coates. However, the Proposed Development would result in a number of public benefits, including its contribution to meeting the identified need for additional generating capacity and support for the local economy. After considering the assessment of effects on heritage and historic assets, I consider that, even though the Proposed Development results in less than substantial harm to the significance of designated heritage asset, that harm is clearly outweighed by the public benefits of the Proposed Development.

4.19.26. There are no other outstanding matters in respect of cultural heritage.

Conclusions on Cultural Heritage

4.19.27. I have taken account of Regulation 3 of the Decisions Regulations, and had full regard to the desirability of:

- preserving scheduled monuments and their settings;
- preserving listed buildings, their settings and any features of special architectural or historic interest; and
- preserving or enhancing the character or appearance of conservation areas.

4.19.28. Additionally, in accordance with section 5.8 of NPS EN-1, I considered whether the perceived harm to heritage assets had clear justification, in order to weigh that harm against the public benefits of the Proposed Development.

4.19.29. Bearing the above in mind, I consider the Applicant has adequately assessed the significance of the heritage assets affected by the Proposed Development and that sufficient information to reach a conclusion on the nature, significance and value of identified heritage assets, along with sufficient understanding of the contribution that setting makes to their significance and the implications of the Proposed Development for those settings has been submitted so that the extent of the impact can be understood. In my view, the application meets the requirements of NPS EN-1 in that regard.

4.19.30. I consider the Proposed Development would not adversely affect any of the non-designated heritage assets or the majority of the designated heritage assets, as identified in the application documents. However, I agree with NE that the Proposed Development would result in less than substantial harm to the Churches of St. Peter and St. Paul, Stallingborough and St. Nicolas, Great Coates, which are designated heritage assets.

4.19.31. However, the Proposed Development would result in a number of public benefits, including its contribution to meeting the identified need for additional generating capacity and support for the local economy. After considering the assessment of effects on heritage and historic assets, having regard to the considerations in Regulation 3 of the Decisions Regulations, I am satisfied that, even though the Proposed Development results in less than substantial harm to the significance of designated heritage assets, that harm is clearly outweighed by the public benefits of the Proposed Development and therefore I consider the Proposed Development is acceptable in this regard.

4.19.32. Bearing the above in mind, the Cultural Heritage effects of the Proposed Development are considered to be a neutral consideration in the planning balance.

4.20. WASTE MANAGEMENT

Introduction

4.20.1. This section considers the potential effects of the Proposed Development on waste management.

Policy Considerations

National Policy Statements

4.20.2. NPS EN-1 states that, in determining a DCO application for energy infrastructure, the decision-maker should:

"consider the extent to which the applicant has proposed an effective system for managing hazardous and non-hazardous waste arising from the construction, operation and decommissioning of the proposed development. It should be satisfied that:

- *any such waste will be properly managed, both on-site and off-site;*
- *the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area; and*
- *adequate steps have been taken to minimise the volume of waste arisings, and of the volume of waste arisings sent to disposal, except where that is the best overall environmental outcome."*

4.20.3. Paragraph 5.14.2 of NPS EN-1 sets a waste hierarchy approach to manage waste which is: prevention; preparation for reuse; recycle; other recovery; and disposal. Paragraph 5.14.4 states that all large infrastructure projects are likely to generate hazardous and non-hazardous waste, and that it falls under the EP regime. Paragraph 5.14.6 states that the Applicant should set out the arrangements that are proposed for managing any waste produced and prepare a Site Waste Management Plan. The arrangements described should include information on the proposed waste recovery and disposal system for all waste generated by the development, and an assessment of the impact of the waste arising from development on the capacity of waste management facilities to deal with other waste arising in the area for at least five years of operation.

4.20.4. NPS EN-3 states that, with respect to waste generated by biomass or waste energy generation projects:

- *"The assessment should include the production and disposal of residues as part of the ES. Any proposals for recovery of ash and mitigation measures should be described"; and*
- *"Applicants should set out the consideration they have given to the existence of accessible capacity in waste management sites for dealing with residues for the planned life of the power station."*

Waste Management Plan for England (DEFRA) 2013 (WMPE)

4.20.5. Information concerning the WMPE is set out in Paragraph 4.11.12 above, and to avoid duplication is not repeated here.

National Planning Policy for Waste (Department for Communities and Local Government, 2014) (NPPW)

4.20.6. Information concerning the NPPW is set out in Paragraph 4.11.15 above, and to avoid duplication is not repeated here.

Our Waste, Our Resources: A Strategy for England (2018)

4.20.7. This strategy will help the government to meet its commitments in regard to waste and *"sets out how we will preserve our stock of material*

resources by minimising waste, promoting resource efficiency and moving towards a circular economy. At the same time we will minimise the damage caused to our natural environment by reducing and managing waste safely and carefully, and by tackling waste crime." The strategy combines actions to be taken now and commitments for the coming years.

Development Plan

4.20.8. NELLP Policy 47 sets out locational criteria to ensure that proposals for waste management facilities will not cause harm to amenity or the local environment. The approach generally seeks to locate waste management facilities away from residential areas, except where there would be clear benefits to the residential communities. This policy states:

"The Council will also seek to secure the recycling of Construction, Demolition and Excavation (CD&E) waste at the locations where waste is produced, including the temporary provision for recovery, separation and where appropriate processing of on-site materials."

The Applicant's case

4.20.9. ES Chapter 16 [APP-050] addresses waste management. It sets out that the assessment identifies the likely types and quantities of waste that would be generated during the construction and operation of the Proposed Development and the waste treatment capacity of the immediate area and surrounding region. However, decommissioning and demolition of the Proposed Development has been scoped out of this chapter of the ES due to:

- there being no information on waste policies, regional waste arisings or facilities that may be in place when the Proposed Development is decommissioned (2053 or later). Therefore, it is not possible to define a baseline;
- any future decommissioning contractor will be required to comply with relevant legislation and policy at that time;
- the majority of materials generated during future decommissioning will comprise concrete and steel, both of which are likely to be recycled rather than disposed; and
- there is no certainty on the timing or method of decommissioning. Therefore, it is not possible to determine the availability of waste management facilities or the quantities or types of waste that may be generated.

4.20.10. The Applicant confirms the study area defined for the waste assessment is the Yorkshire and Humber region. Additionally, it states the ES chapter on waste management (ES Chapter 16 [APP-050]) has been included primarily due to the potential requirement to cut and fill the top layer of ground within the MDA to improve geotechnical conditions for construction. It considers this could generate a large volume (calculated as a 'worst case' scenario as approximately 160,000m^3) of surplus excavation material.

4.20.11. In addition to the above, the ES Chapter 16 [APP-050] at Table 16.6 identifies estimated/ potential construction waste types and their tonnage and states a large proportion of these would be recycled, with the remainder disposed off-site by a licensed waste contractor.

4.20.12. During operation, the Applicant confirms that operational waste will predominantly comprise combustion residues (bottom ash) and FGT residues, which will be managed in accordance with the relevant environmental regulations using licensed waste contractors. The estimated volumes are specified as up to 179,000 tpa of bottom ash and approximately 20,600 tpa of FGT residues (Paragraph 16.6.8 of ES Chapter 16 [APP-050]).

4.20.13. The waste management methods have been assessed by the Applicant on a worst case scenario basis, with disposal of bottom ash to landfill and disposal of FGT residues to a hazardous waste facility, due to their alkaline nature. However, the Applicant recognises bottom ash is widely recycled in the UK as secondary aggregate and it is possible to treat FGT residues to enable re-use of the material as secondary aggregate.

4.20.14. The above figures of operational waste and the worst case scenarios of disposal are identical to those of the NELC Planning Permission, as are the percentage of annual waste arisings being disposed of, on a worst case scenario basis, to the relevant waste disposal facility (1.7% in terms of bottom ash and 0.48% in relation to FGT residues).

4.20.15. In terms of liquid waste, aside from foul water from domestic facilities (kitchens, toilets, etc) at the Proposed Development, liquid waste volumes under normal plant operation will be minimal and these liquids will be returned to the operational process for re-use. The Applicant confirms that any excess liquid effluent would be stored on site and tankered off by a suitable contractor, or discharged to an AW foul sewer under a trade effluent consent.

4.20.16. Additionally, the Applicant considers that waste arising from maintenance activities would be of significantly lower volumes than those generated from normal plant operation.

4.20.17. The Applicant also considers the Proposed Development would not generate any significant additional waste beyond that already generated by the construction and operation of the NELC Planning Permission.

4.20.18. ES Chapter 16 [APP-050] considers the significance of effects, establishing a baseline, as well as a potential future baseline. It also considers development design and impact avoidance during both construction and operation and the likely impacts and effects of the Proposed Development arising from construction and operation. This Chapter of the ES then considers comparisons of the Proposed Development with the NELC Planning Permission, both during construction, operation and decommissioning.

4.20.19. During construction, the Applicant advises waste arisings will be prevented and designed out, where practicable, through working with

suppliers to minimise wastage in materials and packaging. It also states that contractors will be required to adopt good practice in construction waste management, which will reduce the quantity of waste generated. The Applicant also proposes to implement the following approaches, where practicable, in order to minimise the quantities of waste requiring disposal:

- agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take-back scheme;
- implementation of a 'just-in-time' material delivery system to avoid materials being stockpiled, which increases the risk of their damage and disposal as waste;
- attention to material quantity requirements to avoid over-ordering and generation of waste materials;
- re-use of materials wherever feasible;
- segregation of waste at source where practical; and
- re-use and recycling of materials off site where re-use on site is not practical.

4.20.20. In addition, the Applicant proposed to implement the following waste management measures, in order to minimise the likelihood of any localised impacts of waste on the surrounding environment:

- damping down of surfaces during spells of dry weather and brushing/ water spraying of heavily used hard surfaces/ access points across the Site as required;
- off Site prefabrication, where practical, including the use of prefabricated structural elements, cladding units, toilets, mechanical and electrical risers and packaged plant rooms;
- open burning of waste or unwanted materials not being permitted on Site;
- all hazardous materials including fuels, chemicals, cleaning agents, solvents and solvent containing products to be properly stored in sealed containers at the end of each day prior to storage in appropriately protected and bunded storage areas;
- any waste effluent will be tested and where necessary, disposed of at the correctly licensed facility by a licensed specialist contractor(s); and
- materials requiring removal from the Site will be transported using licensed carriers and records will be kept detailing the types and quantities of waste moved, and the destinations of this waste, in accordance with the relevant regulations.

4.20.21. An outline CEMP (Appendix 5A in ES [APP-107]) has been submitted as part of the ES and a final CEMP would be secured by Requirement 15 (CEMP) of the dDCO [REP7-003]. The Applicant confirms the CEMP will be finalised by the contractor prior to the start of construction and it will set out how waste will be managed during construction, and how opportunities to re-use and recycle waste will be explored in accordance with the waste hierarchy. During operation, the CEMP confirms an Environmental Management System (EMS) will be developed and maintained for the operational Proposed Development, as will be required

by an EP issued by the EA. This EMS will include procedures for the management of waste in accordance with relevant legislation.

Views of IPs

4.20.22. The EA in its RR [RR-005] confirm it reviewed Chapter 16 of the ES in respect of waste management and noted that this highlights relevant legislation, which will be adhered to. It also confirmed the outline CEMP also includes proposals for the final CEMP, which was satisfactory, and noted Requirement 15 (CEMP) of the dDCO would adequately secure the CEMP. As such the EA confirmed it was satisfied that all aspects of waste management and pollution prevention have been adequately addressed in these documents.

4.20.23. Mr Hamilton in his RR [RR-009] indicated that he was concerned that the Proposed Development will promote waste production rather than reducing and recycling. However, no further comments, WRs or evidence was received from Mr Hamilton that quantifies his concerns. In the absence of such evidence or additional information I afford his RR limited weight in the consideration of this DCO application.

4.20.24. No other concerns were raised by IPs in respect of waste management or the assessments carried out by the Applicant in relation to it.

Examination

4.20.25. No significant matters or concerns, that were found to be justified, were raised by IPs in RRs or WRs in respect of waste management issues.

4.20.26. Indeed, the EA in its RR [RR-005] confirmed it had reviewed Chapter 16 (Waste Management) of the ES and that it was satisfied that all aspects of waste management and pollution prevention have been adequately addressed in these documents. It also confirmed the outline CEMP, which includes proposals for the final CEMP, were also satisfactory and noted that Requirement 15 (CEMP) of the dDCO ([REP7-003] is the current version of the dDCO) would adequately secure the CEMP. As such the EA confirmed it was satisfied that all aspects of waste management and pollution prevention had been adequately addressed in ES Chapter 16 [APP-050] and the outline CEMP [APP-107].

4.20.27. During the course of the Examination, ExQ1 [PD-006] sought information in regard to estimate future levels of waste arisings in the region, bearing in mind the Waste Disposal Authority for the area and Waste Disposal Authorities for adjoining areas predict growth.

4.20.28. The Applicant's response to ExQ1 [REP2-008] adequately responded to these questions, clarifying future waste arisings are only of relevance to its assessment in the context of assessing waste impacts from operation of the Proposed Development. The Applicant confirmed operational wastes generated by the Proposed Development are compared (in the case of bottom ash) to the arisings of construction and demolition waste and (in the case of FGT residues) to the arisings of hazardous waste. As such, in both cases extended producer responsibility and deposit return

schemes would not be relevant to operational wastes arising from the Proposed Development. I am satisfied with the Applicant's response in this regard.

4.20.29. In addition to the above, I am also satisfied that the figures of operational waste and the methods of disposal are identical to those of the NELC Planning Permission, as are the percentages of annual waste arisings being disposed of (1.7% in terms of bottom ash and 0.48% in relation to FGT residues). In the absence of any evidence that would lead me to a different conclusion, I am satisfied that operational wastes have been adequately considered in the Applicant's ES - Chapter 16 Waste Management [APP-050].

4.20.30. I also consider the Applicant's approach to waste management generally, as set out in its ES (Chapter 16) [APP-050], is acceptable and that a CEMP, as set out in Requirement 15 (CEMP) of the current dDCO [REP7-003], will be adequately secured.

Conclusion on Waste Management

4.20.31. For the reasons set out above, I am satisfied that the Proposed Development would not result in any significant effects arising from waste generated during its construction, operation or decommissioning, especially when bearing in mind they are identical to the NELC Planning Permission, which I consider to be a realistic fallback position. I am also satisfied that matters relating to mitigation in respect of waste can be adequately secured through the rDCO, via Requirement 15 (CEMP).

4.20.32. Bearing all of the above in mind, the Proposed Development would meet all legislative and policy requirements relating to waste management, including those of NPS EN-1, and there are no disbenefits which weigh against the Proposed Development in this regard. As such I consider waste management effects to be a neutral consideration in the planning balance.

4.21. SOCIO-ECONOMIC EFFECTS (INCLUDING HUMAN HEALTH)

Policy Considerations

4.21.1. Section 5.12 of NPS EN-1 notes that the assessment of a project should consider all relevant socio-economic impacts including the creation of jobs and training opportunities, provision of additional local services and local infrastructure, effects on tourism, influx of workers and cumulative effects with other projects in the vicinity. Mitigation measures to address adverse effects should be considered.

4.21.2. Paragraph 4.13.2 of NPS EN-1 sets out that where the proposed project has an effect on human beings, the ES should assess these effects for each element of the project, identifying any adverse health impacts, and identifying measures to avoid, reduce or compensate for these impacts as appropriate. Paragraph 4.13.3 recognises that direct impacts on

health may include increased traffic, air or water pollution, dust, odour, hazardous waste and substances, noise, exposure to radiation, and increases in pests.

4.21.3. Paragraph 4.3.15 of NPS EN-1 states that generally, those aspects of energy infrastructure which are most likely to have a significantly detrimental impact on health are subject to separate regulation (for example for air pollution) which will constitute effective mitigation of them, so that it is unlikely that health concerns will either constitute a reason to refuse consents or require specific mitigation under PA2008. However, account should be taken of health concerns when setting requirements relating to a range of impacts such as noise.

4.21.4. NPS EN-5 contains guidance on the assessment of the effects of Electromagnetic Fields (EMFs) with reference to the guidelines on exposure of people to EMFs published by the International Commission on Non-Ionizing Radiation Protection.

The Applicant's case

4.21.5. ES Chapter 15 [APP-049] assesses the socio-economic effects of the Proposed Development during construction, operation and decommissioning, whilst ES Chapter 18 [APP-052] addresses effects on human health.

Socio-economic effects

4.21.6. The assessment considers the role of the Proposed Development in the generation of direct and indirect employment opportunities at the local and regional level during its construction and operation, including periods of maintenance and decommissioning, and how this would impact on the economic prosperity of the area. Where possible, socio-economic impacts have been appraised against relevant national standards. Where these do not exist professional experience and judgement have been applied.

4.21.7. The Office of National Statistics (ONS) statistical geographies have been used to define the study area for the socio-economic assessment. The Proposed Development falls within a Lower Super Output Area (LSOA) North East Lincolnshire 007A (Direct Impact Area), one of many small geographic areas defined by the ONS. As well as understanding the socio-economic conditions immediately surrounding the Site (as per the LSOA analysis), the socio-economic assessment also takes into account the principal labour market catchment area of the Travel to Work Area (TTWA). TTWAs contain at least 75% of the area's workforce that both live and work in the area. The Site falls within the Grimsby TTWA (the 'Wider Impact Area'), which features the town of Grimsby as its employment centre, also covering other local settlements including Cleethorpes and Immingham. The Site is located relatively centrally in the TTWA, positioned between the two largest settlements of Grimsby and Immingham

4.21.8. The assessment outlines the socio-economic context of both the Direct Impact Area and the Wider Impact Area (together being the 'Study Area')

and makes comparisons to the whole of England. Key indicators include population and labour force; skills and unemployment; industry and the economy.

4.21.9. ES Chapter 15 [APP-049] sets out that at the peak of construction the Proposed Development would create approximately 730 jobs, when applying the 'Displacement' and 'Multiplier Effect'. On a 'worst scenario' basis 50% (some 365) workers in those jobs would be from within the Grimsby TTWA, across a wide range of sectors and skills. Additionally, the direct expenditure involved in the construction phase would lead to increased output generated in the Grimsby TTWA economy. It is considered that the employment created by the construction phase of the Proposed Development would have a short-term beneficial effect on the economy of the TTWA economy.

4.21.10. The Applicant indicates that it would host a careers fair to promote employment opportunities at the Proposed Development for local residents, and a "meet the buyer" event will be held to promote supply chain opportunities for local businesses.

4.21.11. During the operational phase of the Proposed Development, taking account of 'job leakage', 'displacement' and the 'multiplier effect', it is estimated that the total net employment for the operational element of the Proposed Development will be 55 employees, of which 48 are predicted to be from the Grimsby TTWA.

4.21.12. In terms of maintenance, it is expected that each year the Proposed Development will be taken offline for approximately three weeks to allow for maintenance activities to be undertaken safely, including an internal inspection of the boiler. Approximately every five to six years it will be taken offline for a major outage for other more substantial maintenance activities, including for example replacement of sections of the boiler. Such a major outage is likely to last approximately five weeks. Staffing levels will vary as each element of the works are completed.

4.21.13. When taking account of 'job leakage', 'displacement' and the 'multiplier effect', it is estimated that the peak number of employees on Site at any one time during a major outage is likely to be around 195 employees, of which 49 are predicted to be from the Grimsby TTWA.

4.21.14. Taking into account the existing overall size of the labour pool in the Grimsby TTWA, the magnitude of impacts is considered to be low during the operational and maintenance phases of the Proposed Development. Therefore, the direct, indirect and induced employment created by the operational phase of the Proposed Development is likely to have a moderate beneficial long-term (significant) effect on the Grimsby TTWA economy.

4.21.15. The workforce employed to decommission the Proposed Development would have a beneficial effect on the economy, in the same way as those employed during construction. However, at this stage the significance of socio-economic effects during decommissioning is uncertain due to

limited information available regarding decommissioning methods, timescales and associated staffing requirements.

4.21.16. ES Chapter 15 [APP-049] concludes that the Proposed Development will have an overall positive effect on the Grimsby TTWA economy, through the provision of employment and through associated multiplier effects. Additionally, the Applicant considers the creation of employment opportunities during both the construction, operation, and decommissioning phases of the Proposed Development will support the objectives set out in the Humber Local Enterprise Partnership's Strategic Economic Plan (2014-2032 (updated 2016)) related to job creation, in particular skilled roles and the overall contribution to the growth of the energy sector in the Humber Estuary.

Human Health

4.21.17. ES Chapter 18 [APP-052] provides an overview, highlighting key aspects of the technical assessments completed and presented elsewhere in the ES that are relevant to human health. It also includes baseline health related data to inform the overall conclusions of the chapter, and presents information on potential EMF health effects from electricity cables and substations associated with the Proposed Development.

4.21.18. The technical assessments presented elsewhere in the ES include assessments relating to air quality, traffic and transport, noise and vibration, flood risk and water quality, ground conditions and contamination and socio-economics.

4.21.19. ES Chapter 18 [APP-052] concludes that, in most cases, there would be no significant effects during the construction, operation or decommissioning of the Proposed Development, particularly following impact avoidance and mitigation secured through requirements in the dDCO.

4.21.20. It also addresses effects of EMF on human health, recognising that there are potential health impacts associated with electrical and magnetic fields around switchyards and connecting cables and power lines. The Proposed Development would include new above or below ground electrical cables to connect to the existing 400kV substation within the SHBPS. The assessment sets out that no residential receptors are present within the study area and none are known to be likely in the future baseline, so there is no potential for significant EMF effects for the general public. Furthermore, as the 400kv substation already exists and is not being extended beyond its existing perimeter wall, which is over 45m from the SHBPS site boundary, there will be no new EMF effects to the general public associated with its use.

4.21.21. As such, the only potential exposure to EMF would arise for construction workers and operational staff associated with the Proposed Development and potential off-site electrical connection. Impact avoidance measures will be implemented to protect construction workers and operational staff from potential EMF effects associated with the existing substation and the electrical cable in accordance with the Control of Electromagnetic Fields

at Work Regulations 2016. With these measures in place, no significant health effects in the medium to long-term for construction workers or operational staff are predicted.

Views of IPs

4.21.22. No significant matters of concerns were raised by IPs in RRs and WRs in respect of socio-economic matters, including human health. NELC's LIR [REP1-018] recognised that the Proposed Development would support economic growth of the South Humber Bank and will support local employment and job creation over a considerable period.

Examination

4.21.23. I am satisfied that ES Chapter 15 [APP-049] has adequately demonstrated that the Proposed Development would provide economic benefits, including within the local area.

4.21.24. No significant matters of concerns were raised by IPs in RRs and WRs in respect of human health matters. In addition, PHE in its RR [RR-011] acknowledged that the ES has not identified any issues which could significantly affect public health and confirmed that it was satisfied with the methodology used in the ES to undertake assessments.

4.21.25. The HSE did not make any RR or WR in relation to this DCO application, despite having made representations on the NELC Planning Permission. In relation to the NELC Planning Permission, the HSE noted the site's close proximity to several pipelines and hazardous installations and wrote advising NELC that they 'did not advise against' that development. However, as with the NELC Planning Permission, in order to accord with guidance previously provided by the HSE to the Council, I consider it would be appropriate to require no part of the Proposed Development to have more than three occupied storeys, save for the administration block within the area defined in the rDCO, as Work No. 1B, and as shown on the submitted Works Plan [APP-010]. I am satisfied that such a limit on the number of occupied storeys would be adequately controlled by Requirement 5 (Detailed Design (Position and Scale).

4.21.26. Mr Hamilton raised concerns [RR-009] around PM_*, $pm_{2.5}$ and smaller. I have largely considered these concerns within the section of this report on Air Quality above, finding such concerns unwarranted and unsubstantiated.

4.21.27. In addition to the above considerations, the 'fallback position', as referred to above, must be borne in mind when considering the socio-economics impacts (including Human Health) that may arise from the Proposed Development, as it is an important and relevant consideration.

Conclusions on Socio-economics (including Human Health)

Socio-economic effects

4.21.28. I consider that the ES has adequately assessed the socio-economic effects of the Proposed Development and has provided sufficient evidence to support its conclusions on those effects. I am satisfied that the Proposed Development would support economic development in the area and would accord with all relevant policies, including NPS EN-1. This weighs modestly in favour of the Proposed Development. As such I consider socio-economic effects to be a substantial consideration in the planning balance.

Human Health

4.21.29. I am satisfied that the ES has adequately addressed and considered human health matters relating to the Proposed Development and that necessary mitigation to avoid adverse effects in this regard is appropriately secured through the relevant requirements of the rDCO, including Requirement 5 (Detailed Design (Position and Scale), Requirement 15 (CEMP) and Requirement 16 (CTMP).

4.21.30. In addition, the operation of the Proposed Development would be regulated by the EA through an EP to control emissions from the Proposed Development through the use of BAT. The Proposed Development would thus comply with relevant legislation and policy in respect of human health, including that of NPS EN-1 and NPS-EN5, and there are no disbenefits which weigh against the Proposed Development in this regard. As such Human Health effects are a neutral consideration in the planning balance.

4.22. OTHER CONSIDERATIONS, INCLUDING CLIMATE CHANGE

Climate Change

Policy Considerations

4.22.1. The Climate Change Act 2008 (as amended) (CCA2008) sets a legally binding target for the UK to reduce its net GHG emissions from 1990 levels. It commits the UK government to reducing GHG emissions by at least 100% of 1990 levels by 2050 (a net zero carbon target for the UK).

4.22.2. As noted in Chapter 3 of this report, the UK is a signatory to the Paris Agreement 2015 under the United Nations Framework Convention on Climate Change. This provides a framework to keep global warming below 2°C, pursuing efforts to limit the temperature increase to 1.5°C.

4.22.3. The 2011 Carbon Plan (Carbon Plan) is the UK's national strategy under CCA2008 for delivering emissions reductions through Carbon Budgets (2023-27) and preparing for further reductions to 2050. The Sixth Carbon Budget Report was published in December 2020, although the Carbon Budget Order 2021 had not been made prior to the close of this Examination.

4.22.4. The Carbon Plan, pp93-99 describes a three-pronged strategy of: preventing waste arising; reducing methane emissions from landfill; and

efficient energy recovery from residual waste. Paragraphs 2.130-2.132 describe EfW as a sustainable biomass source and low carbon heat source for large-scale CHP opportunities.

4.22.5. Paragraph 2.206 of the Carbon Plan states that the Government is committed to working towards a zero-waste economy and identified three broad strands of the Government's approach to tackle emissions from the sector. One of these strands is recovering EfW, rather than sending it to landfill. It states EfW "would displace energy produced from fossil fuels, avoids methane emissions from landfill and is considered to be generally a good source of feedstocks to meet UK bioenergy needs."

4.22.6. Additionally, Paragraph 2.2.3 states *"The Government's aim is to get the most energy out of waste, not to get the most waste into energy recovery. Through effective prevention, re-use and recycling, residual waste will eventually become a finite and diminishing resource. However, until this becomes a reality, efficient energy recovery from residual waste can deliver environmental benefits and provide economic opportunities." Furthermore Paragraph 2.224 set out that "efficient energy recovery from waste prevents some of the negative greenhouse gas impacts of waste in landfill and helps to offset fossil fuel power generation".*

4.22.7. The WMPE states that the Government prioritises efforts to manage waste in line with the waste hierarchy and reduce the carbon impact of waste, and supports efficient energy recovery from residual waste – of materials which cannot be reused or recycled – to deliver environmental benefits, reduce carbon impact and provide economic opportunities.

4.22.8. The Clean Growth Strategy for the UK, 2017 notes significant progress made in decreasing GHG emissions from waste going to landfill and adopts goals of being a 'zero avoidable waste economy' by 2050 and diverting all food waste from landfill by 2030.

4.22.9. Although not adopted national policy the National Infrastructure Assessment, 2018 recommends that more use of alternative treatment for food waste and plastic in particular is encouraged to reduce GHG emissions. Page 34 states: *"The successful delivery of a low cost, low carbon energy and waste system requires… encouraging more recycling, and less waste incineration."*

4.22.10. The UK Committee on Climate Change (UK CCC) has a statutory role to advise government under CCA2008. The Committee's 2017 and 2018 reports to Parliament identify significant policy gaps for meeting carbon budgets. On page 8 in the 2017 report, the Committee stated that:

"New policies are needed across the economy. By 2030, current plans would at best deliver around half of the required reduction in emissions, 100-170 MtCO2e per year short of what is required by the carbon budgets."

4.22.11. The latest advice to Government regarding necessary actions for the UK to achieve the carbon emission reductions enshrined in law via the CCA2008 is the UK CCC's report: Reducing UK emissions: Progress

Report to Parliament, which was laid before Parliament on 25 June 2020 (June 2020 CCC Progress Report). It identifies for the first time the need to address emissions from waste incineration, warning against the continued 'dash for incineration' as it competes with recycling, and expressly advises: *"New plants (and plant expansions) above a certain scale should only be constructed in areas confirmed to soon have CO_2 infrastructure available and should be built 'CCS1 (Carbon Capture and Storage) ready' or with CCS"*.

4.22.12. Chapter 7 of the sectoral scenarios report from the UK CCC, p201, lists *"incineration with energy recovery"* among technology options for landfill waste diversion.

4.22.13. The UK CCC's 2019 report states that electricity generation needs to be almost fully decarbonised by 2050 and that industry will require greater deployment of carbon capture, utilisation and storage, use of hydrogen, and electrification. As to waste management it suggests that no biodegradable waste should be landfilled after 2025 and that recycling rates of 70% should be targeted, further reducing residual waste.

4.22.14. NPS EN-1 states that while*: "the UK economy is reliant on fossil fuels, and they are likely to play a significant role for some time to come… the UK needs to wean itself off such a high-carbon energy mix: to reduce GHG emissions and to improve the security, availability and affordability of energy through diversification"* (paragraphs 2.2.5 and 2.2.6). However, it also emphasises the importance of a diverse mix of energy generating technologies. The NPS states that the Government is committed to increasing the use of renewable energy and investment in low carbon energy generation to ensure a secure electricity market in the future. The NPS states that the CO_2 emissions of individual applications do not need to be benchmarked against UK carbon budgets, and CO_2 emissions are not a reason to prevent project consent.

4.22.15. Paragraph 2.2.4 states that not all aspects of Government energy and climate change policy will be relevant to NSIP decisions or planning decisions by local authorities, and the planning system is only one of several vehicles that helps to deliver Government energy and climate change policy.

4.22.16. Paragraph 3.4.3 notes only that the energy produced in EfW facilities *"from the biomass fraction"* of residual waste is regarded as renewable. Section 4.6 supports CHP for thermal generating stations including (paragraph 4.6.8) on the grounds of the efficiency of displacing conventional fossil-fuelled separate heat and electricity generation.

4.22.17. Paragraph 5.2 states that:

"CO_2 emissions are a significant adverse impact from some types of energy infrastructure which cannot be totally avoided (even with full deployment of CCS technology). However, given the characteristics of these and other technologies, as noted in Part 3 of this NPS, and the range of non-planning policies aimed at decarbonising electricity

generation such as EU ETS (see Section 2.2 above), Government has determined that CO_2 emissions are not reasons to prohibit the consenting of projects which use these technologies or to impose more restrictions on them in the planning policy framework than are set out in the energy NPSs (e.g. the CCR and, for coal, CCS requirements). Any ES on air emissions will include an assessment of CO_2 emissions, but the policies set out in Section 2, including the EU ETS, apply to these emissions. The [decision making body] does not, therefore need to assess individual applications in terms of carbon emissions against carbon budgets and this section does not address CO_2 emissions or any Emissions Performance Standard that may apply to plant."

4.22.18. The NPS EN-3 covers EfW and states:

"The recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs. Where the waste burned is deemed renewable, this can also contribute to meeting the UK's renewable energy targets. Further, the recovery of energy from the combustion of waste forms an important element of waste management strategies in both England and Wales."

4.22.19. Low-carbon technologies are defined in the NPPF as *"…those that can help reduce emissions (compared to conventional use of fossil fuels)."* A core planning principle of the NPPF is that the planning system should *"…support the transition to a low carbon future in a changing climate"* (Paragraph 152). Paragraph 158 states that in determining planning applications for renewable and low carbon development*: "…local planning authorities should not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions..."*

The Applicant's Case

4.22.20. Chapter 19 of the ES [APP-053], entitled Sustainability and Climate Change, considers the potential effects of the Proposed Development on climate change, whilst Appendix 19A of the ES [APP-138] provides an assessment of GHG emissions. Chapter 19 provides a summary of the assessment of the impact of GHG emissions and considers the Proposed Development's resilience to climate change. It recognises that the Proposed Development would result in GHG emissions both during construction and operation. It concludes:

- GHG emissions from construction of the Proposed Development (mainly from embodied carbon in construction materials) are estimated to be minor adverse when compared to the UK carbon budget for the period;
- GHG emissions from operation of the Proposed Development will be partly offset by emissions savings achieved by diverting waste from landfill and recycling of metals in bottom ash, so the carbon intensity of the Proposed Development (72 tCO2e per GWh) compares

favourably to the current grid average carbon intensity (173 tCO2e per GWh);

- the carbon intensity of the Proposed Development (72 tCO2e per GWh) is lower than the carbon intensity of the NELC Planning Permission (93 tCO2e per GWh) as a result of the higher planned operational efficiency of the Proposed Development; and
- no significant combined effects from climate change and the Proposed Development on sensitive receptors have been identified.

Views of IPs

4.22.21. The RR of UKWIN [RR-012] cites climate impacts as a concern and states it considers that this would hamper efforts to decarbonise the electricity supply. It also considered the methodologies and assumptions adopted by the Applicant for its needs and climate change assessments to be flawed, advising it disputed them. Despite raising the above concerns no WRs or further submissions were received from UKWIN and its concerns and allegations remained unsubstantiated at the close of the Examination.

4.22.22. The RR from Philippa Roddis [RR-010] indicated that she would be making principal submissions in relation to carbon emissions, sustainability and community benefits. However, no subsequent submissions or WRs were received from this person.

4.22.23. No other IPs raised concerns in regard to Climate Change or the assessments carried out by the Applicant in relation to it.

Examination

4.22.24. The 'fallback position', referred to above, is an important and relevant consideration in terms of climate change considerations that arise from the Proposed Development.

4.22.25. NPS EN-1 explicitly recognises the Government's commitment to increasing the use of renewable energy and investment in low carbon energy generation to ensure a secure electricity market in the future. The NPS states that the CO_2 emissions of individual applications do not need to be benchmarked against UK carbon budgets, and CO_2 emissions are not a reason to prevent project consent.

4.22.26. Emissions from the construction of the Proposed Development would contribute considerably less than 1% of the total UK carbon budget emissions during any five-year carbon period under which they arise. As such, the magnitude of impact during construction is considered low, with the significance of effects considered as 'minor adverse'. Additionally, it is worth remembering that the NELC Planning Permission would have similar impacts in terms of emissions from construction as the Proposed Development subject to this DCO application. Bearing these factors in consideration, I consider the construction of the Proposed Development will not have a significant impact on the UK meeting the current carbon budgets.

4.22.27. In regard to GHG emissions arising from the operation of the Proposed Development, it is clear that when considered in isolation, a rise in emissions would result. However, bearing in mind the NELC Planning Permission, which I consider to be important and relevant in the consideration of the Proposed Development, it is clear that the Proposed Development, with its higher planned operational efficiency, will have a lower carbon intensity (72 tCO2e per GWh) than the NELC Planning Permission (93 tCO2e per GWh). In order to ensure this, and in the absence of an EP specific to the Proposed Development, I consider it important to secure the maximum RDF throughput to that set out in the submitted DCO documentation and the NELC Planning Permission (753,500 tpa). This is achieved in the rDCO, attached to this report at Appendix D, by specifying the maximum RDF throughput within Schedule 1 (Authorised Development).

Conclusions on Climate Change

4.22.28. The evidence presented indicates that the Proposed Development would support the UK's transition to low carbon energy generation. While there would be a small increase in GHG emissions, it would not be significant and when bearing in mind the NELC Planning Permission it would result in similar impacts during construction and a lower carbon intensity when in operation that the NELC Planning Permission.

4.22.29. In my view, the Proposed Development would contribute to meeting the UK's carbon commitment and supporting the transition to a low carbon economy.

4.22.30. On balance, I am satisfied that the Proposed Development would accord with the guidance in NPS EN-1 and EN-3 and would be in accordance with the UK's commitments under the CCA2008 and the Paris Agreement and I consider the climate change effects are a neutral consideration in the planning balance.

4.22.31. Irrespective of the above, the SoS for BEIS may wish to satisfy themselves as to the impact of the making and/ or coming into force of The Carbon Budget Order 2021, which came into force after the close of the Examination. The SoS for BEIS may wish to consider the impact of the CO_2 equivalent emissions for the construction and operational phases of the Proposed Development in relation to the Carbon Budget Order 2021 and the cumulative impact of emissions in the context of any revised net carbon target and any other projects and programmes.

CUMULATIVE AND COMBINED EFFECTS

Policy Considerations

4.22.32. The EIA Regulations require an ES to include an assessment of the potentially significant effects of a proposed scheme. Furthermore, NPS EN-1 advises that the SoS should take into account, amongst other things, any long term and cumulative adverse impacts. It requires applications to include information on how the effects of the proposal would combine and interact with the effects of other development.

The Applicant's Case

4.22.33. ES Chapter 17 [APP-051] examines the cumulative and combined effects of the Proposed Development with the other developments within the study area that are likely to contribute to combined or cumulative impacts. These are identified in Figure 17.1 of the ES [APP-100]. It also defines what is meant by cumulative and combined effects, identifies the methodology and significance criteria adopted and considers the cumulative effects on: Air Quality; Traffic and Transportation; Noise and Vibration; Ecology; Landscape and Visual Amenity; Geology, Hydrogeology and Land Contamination; Cultural Heritage; Water Resources, Flood Risk and Drainage; Socio-Economic Effects; Waste Management; Human Health; and Sustainability and Climate Change.

4.22.34. In summary, it concludes that there would be no significant cumulative and combined effects arising from the construction or operational phases of the Proposed Development in relation to the majority of the above aspects. However, it identified air quality impacts on the Humber Estuary SPA, Ramsar site and SAC arising from NOx concentrations and acid deposition resulting from the Proposed Development in combination with other plans and projects during operation.

Views of IPs

4.22.35. NE in its RR [RR-008] raised concerns in regard to the air quality impacts on the SPA, Ramsar site and SAC arising from NOx concentrations and acid deposition in combination with other plans and projects during operation.

4.22.36. No other IPs raised any concerns on the cumulative and combined effects of the Proposed Development during the Examination.

Examination

4.22.37. In relation to cumulative and combined effects, including those related to air quality impacts, these matters are considered in detail in Chapter 5 below, especially paragraphs 5.6.30 – 5.6.39.

4.22.38. Therefore, to avoid duplication, these matters are not considered further in this section, other than to note that in Chapter 5 I consider that the Applicant's approach to the assessment of in combination effects from NOx and acid deposition, as set out in the HRAR, ES Chapter 17 and further explained in the Applicant's comments on the RRs [REP1-008], to be justified. I also note that the Proposed Development would not result in adverse effects on the integrity of the European sites due to the predicted NOx and acid deposition contributions in combination with other plans or projects and that there are no outstanding matters to be resolved with regard to cumulative effects.

Conclusion on Cumulative and Combined Effects

4.22.39. Bearing the above in mind, and in consideration of Chapter 5 which covers these matters in detail, I am satisfied that no long term and

cumulative adverse impacts are likely to arise from construction, operation and decommissioning activities for the Proposed Development. Accordingly, I am satisfied that the requirements of NPS EN-1 are met in this regard and the Cumulative and Combined Effects are a neutral consideration in the planning balance.

5. FINDINGS AND CONCLUSIONS IN RELATION TO HABITATS REGULATIONS ASSESSMENT

5.1. INTRODUCTION

5.1.1. This chapter of the report sets out my analysis and conclusions relevant to Habitats Regulations Assessment (HRA). This will assist the Secretary of State (SoS) for Business, Energy and Industrial Strategy (BEIS), as the competent authority, in performing his duties under The Conservation of Habitats and Species Regulations 2017 ('the Habitats Regulations').

5.1.2. Regulation 63 of the Habitats Regulations states that if a plan or project is likely to have a significant effect on a European site designated under the Habitats Regulations (either alone or in combination with other plans or projects), then the competent authority must undertake an appropriate assessment (AA) of the implications for that site in view of its conservation objectives. As a matter of policy, the Government applies the same procedures to a number of other internationally designated sites, including Ramsar sites; these are all referred to in this report hereafter as European sites. Consent can only be granted if the AA concludes that the integrity of European sites would not be adversely affected, subject to Regulation 64 (considerations of overriding public interest).

5.1.3. During the course of the Examination, the Habitats Regulations were amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 which came into force on Implementation Period Completion Day, 31 December 2020. These amendment regulations reflect the arrangements in light of the UK's departure from the EU, as discussed in Section 3.3 of this report, including the introduction of new terminology with reference to the National Site Network rather than the Natura 2000 network (which remains the collective term for sites in the European Union).

5.1.4. Evidence has been sought during the Examination from the Applicant and the relevant Interested Persons (IPs) through written questions, with the aim of ensuring that the SoS has such information as may reasonably be required to carry out his duties as the competent authority.

5.1.5. In accordance with the process set out in Planning Inspectorate Advice Note 10, submitted evidence in respect of HRA matters was drawn together during the Examination into a Report on the Implications for European Sites (RIES) [PD-012]. The purpose of the RIES was to compile, document and signpost information provided in the application and submitted by the Applicant and IPs during the Examination (up to and including Deadline (DL) 5 in relation to potential effects on European sites. The RIES was published on the Planning Inspectorate's website on 31 March 2021. IPs, including Natural England (NE), were notified and consultation was undertaken between 31 March and 23 April 2021.

5.1.6. The RIES was issued to ensure that IPs, including NE as the statutory nature conservation body, had been consulted formally on Habitats Regulations matters. This process may be relied upon by the SoS for the purposes of Regulation 63(3) of the Habitats Regulations. The consultation raised no new relevant or important issues or concerns. The Applicant submitted comments on the RIES for DL6; these are reported below in Section 6.6. No other party commented on the RIES.

5.2. PROJECT LOCATION

5.2.1. The Proposed Development considered in the HRA Report is as described in Chapter 2 of this report.

5.2.2. The Order Limits of the Proposed Development do not overlap with any European site. The nearest European sites are all located approximately 175m to the east of the application site at their closest point.

5.2.3. The Applicant identified European sites within 10km of the application site boundary, and accordingly considered the following three European sites and their features, for which the UK is responsible, for inclusion within the HRA: Humber Estuary Special Area of Conservation (SAC); Humber Estuary Special Protection Area (SPA); and Humber Estuary Ramsar site.

5.2.4. No other European sites or features were identified by NE or any other IP.

5.2.5. The Applicant did not identify any effects on European sites in any European Economic Area (EEA) State.

5.2.6. I am satisfied that the Applicant has correctly identified all the relevant European sites and qualifying features/ interests for consideration within the HRA.

5.3. HRA IMPLICATIONS OF THE PROJECT

5.3.1. As the Applicant did not identify any European sites in an EEA State that may be affected, only European sites within the national site network and Ramsar sites are addressed in this report.

5.3.2. The Proposed Development is not connected with or necessary to the management for nature conservation of any of the European sites considered within the Applicant's assessment.

5.3.3. The Applicant concluded that there is the potential for likely significant effects (LSE) on the Humber Estuary SAC, SPA and Ramsar site and therefore provided a Habitats Regulations Assessment Report entitled 'Habitats Regulations Assessment Signposting' (Revision 1.0) ('the HRAR') [APP-027], together with screening and integrity matrices (HRAR Appendices 1 and 2, respectively) with the Development Consent Order (DCO) application.

5.3.4. The Applicant, in its 'Comments on Relevant Representations' [REP1-008], received for DL1, addressed comments made by NE in relation to HRA in its Relevant Representation (RR) [RR-008]. The draft Statements of Common Ground (dSoCGs) with NE [REP1-010] and North East Lincolnshire Council (NELC) [REP1-011] and finalised SoCG with North Lincolnshire Council (NLC) [REP1-012] submitted by the Applicant for DL1, contained information relevant to HRA.

5.3.5. My First Written Questions (ExQ1) were issued on 17 November 2020 [PD-006], responses to which were due for DL2 (8 December 2020). Questions 10.0.1 – 10.0.36 related to HRA matters and the content of the HRAR. Responses to these questions were received at DL2 from the Applicant [REP2-008], NE [REP2-020] and NELC [REP2-017 and REP2-018].

5.3.6. In response to my ExQ1 and representations made by IPs during the Examination the Applicant provided an updated HRAR (Revision 2.0) [REP2-001] at DL2 containing updated screening and integrity matrices.

5.3.7. A finalised SoCG with NE was submitted by the Applicant at DL2 [REP2 003], in which all HRA-related matters were shown as agreed.

5.3.8. The Applicant submitted its comments on the responses from IPs to my ExQ1 at DL3 [REP3-011], which included HRA matters.

5.3.9. An updated dSoCG between the Applicant and NELC was submitted at DL3 [REP3-005] and a finalised version was submitted at DL4 [REP4-006]. Neither of these contained any changes to the HRA-related content of the dSoCG submitted at DL1 [REP1-011].

5.3.10. My Further Written Questions (ExQ2), which included points in respect of HRA matters, were issued on 5 March 2021 [PD-010].

5.3.11. Relevant responses to the HRA-related questions contained in ExQ2 were received at DL5 from the Applicant [REP5-005], NE [REP5-010] and NELC [REP5-014], and an updated HRAR (Revision 3.0) [REP5-004] was provided by the Applicant. All references to the HRAR in this report are to this version unless stated otherwise. No subsequent versions of the HRAR were submitted during the Examination.

5.3.12. In response to my ExQ2 QB.10.3 [PD-010], Revision 3.0 of the HRAR [REP5-004] identified additional qualifying features of the European sites that had not been included in the previous iterations of the HRAR.

5.3.13. A number of questions were included in my ExQ1 (10.0.1 – 10.0.36) [PD-006] in respect of the information contained in the HRAR (Revision 1.0) including in relation to decommissioning; the study area; methodology; site features; LSEs; proposed mitigation; and omissions, discrepancies and clarifications.

5.3.14. Further questions on the content of the HRAR (Revision 2.0) were contained in my ExQ2 [PD-010]. QB.10.1, QB.10.2, QB.10.4 and QB.10.5 were directed to the Applicant and requested updates to the HRAR and

matrices to address requests made in my ExQ1 and to reflect information contained in the answers provided by the Applicant to the ExQ1 in relation to in combination effects.

5.3.15. In addition, QB.1.2 asked the Applicant and NELC to provide an update on progress in respect of a proposed Deed of Variation (DoV). This sought to vary an existing Town and Country Planning Act 1990 (TCPA1990) Section 106 (s106) agreement [APP-032] between EP SHB Limited (applicant for the TCPA consent) and NELC in regard to the NELC Planning Permission (the 49.9MW energy from waste power station on the DCO application site granted planning permission by NELC in April 2019). The purpose of this was to apply the obligations within the existing s106 agreement to the Proposed Development. The s106 agreement related to the South Humber Gateway (SHG) Mitigation Strategy, contained in the North East Lincolnshire Local Plan 2013-2032 (NELLP), designed to mitigate impacts associated with the loss of land functionally linked to the Humber Estuary SPA and Ramsar site.

5.3.16. QB.10.3 asked NE to confirm whether it considered that all of the correct site features of the European sites considered in the assessment were represented in the HRAR (Table 4.1).

5.3.17. QB.1.8 asked the Applicant and IPs whether they considered that there were any implications for the application arising from the policy paper published by the Department for Environment, Food and Rural Affairs (DEFRA) on 1 January 2021 and the DEFRA guidance published on 24 February 2021 relating to changes to the Habitats Regulations following the departure of the United Kingdom (UK) from the European Union (EU).

5.3.18. I noted that the existing s106 agreement, which was appended to the draft Development Consent Obligation [APP-032], appeared to have excluded the Mortgagee (Lloyds Bank plc), and that the unsigned Confirmatory Deed contained in Appendix 1 of the DoV submitted at DL6 [REP6-009] did not appear to contain any obligation under s106(1) of the TCPA1990. I issued a Rule 17 (R17) letter on 28 April 2021 in which I asked the Applicant and NELC to explain by DL7 why they had not considered it necessary to bind the Mortgagee to the original s106 agreement, and whether consequently the DoV would not bind the Mortgagee; and for legal submissions on the enforceability of the s106 agreement (as varied) if the DCO was granted (or refused). I also asked the Applicant to suggest an alternative way to secure the required SHG Mitigation Strategy contribution if a s106 agreement which bound the Mortgagee to the existing s106 agreement had not been signed by the Mortgagee by the close of Examination.

5.4. ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS

5.4.1. A screening assessment of the Humber Estuary SAC, SPA and Ramsar site is provided in Section 5 of the HRAR. The Applicant did not explicitly identify the scope of the assessment in the HRAR. It stated that it is usual to consider a search radius of 10km to identify potential pathways for air quality impacts on European sites (paragraph 3.1.3), and no

further information was provided. It was not explained whether this or any other study area was applied in respect of the other impacts considered in the HRAR, ie noise and vibration, visual disturbance, displacement, and surface water quality. ExQ10.0.3 and ExQ10.0.16, contained in my ExQ1 [PD-006], asked the Applicant to provide information on the study areas, to which the Applicant responded for DL2 [REP2-008]. It confirmed that the 10km study area applied to all potential pathways and that the scope of the ecological impacts assessment had been agreed with NELC and stated that NE had not made any objection to the baseline data-gathering approach.

5.4.2. In response to my ExQ2 [PD-010] the Applicant provided an updated HRAR [REP5-004] that incorporated additional information required to inform an appropriate assessment and contained updated screening and integrity matrices in Appendices 1 and 2 as requested. Table 6.1 had been amended to include consideration of in combination visual effects as requested in my ExQ2 QB.10.2. In response to QB.10.3, Table 4.1 (Designated sites scoped into HRA screening) had been amended to include each of the qualifying features of the European sites considered in the assessment rather than a summary as per the previous versions. The Applicant stated that this had been shared with NE and that NE had shared its response with the Applicant prior to DL5. The integrity matrices in Appendix 2 had been updated in response to QB.10.4 to accurately reflect the LSEs identified in the screening assessment.

5.4.3. QB.10.5 asked the Applicant to revise the screening and integrity matrices so that the European site features listed were consistent with those identified on NE's website. The Applicant responded [REP5-005] that the matrices had been updated to include all the individual bird species that comprise the population assemblages of the European sites according to information obtained from the Joint Nature Conservation Committee's website.

5.4.4. In response to my ExQ2 QB.10.3 NE confirmed [REP5-010] that it had received an updated version of Table 4.1 from the Applicant on 16 March 2021 and that the features included within it were now consistent with information presented in other sections of the HRAR (as reflected in HRAR Revision 3.0 [REP5-004]). NE also highlighted that it was indicated in Table 1A.2 (Screening Matrix for Humber Estuary SAC) of HRAR Revision 2.0 that Atlantic salt meadows were either not susceptible to potential effects or were outside the zone of influence for potential impacts from deterioration in air quality during operation both alone and in combination with other plans and projects, and that this appeared to be contradictory to the information within Table 5.2 of the HRAR (Likely Significant Effects during Operation). NE noted that it had advised in it's RR [RR-008] that a LSE could not be ruled out either alone or in combination for this habitat type but confirmed that overall NE remained satisfied that there would be no Annual Effect on Integrity (AEoI) for the reasons listed in its' RR and it's response to my ExQ1 [REP2-020]. In response to my ExQ2 QB.10.3 the Applicant confirmed [REP5-005] that it had amended the HRAR Screening Matrix for Humber Estuary SAC to

address NE's comment (The Integrity Matrix for the SAC contained in HRAR Appendix 2 had also been amended to include this feature).

5.4.5. Potential in combination effects are addressed within Sections 6, 7.4 and 7.5 of the HRAR. 13 projects have been included in the in combination assessment carried out by the Applicant. These are identified in HRAR Tables 6.1 (construction) and 6.2 (operation) and reflect the shortlist of plans and projects considered in the Environmental Statement (ES) cumulative assessment.

5.4.6. As a result of the screening assessment, the Applicant concluded that the project is likely to give rise to significant effects, either alone or in combination with other projects or plans, on the qualifying features of each of the European sites considered in the assessment, as set out below:

- Humber Estuary SPA during construction (project alone and in combination) and decommissioning (alone);
- Humber Estuary Ramsar site during construction (alone and in combination), operation (alone and in combination) and decommissioning (alone); and
- Humber Estuary SAC during operation (alone and in combination).

5.4.7. The Applicant identified the following LSEs:

- on the Humber Estuary SPA during construction (project alone) - loss of functionally-linked habitat within the Proposed Development boundary; noise/ vibration impacts to birds using the Pyewipe mudflats; noise/ vibration impacts to birds using the arable field to the south of the Proposed Development (Field 37); noise/ vibration impacts to birds using arable fields to the north (Fields 30 and 31); and visual impacts to birds using Field 37;

- on the Humber Estuary Ramsar site during construction (project alone) - loss of functionally-linked habitat within the Proposed Development boundary; noise/ vibration impacts to birds using the Pyewipe mudflats; noise/ vibration impacts to birds using Field 37; noise/ vibration impacts to birds using Fields 30 and 31; and visual impacts to birds using Field 37;

- on the Humber Estuary SAC during operation (project alone) - changes in air quality from nitrogen oxides (NOx) emissions; and changes in air quality from nutrient nitrogen deposition;

- on the Humber Estuary Ramsar site during operation (project alone) - changes in air quality from NOx emissions; and changes in air quality from nutrient nitrogen deposition;

- on the Humber Estuary SPA during decommissioning (project alone) - noise/ vibration impacts to birds using the Pyewipe mudflats; noise/ vibration impacts to birds using Field 37; noise/ vibration impacts to birds using Fields 30 and 31; and visual impacts to birds using Field 37;

- on the Humber Estuary Ramsar site during decommissioning (project alone) - noise/ vibration impacts to birds using the Pyewipe mudflats; noise/ vibration impacts to birds using Field 37; noise/ vibration impacts to birds using Fields 30 and 31; and visual impacts to birds using Field 37;

- on the Humber Estuary SPA during construction (in combination) - noise disturbance to functionally-linked habitat (in combination with Project Nos 1 & 2 identified in HRAR Table 6.1); and loss of functionally-linked habitat (in combination with Project Nos 1 & 2);

- on the Humber Estuary Ramsar site during construction (in combination) - noise disturbance to functionally-linked habitat (in combination with Project Nos 1 & 2); and loss of functionally-linked habitat (in combination with Project Nos 1 & 2);

- on the Humber Estuary SAC during operation (in combination) - air quality (in combination with Project Nos 2, 6, 7, 8, 10 & 12 identified in HRAR Table 6.2);

- on the Humber Estuary SPA during operation (in combination) - noise disturbance to functionally-linked habitat (in combination with Project Nos 1 & 2 identified in HRAR Table 6.2); and air quality (in combination with Project Nos 2, 6, 7, 8, 10 & 12); and

- on the Humber Estuary Ramsar site during operation (in combination) - noise disturbance to functionally-linked habitat (in combination with Project Nos 1 & 2); and air quality (in combination with Project Nos 2, 6, 7, 8, 10 & 12).

5.4.8. The Applicant's conclusion of potential LSEs on those European sites and their qualifying features were not disputed by any IPs during the Examination. I am satisfied that the screening conclusions are appropriate and that an assessment of the potential effects of the Proposed Development on the integrity of the European sites was required.

5.5. CONSERVATION OBJECTIVES

5.5.1. The conservation objectives for the European sites taken forward for consideration of effects on their integrity, and discussed in Section 6.6 of this report, are summarised in Section 4, Table 4.2 of the HRAR. In the absence of objectives for Ramsar sites, the same objectives were assumed in the HRAR for the Humber Estuary Ramsar site as those of the Humber Estuary SAC and SPA.

5.6. FINDINGS IN RELATION TO ADVERSE EFFECTS ON INTEGRITY (AEoI)

5.6.1. The Applicant provided an assessment in Section 7 of the HRAR of the potential effects of the Proposed Development on the integrity of the

European sites and concluded that taking into account the proposed mitigation the Proposed Development would not adversely affect the integrity of the European sites or their features.

5.6.2. A number of the Applicant's conclusions in relation to the European sites and their features were disputed by NE in its RR [RR-008]. NE set out its view that there was no fundamental reason of principle why the Proposed Development should not be permitted but considered that the Applicant had provided insufficient evidence to establish that there would be no adverse effects on the European sites and that further information was required to assess the following impact pathways:

- noise disturbance to SPA and Ramsar birds using the Humber Estuary foreshore (Pyewipe mudflats) from piling during construction;
- noise and vibratory disturbance to SPA and Ramsar birds using neighbouring functionally-linked land (fields to the north and south of the application site) from piling during construction, and operation; and
- and air quality impacts on the SPA, Ramsar site and SAC arising from NOx concentrations and acid deposition in combination with other plans and projects during operation.

5.6.3. NE stated in its RR [RR-008] that on the basis that the relevant proposed mitigation was secured in the DCO it was satisfied that the Proposed Development was not likely to result in significant/ adverse effects on the European sites arising from the following:

- water quality, arising from foul water drainage during construction and operation on the Humber Estuary SAC, SPA or Ramsar site. This was on the basis that an on-site package treatment plant was the Applicant's preferred drainage option. NE were of the view that further consideration would be needed as part of the HRA if the Applicant decided to implement an alternative drainage option;
- air quality, arising from the project alone during construction and operation on the Humber Estuary SAC or Ramsar site;
- direct loss of functionally-linked land during construction and operation on the Humber Estuary SPA or Ramsar site;
- visual disturbance to SPA/ Ramsar site birds using the neighbouring functionally-linked land during construction and operation on the Humber Estuary SPA or Ramsar site; and
- lighting disturbance to SPA/ Ramsar site birds using the neighbouring functionally-linked land during construction and operation on the Humber Estuary SPA or Ramsar site.

5.6.4. NE considered that the relevant mitigation was contained in draft DCO (dDCO) Requirements 9 (Lighting scheme), 11 (Biodiversity protection), 12 (Biodiversity mitigation and enhancement), and 15 (Construction

environmental management plan). Surface water and foul water drainage are addressed in dDCO Requirements 13 and 14, respectively, and provide that the surface and foul water drainage systems must be in accordance with the principles set out in the Outline Drainage Strategy [APP-137].

5.6.5. The Applicant responded to NE's RR in its 'Comments on Relevant Representations' (Section 12) [REP1-008], Appendix 8 of which contained a copy of a technical memo from the Applicant to NE (dated 5 October 2020) entitled 'Clarifications provided to Natural England'. It is stated in Appendix 8 that it addressed NE's points only in relation to air quality and that noise disturbance was addressed in a separate memo, which was not provided for DL1. The memo was subsequently provided at DL2 in Appendix 9 of Part 3 of the Applicant's response to my ExQ1 [REP2-010]. The Applicant stated that some matters had been agreed (as set out in the dSoCG with NE submitted for DL1 [REP1-010]) and that it expected to conclude ongoing discussion with NE on the outstanding matters in 'the near future'. NE did not make any submissions for DL1.

5.6.6. Appendix 8 included further explanation to demonstrate there would be no AEoI for the European sites with regard to NOx and acid deposition. In respect of noise disturbance, noise contour maps and evidence of undisturbed habitat availability were provided in Appendix 9 of Part 3 of the Applicant's response to my ExQ1 [REP2-010]. The Applicant noted that following review of the information provided in the memos NE sought further clarification from the Applicant but the Applicant did not provide any details relating to these clarifications; NE provided the details in its response to my ExQ1 [REP2-020].

5.6.7. In relation to relevant mitigation the Applicant pointed to dDCO Requirements 9 (Lighting scheme), 11 (Biodiversity protection), 12 (Biodiversity mitigation and enhancement), 15 (Construction environmental management plan) and 17 (Piling) as securing the relevant measures.

5.6.8. The Applicant stated that it was reflected in the dSoCG with NE submitted for DL1 that NE had agreed (subsequent to the comments in its RR) that operational noise would not result in significant effects.

5.6.9. In relation to construction noise from piling disturbing SPA/ Ramsar birds using the Humber Estuary foreshore, NE noted in its RR [RR-008] that the noise assessment demonstrated that there would be a potential increase of up to 4dB, compared with the ambient noise levels, from the proposed drop hammer piling activity, and that the peak noise could potentially be even greater than the ambient noise levels. It noted that the Applicant had used significance criteria for disturbance to birds based on peak noise levels of 75dB LAmax being classified as a minor adverse impact and therefore not determined to be a LSE on bird behaviour. NE considered that such an increase in noise levels could disturb bird species using the Pyewipe mudflats and requested further information to demonstrate that a LSE could be ruled out.

5.6.10. NE noted that para 7.2.8 of the HRAR (Revision 1.0) stated that the elevated noise levels would only reach the portion of Pyewipe mudflats closest to the main development area but that no evidence was provided to illustrate how large an area this might be. NE noted that the HRAR subsequently stated that the piling works would take place over a relatively short period of time but highlighted that passage species, particularly black-tailed godwit, are only present in these areas for very limited periods of time before moving to their wintering/ breeding grounds. As a result, disturbance impacts on foraging efficiency and energy expenditure could have a significant effect on these species. NE also noted that the use of Continuous Flight Auger (CFA) piling was considered in paragraph 10.6.15 of ES Chapter 10 (Ecology) [APP-044] and were of the view that if CFA piling were to be used it could be concluded that "likely significant impacts" could be ruled out for bird species using the foreshore.

5.6.11. In relation to noise and vibratory disturbance to SPA/ Ramsar birds using neighbouring functionally-linked land to the north of the application site during construction, NE considered that the proposal to use CFA piling rather than drop hammer piling could adequately mitigate these impacts, but that it was not clear if the figures set out in paragraph 10.6.23 of ES Chapter 10 (Ecology) [APP-044] related to the location of the noise receptor (LT3) or a central location within the field. NE were of the view that seasonal piling restrictions could also adequately mitigate these impacts but considered that further evidence was required to demonstrate there would be adequate alternative undisturbed habitat available, as the noise assessment indicated that there could also be increased noise levels on the nearby mudflats.

5.6.12. In respect of noise and vibratory disturbance to SPA/ Ramsar birds using neighbouring functionally-linked land to the south of the application site during construction, NE noted that the noise assessment concluded that there would be a slightly higher predicted noise level in the centre of the fields compared with the ambient noise level, but that it was concluded according to the applied significance criteria that the predicted peak noise levels of 72dB LAmax would have a minor adverse impact and LSEs could be ruled out. NE considered that such an increase in noise levels could disturb bird species using those fields.

5.6.13. In relation to noise and vibratory disturbance to SPA/ Ramsar birds using neighbouring functionally-linked land to the north and south of the application site during operation, NE noted that it was predicted by the Applicant that there would be some increase in noise levels above the ambient level. NE acknowledged that Figure 8.2 (Predicted Noise Levels at Ecological Receptors) [APP-069] demonstrated how the predicted noise levels would attenuate from the levels at the edge of the fields to the levels in the centre of the fields, but considered that further information was required to demonstrate that there would be an adequate area of the field that would remain undisturbed and justification provided that this could still provide functional supporting habitat for SPA/ Ramsar site species.

5.6.14. NE requested that noise contour maps were provided to illustrate how the proposed piling noise levels and operational noise levels would attenuate across the Humber estuary foreshore and associated functionally-linked land.

5.6.15. The Applicant provided its response (Part 1) [REP2-008]) to my ExQ1 [PD-006] for DL2. Part 3 of its response [REP2-010] contained associated appendices relevant to HRA. The Applicant confirmed, in its response to my ExQ1 10.0.18, that it would implement CFA piling or seasonal constraints on drop hammer (percussive) piling, or a combination of both, and that no other piling options would be proposed. It stated that it would revise the wording of dDCO Requirement 17 to describe only these two mitigation options. It also explained that the dDCO submitted at DL2 [REP2-014] had been amended to remove piling from the definition of 'permitted preliminary works' contained in Requirement 1.

5.6.16. Appendix 9 [REP2-010] of the Applicant's response to my ExQ1 provided a more detailed response to NE's concerns in relation to noise and its request for evidence of the availability of undisturbed habitat to support the Applicant's argument that there were plenty of alternative foraging/ roosting areas if birds were displaced by noise and vibration impacts during construction and operation. Figures A to L of the Appendix contain LAeq and LAmax noise contour maps for drop hammer and CFA piling, as requested in my ExQ 10.0.35.

5.6.17. The Appendix explained that drop hammer piling gives rise to frequent noise peaks for the duration of the piling activity whereas CFA piling does not, as it does not include the regular bangs associated with drop hammer piling, and that CFA piling would be much less likely to disturb birds, which are more sensitive to loud peak noise events. It was predicted that the use of CFA piling would result in a decrease of around 10 dB LAmax from that predicted using drop hammer piling, which would result in a significant decrease in the peak noise modelled across the fields to the north (30 and 31) and south (37) and across the Pyewipe mudflats.

5.6.18. The Appendix also cross-referenced the ES Ecology chapter, in which it was concluded, based on a 2012 Xodus Group study on bird behaviour in response to piling activity prepared on behalf of Associated British Ports ('Grimsby River Terminal Construction Pile Noise Monitoring and Bird Behaviour Observations'), that there would be a minor adverse effect on waterbirds feeding/ loafing/ roosting on the Pyewipe mudflats where peak noise levels were between 65 - 75 dB LAmax. It explained that less than 1% of the mudflats would be affected by construction noise levels in excess of 65 dB LAmax, and considered that it would be reasonable to assume that the birds that favoured this area would move further away to the south rather than completely abandon their favoured feeding/ roosting/ loafing grounds. It also highlighted that the Pyewipe mudflats are fronted by industrial areas and are therefore subject to industrial noise and activity currently, meaning that it could reasonably be assumed that the birds are habituated to noise given that they are present in large numbers at this location in the winter months.

5.6.19. It was considered that given the small proportion of the Pyewipe mudflats that could potentially experience higher LAmax noise levels during drop hammer piling it could reasonably be concluded that there was sufficient undisturbed area on the mudflats to the south-east (which are significantly wider than the mudflats adjacent to the Proposed Development) to accommodate any birds displaced from areas within the zone of influence of the Proposed Development.

5.6.20. Table 2 and Table 3 of Appendix 9 present the modelled LAmax levels during construction at Field 37 to the south and Fields 30 and 31 to the north, respectively, for drop hammer piling in five locations within the application site. These indicated that a large proportion of the fields were predicted to be subject to noise levels up to 75 dB LAmax during drop hammer piling.

5.6.21. The Appendix confirms that the proposed mitigation was to apply seasonal and timing constraints on drop hammer piling (two hours either side of high tide during September to March, when waterbirds are most likely to be present in the fields) and/ or to use CFA piling, as secured in the dDCO.

5.6.22. In relation to LAeq levels the modelled drop hammer piling scenario indicated that only a very small proportion of Fields 30 and 31 (0.2%) and 37 (0.6%) would be subject to construction noise levels in excess of 65 dB LAeq (the threshold above which a significant effect is more likely) at the closest point to the Proposed Development, along the field boundaries. It was considered that it could reasonably be concluded that aggregations of waterbirds would not be present in close proximity to these boundaries as they are known to prefer open vistas with sufficient scanning distance to observe ground predators.

5.6.23. In relation to operational effects, it was stated that the modelling for Fields 30 and 31 indicated that 2.5% of the total combined area would be subject to noise levels in excess of 65 dB LAeq, and that as this was along the field boundaries it was considered unlikely that waterbirds would favour those areas regardless of the ambient noise level on the basis that they generally avoid boundary features. It was also noted that if the operational noise did reach a level above which a disturbance response may be elicited from the waterbirds, about 97.5% of the field would remain undisturbed for feeding/ roosting/ loafing waterbirds. It was considered that it could be reasonably concluded that as the majority of the area of Fields 30 and 31 was not predicted to experience operational noise levels above which disturbance may be expected, it would continue to provide functional supporting habitat for SPA and Ramsar species.

5.6.24. NE, in its response to my ExQ1 [REP2-020], stated that it had clarified with the Applicant that in line with the mitigation hierarchy noisy works should be avoided during sensitive time periods for overwintering SPA and Ramsar bird species, where possible, but acknowledged that the Applicant wished to provide the contractors with as much flexibility as possible to work during the winter.

5.6.25. It was noted by NE that the Applicant had proposed two mitigation options and were of the view that the use of CFA piling would be the more effective mitigation measure on the basis that it does not produce impulsive, discontinuous noise, which is more disturbing to bird species. NE agreed that the alternative option of the avoidance of impact piling two hours either side of high tide during the wintering period (September to March inclusive) and any residual short-term disturbance impacts on overwintering birds would not result in adverse effects on the integrity of the Humber Estuary SPA and Ramsar site. This was provided that the piling works would not take longer than one month to complete, as suggested in the HRAR and other documents, and the mitigation measures were appropriately secured.

5.6.26. In the 'Applicant's Response to the First Written Questions Responses' [REP3-011] the Applicant noted NE's comments contained in its response to my ExQ1 6.0.5 [REP2-020] in respect of the timing and methods of piling. The Applicant confirmed that drop hammer piling would not be required for more than four weeks and that piling mitigation was secured by dDCO Requirement 17, the wording of which was refined at DL2 [REP2-014]. It also confirmed that all matters had been agreed with NE, as recorded in the finalised SoCG submitted for DL2 [REP2-003]. NE did not make any submissions for DL3.

5.6.27. In its comments on the RIES submitted at DL6 [REP6-007] the Applicant confirmed that, in response to the RIES, it had submitted an updated version of the Biodiversity Strategy (Revision 2.0, dated April 2021) [REP6-004], paragraph 7.1.3 of which had been revised to clarify that if drop hammer piling was required during the period of September to March it would be restricted to no more than four weeks duration. This is secured by dDCO Requirement 17(2) [REP7-003] which provides that seasonal piling restrictions must be implemented as described in the Biodiversity Strategy.

5.6.28. The Applicant submitted a signed Position Statement between it and NELC for DL6 [REP6-008], in which it is confirmed that NELC is content with the updated definition of the Biodiversity Strategy set out in the dDCO submitted in advance of DL6, the purpose of which was to link dDCO Requirement 17 with Revision 2.0 of the Biodiversity Strategy.

5.6.29. I have considered the information provided in the HRAR, ES and in the responses to my written questions and the RIES regarding impacts on SPA and Ramsar bird species using the Pyewipe mudflats and functionally-linked land. On the basis of this information, and the control measures secured by dDCO Requirement 17, I consider that the Proposed Development would not result in AEoI of the European sites due to noise and vibratory disturbance either due to piling during construction, or during operation. I am satisfied that the proposed measures are appropriate and would effectively mitigate the predicted effects, and that they are properly secured in the dDCO.

5.6.30. In relation to air quality impacts, NE noted in its RR [RR-008] that the background NOx concentrations already exceeded the critical levels and

that the Applicant's air quality assessment reported that the annual mean NOx environmental thresholds for a saltmarsh habitat receptor near the application site would be exceeded in combination with other plans or projects. In respect of acid deposition NE noted that acid deposition environmental thresholds would be exceeded in-combination with other plans/ projects for fixed dune habitat receptors. NE considered that this was not discussed in the HRAR (Revision 1.0), and that further information and justification was required to demonstrate why it was concluded that there would be no AEoI on the European sites due to in-combination air quality effects.

5.6.31. It is stated in Appendix 8 of the Applicant's comments on the RRs [REP1-008] that in response to NE's request for explanation, the Applicant had reviewed both the NOx and acid deposition Process Contributions (PC) and Predicted Environmental Concentrations (PEC) to assist the competent authority in undertaking its AA.

5.6.32. In relation to in-combination effects of NOx the Applicant stated that the air quality modelling had identified several locations within the Humber Estuary SPA, SAC and Ramsar site where the PC for mean NOx was between 1.2 and 1.3% of the Critical Load (CL), and referred to the reference within NE's air quality impact assessment guidance to Institute of Air Quality Management (IAQM) guidance that advises that the 1% and 10% screening criteria should not be used rigidly and provides an example of 1.1% effectively being 1%. The Applicant was of the view that it was therefore correct for its assessment to take the values as whole percentages using rounding of the first decimal place, which resulted in them all being rounded down to 1%, in which case the PC threshold for screening out in-combination effects was not exceeded.

5.6.33. The Applicant also made reference to a statement on the UK Air Pollution Information System (APIS) database that "There is substantial evidence to suggest that the effects of nitrogen dioxide (NO_2) are much more likely to be negative in the presence of equivalent levels of SO_2" (sulphur dioxide), and that as SO_2 levels are generally low (i.e. well below 10 µg/m3 and well below the CL) locally to the application site no synergistic effect with NOx was expected. Additionally, the Applicant referred to the statement in NE's air quality impact assessment guidance that "…1% of critical load/ level are considered by NE's air quality specialists (and by industry, regulators and other statutory nature conservation bodies) to be suitably precautionary, as any emissions below this level are widely considered to be imperceptible…". On this basis the Applicant considered that the conclusion of no likely significant in combination effects as a result of changes in NOx emissions was therefore valid.

5.6.34. NE, in its response [REP2-020] to my ExQ1, in relation to the in combination effects of NOx, highlights a statement on the APIS website that "…it is likely that the strongest effect of emissions of nitrogen oxides across the UK is through their contribution to total nitrogen deposition", and notes that additional reasoning on nutrient nitrogen (N) deposition had been provided in ES Chapter 17, paragraph 17.8.12 [APP-051]. This

asserts that for coastal saltmarshes, such as those for which the Humber Estuary SAC is partly designated, nitrogen inputs from air were less important than nitrogen effects from other sources because the effect of any deposition of nitrogen from the atmosphere was likely to be dominated by much greater flushes of nitrogen from marine, fluvial or agricultural sources, and states that this view is reflected on the APIS website. It also highlights that flushing of the intertidal saltmarsh in the area by tidal incursion occurs twice a day and considers that this is likely to further reduce the role of nitrogen from the atmosphere in controlling botanical composition. Based on this information, NE concurred with the assessment conclusions that the Proposed Development would not result in adverse effects on the integrity of the European sites due to the predicted NOx contributions in combination with other plans or projects.

5.6.35. In relation to in combination effects of acid deposition the Applicant pointed out in Appendix 8 of the Applicant's comments on the RRs [REP1-008] that the detailed assessment was contained in ES Chapter 17, as signposted from the HRAR (Revision 1.0). The Applicant stated that the cumulative PC would be between 1.1 and 1.2% of the CL at six locations within the Humber Estuary SPA, SAC and Ramsar site (sand dune habitats) and that, as for NOx, the application of the IAQM guidance resulted in no exceedance of the 1% screening thresholds for acid deposition at the designated site receptors modelled for the in combination assessment. On this basis the Applicant considered the conclusion of no likely significant in combination effects as a result of changes in acid deposition was therefore valid.

5.6.36. NE noted, in its response [REP2-020] to my ExQ1, that given that the sand dunes are likely to be calcareous based on the soil type and the plant communities in the area, the APIS description of acid deposition was relevant, which highlights that "soil acidification as a result of acid deposition has relatively little impact in UK dunes because sand dune soils are generally well-buffered, with the exception of the few acidic dune systems (UKREATE, 2000)". NE stated that based on this information it concurred with the assessment conclusions that the Proposed Development would not result in AEoI for any of the European sites due to predicted acid deposition contributions in combination with other plans or projects.

5.6.37. The Applicant submitted an updated signed SoCG with NE for DL2 [REP2-003] with all matters agreed. NE confirmed at DL2 that the Applicant had provided it with further information in response to its' RR and that as set out in the updated SoCG it had no outstanding queries and all relevant matters had been agreed.

5.6.38. I note that ES Chapter 17 paragraph 17.8.8 states that based on the background concentration indicated on the APIS website, the NOx cumulative PEC is slightly below the CL (30 µg/m3) for all vegetation types from the effects of NOx, but based on a more precise background NOx concentration derived from project-specific NO_2 data recorded at the saltmarsh site itself (contained in ES Appendix 7A [APP-108]) the total PEC is between 19.9 µg/m3 - 20.1 µg/m3, which is well below the CL.

Paragraph 17.8.11 states that the air quality assessment predicted that the cumulative PEC for nitrogen deposition at three saltmarsh habitat receptors where the PC CL was exceeded would be a maximum of 16.3 kg N/ha/yr, which would be below the CL of 20 – 30 kg N/ha/yr.

5.6.39. I consider that the Applicant's approach to the assessment of in combination effects from NOx and acid deposition, as set out in the HRAR, ES Chapter 17 and further explained in the Applicant's comments on the RRs [REP1-008], is justified, and agree that the Proposed Development would not result in adverse effects on the integrity of the European sites due to the predicted NOx and acid deposition contributions in combination with other plans or projects

5.6.40. In relation to the direct loss of functionally-linked land, NE, in its RR [RR-008] made reference to the SHG Mitigation Strategy, contained in Policy 9 of the NELLP, designed to mitigate impacts associated with the loss of land functionally linked to the Humber Estuary SPA and Ramsar site. NE were satisfied that the Applicant's commitment to a financial contribution towards the SHG strategic mitigation land, to be secured by a DoV to the NELC Planning Permission's existing s106 agreement for the same between the Applicant and NELC, was an acceptable approach to mitigate for the loss of waterbird-supporting habitat.

5.6.41. In its response [REP2-008] to my ExQ1 10.0.13, requesting further information on the SHG Mitigation Strategy, the Applicant explained that it had adhered to NELLP Policy 9 by committing to a financial contribution to the Strategy through its Development Consent Obligation (the DoV) [APP-032], which would be used to pay (retrospectively) towards the costs of constructing the Cress Marsh wetland habitat (SHG mitigation site). (An updated version, Revision 2.0, of the Development Consent Obligation was provided at DL2 [REP2-011].) It stated that construction of this habitat was completed by NELC in winter 2018/19, and NELC had advised the Applicant that it had been demonstrated by survey data to be successfully providing functional habitat for waterbirds. The Applicant did not indicate when it anticipated that the DoV would be completed and the s106 agreement variation would take effect. However, in its responses to my ExQ1 Q5.0.2 and ExQ1 Q5.0.3 the Applicant stated it would ensure that the obligation in the s106 agreement was secured and considered that the existing s106 agreement would constitute a development consent obligation and as such could be taken into account by the SoS in determining the DCO application.

5.6.42. In its LIR [REP1-018] NELC referred to the need for a contribution to the SHG Mitigation Strategy from the Applicant totalling £105,378 (based on site area). It described the Strategy as a strategic approach to promoting economic development on the South Humber Bank whilst maintaining the area's functional relationship with the estuary through the creation of a network of smaller sites of wetland/ grass habitat creation to mitigate the impact on overwintering birds from the estuary. It stated that the contribution secured by the existing s106 agreement and proposed variation related to the Cress Marsh wetland site should be secured prior to the granting of the DCO, noting that this was the Applicant's intention.

It confirmed that the proposed ecological mitigation measures, including measures contained in the SHG Mitigation Strategy, were identical to those agreed for the NELC Planning Permission and deemed to accord with Policies 6, 9 and 41 of the NELLP.

5.6.43. It was shown as agreed in the dSoCG with NELC [REP1-011] submitted for DL1 that appropriate mitigation had been secured in the DCO so that there would be no significant adverse effects on waterbirds associated with the Humber Estuary SPA and Ramsar site. This included the proposed financial contribution from the Applicant to the SHG Strategic Mitigation Scheme. There were no changes to this in subsequent iterations of the SoCG and a finalised SoCG with NELC [REP4-006] was submitted by the Applicant at DL4 which showed that all matters were agreed.

5.6.44. In the finalised SoCG with NLC [REP1-012], all matters are shown as agreed. It is confirmed that NLC supported the proposal for the Applicant to provide a contribution towards strategic mitigation for (effects on) SPA/ Ramsar waterbirds and agreed that it would be adequately secured according to the Applicant's statement that it would be secured in the DCO.

5.6.45. In response to my request in ExQ1 10.0.13 and 10.0.14 for additional information on the SHG Mitigation Strategy the Applicant provided, within its response to my ExQ1 [REP2-010], copies of the SHG Ecological Mitigation North East Lincolnshire Delivery Plan (Appendix 10), and Policy 9 (Habitat Mitigation: South Humber Bank) of the NELLP (Appendix 12). The Applicant commented that it understood that NELC would also be submitting a number of documents containing information on the Mitigation Strategy for DL2.

5.6.46. In its response to my ExQ1 10.0.13 and 10.0.14 [REP2-017] NELC provided information on the strategy as requested and also provided related Appendices G (Memorandum of Understanding), H (RTPI Excellence Award SHG Submission and Certificate), I (South Humber Gateway Ecological Mitigation North East Lincolnshire Delivery Plan) and J (Local Plan Policy 9) [REP2-018]. NELC explained that the SHG Mitigation Strategy is a long-term strategy which has been agreed between NELC, NLC, NE, the Environment Agency, Lincolnshire Wildlife Trust and the Royal Society for the Protection of Birds to address impacts of new development on the overwintering birds on the South Humber. The Council described it as providing a strategic approach whereby the appropriate mitigation was effectively provided up front by the partnership (including mitigation land assembly, habitat creation and monitoring) and developers paid an appropriate contribution based on land area to recover the cost of the work pro rata. A 48 hectare site has been established at Cress Marsh; NELC stated that this attracts large numbers of birds and provides more than sufficient mitigation land than is required through current consents/ submissions to adequately mitigate the impact on overwintering birds.

5.6.47. In its response to my ExQ2 QB.1.2 [PD-010], which requested an update on the proposed variation to the s106 agreement, the Applicant stated that it was intending to submit the completed (signed and dated) DoV by DL6, or earlier if it was available [REP5-005]. NELC confirmed in its' response to the question that it was content with the DoV and were not aware of any further updates but would work with the Applicant to execute it when the document was available to seal.

5.6.48. In response to the RIES [PD-012] the Applicant stated at DL6 [REP6-007] that, in respect of mitigation for potential effects on the European sites considered in the HRAR [REP5-004], it had provided updated information in a Position Statement with NELC [REP6-008] on the DoV. It is stated in Point 4 of the Position Statement that the signed s106 agreement DoV had been completed by NELC and the Applicant on 19 April 2021, and also that a notice may not be issued pursuant to Article 5 (Effect of the Order on the SHBEC [South Humber Bank Energy Centre] planning permission) of the DCO [REP7-003] until a confirmatory deed with the Mortgagee had been signed (or evidence provided that there was no longer a mortgagee). The Applicant submitted the executed s106 agreement DoV [REP6-009] for DL6.

5.6.49. In its 'Submissions in Response to the ExA's R17 Letter Dated 28 April 2021' [REP7-007], the Applicant responded to the points about the DoV raised in the R17 letter issued on 28 April 2021 [PD-013]. It explained that when the 'Original Deed' (the existing s106 agreement) was completed, the Land Registry information that was used did not show that the Mortgagee had an interest in the site, and therefore the only parties to the Original Deed were EP SHB Limited (the applicant for the TCPA consent) and NELC. The Mortgagee's consent was subsequently sought in relation to the DoV but was not obtained prior to the close of the Examination.

5.6.50. The Applicant explained that to address this position the Confirmatory Deed appended to the DoV would (when entered into) provide that the Mortgagee acknowledges that the DoV has been entered into with its consent. Clause 4 of the DoV prevents implementation of the DCO or issue of a notice pursuant to DCO Article 5 until either the Mortgagee has entered into the Confirmatory Deed or its charge has been discharged. If the charge remains in place development authorised by the DCO would not be able to take place until the Mortgagee was joined to the DoV through the Confirmatory Deed. If the Mortgagee's charge was discharged, then it would no longer be relevant to the site or to the obligations in the Original Deed. In order to provide more certainty, the Applicant inserted a new paragraph (12(5)) into Article 5 of the revised dDCO submitted for DL7 [REP7-003] to reflect this position and added relevant definitions to Article 2.

5.6.51. In its response to my ExQ2 QB.1.2 [PD-010], which requested an update on the proposed variation to the s106 agreement, the Applicant stated that it was intending to submit the completed (signed and dated) DoV by DL6, or earlier if it was available [REP5-005]. NELC confirmed in its response to the question that it was content with the DoV and it was not

aware of any further updates but would work with the Applicant to execute it when the document was available to seal.

5.6.52. In response to the RIES [PD-012] the Applicant stated at DL6 [REP6-007] that, in respect of mitigation for potential effects on the European sites considered in the HRAR [REP5-004], it had provided updated information in a Position Statement with North East Lincolnshire Council (NELC) [REP6-008] on the Deed of Variation (DoV). It is stated in Point 4 of the Position Statement that the signed s106 agreement DoV had been completed by NELC and the Applicant on 19 April 2021, and also that a notice may not be issued pursuant to Article 5 (Effect of the Order on the SHBEC planning permission) of the DCO [REP7-003] until a confirmatory deed with the Mortgagee had been signed (or evidence provided that there was no longer a mortgagee). The Applicant submitted the executed s106 agreement DoV [REP6-009] for DL6.

5.6.53. In its 'Submissions in Response to ExA's R17 Letter Dated 28 April 2021' [REP7-007], the Applicant responded to the points about the DoV raised in the R17 letter issued on 28 April 2021 [PD-013]. It explained that when the 'Original Deed' (the existing s106 agreement) was completed, the Land Registry information that was used did not show that the Mortgagee had an interest in the site, and therefore the only parties to the Original Deed were EP SHB Limited (the applicant for the TCPA consent) and NELC. The Mortgagee's consent was subsequently sought in relation to the DoV but was not obtained prior to the close of the Examination. The Applicant explained that to address this position the Confirmatory Deed appended to the DoV will (when entered into) provide that the Mortgagee acknowledges that the DoV has been entered into with its consent. Clause 4 of the DoV prevents implementation of the DCO or issue of a notice pursuant to DCO Article 5 until either the Mortgagee has entered into the Confirmatory Deed or its charge has been discharged. If the charge remains in place development authorised by the DCO would not be able to take place until the Mortgagee was joined to the DoV through the Confirmatory Deed. If the Mortgagee's charge was discharged, then it would no longer be relevant to the site or to the obligations in the Original Deed. In order to provide more certainty, the Applicant inserted a new paragraph (12(5)) into Article 5 of the revised dDCO submitted for DL7 [REP7-003] to reflect this position and added relevant definitions to Article 2.

5.6.54. In relation to the request to the Applicant in the R17 letter to suggest any alternative way to secure the SHG Mitigation Strategy contribution should a s106 agreement which binds the Mortgagee to the Original Deed not be signed by the Mortgagee by the close of the Examination, the Applicant considered that the SoS could use powers in the Planning Act 2008 to directly impose an obligation to pay the contribution [REP7-007]. It suggested that such an obligation would be phrased negatively, preventing construction of Work No. 1 starting until the contribution had been paid to the relevant planning authority, matching the terms of the varied s106 agreement. The Applicant provided draft wording to this effect that could be incorporated into the DCO.

5.6.55. In relation to the point in the R17 letter [PD-013] that the Confirmatory Deed does not appear to contain any obligation under s106 of the TCPA1990, the Applicant [REP7-007] responded that the Original Deed contains obligations under s106, the DoV varies the terms of the Original Deed, and the Original Deed and DoV are therefore legally one instrument. The Applicant also stated that the Confirmatory Deed is not a standalone document but is supplemental to the DoV.

5.6.56. NELC provided a similar response to the Applicant in its response to the questions in the R17 letter about the DoV [REP7-010] and confirmed its support for, and agreement with, the approach taken by the Applicant in its response [REP7-007].

5.6.57. Irrespective of the response of the Applicant [REP7-007] and NELC [REP7-010] in regard to my questions in the R17 letter concerning the DoV [REP7-010], I remained concerned that the DoV as submitted does not bind the Mortgagee, especially in the light of the Confirmatory Deed remaining unsigned. As such, I consider there remains a risk, albeit small, that the mortgagee could take possession of the property and sell to a third party free from the obligation contained in the s106 agreement (the requirement to pay the South Humber Gateway (SHG) mitigation contribution (referred to in the Original s106 agreement as the 'Habitat Contribution')). Consequently, I am not satisfied that the DoV, and the attached confirmatory deed, adequately removes this risk and as such considers that should the SoS for BEIS be minded to grant the DCO, then he would need to impose the Requirement, as set out by the Applicant in its response [REP7-007] to my R17 letter dated 28 April 2021.

5.6.58. The Applicant responded [REP5-005] at DL5 to my ExQ2 QB.1.8, which asked the Applicant and IPs whether they considered there were any implications for the application arising from the DEFRA January 2021 policy paper and the DEFRA February 2021 guidance relating to changes to the Habitats Regulations following the departure of the UK from the EU. The Applicant responded that neither document had any implications for the application as the changes were of a procedural nature and the guidance related to consenting a plan or project under a HRA derogation, which was not relevant to its application [REP5-005]. NELC stated that it had no comments [REP5-014]. NE did not respond to this question.

5.6.59. On the basis of the information provided within the DCO application and during the Examination I am satisfied that the Applicant has provided sufficient information to inform an assessment of the potential effects of the Proposed Development on the integrity of the European sites. I consider that the proposed measures are appropriate and would effectively mitigate the predicted effects, including the imposition of an additional Requirement that secures the SHG Mitigation Strategy contribution (secured in the Original Deed completed as part of the NELC Planning Permission) to the relevant planning authority, prior to the commencement of the Proposed Development. The measures would be properly secured as set out in the rDCO attached at Appendix D of this report.

5.7. HRA CONCLUSIONS

5.7.1. My understanding of HRA matters in relation to the Proposed Development is drawn from the information provided in the application, with reference to the HRAR and the ES, and taking full account of the responses to relevant questions that I raised.

5.7.2. On the basis of the information before me I consider that the Proposed Development would have no adverse effects, subject to the controls set out in the rDCO attached at Appendix D of this report, either alone or in-combination with other plans or projects, on the integrity of any European site and its features.

5.7.3. I am also satisfied that sufficient information has been provided by the Applicant to enable the SoS to undertake an appropriate assessment and discharge their obligations under the Habitats Regulations.

6. CONCLUSION ON THE CASE FOR DEVELOPMENT CONSENT

6.1. INTRODUCTION

6.1.1. This chapter provides an evaluation of the planning merits of the Proposed Development. It does so in the light of the legal and policy context set out in Chapter 3 and individual applicable legal and policy requirements identified in Chapters 4 and 5 above. It applies relevant law and policy to the application in the context of the matrix of facts and issues set out in Chapter 4. Whilst the Habitats Regulations Assessment (HRA) has been documented separately in Chapter 5, relevant facts and issues set out in that chapter are taken fully into account.

6.1.2. I have taken into account all Relevant Representations (RR), Written Representations (WR) and responses to my first written questions (ExQ1) and further written questions (ExQ2), as well as all other representations made during the course of the Examination including the Local Impact Report (LIR) from North East Lincolnshire Council (NELC).

6.2. CONCLUSIONS ON THE PLANNING ISSUES

6.2.1. I have reached a number of conclusions on the effects of the Proposed Development and its performance against relevant policy and legislation which draw on the analysis of the planning considerations in Chapter 4 and the relevant facts and issues documented in the HRA in Chapter 5.

Issues arising in written and oral submissions

6.2.2. With the exception of the outstanding objection from National Grid (NG), matters which arose during written and oral submissions were either addressed or did not raise any concerns which weighed materially against the Proposed Development.

6.2.3. In terms of the outstanding NG objection, at the close of the Examination the Applicant and NG were in advanced negotiations in terms of securing Protective Provisions (PP) and the completion of a Side Agreement. The Statement of Common Ground (SoCG) [REP7-004] completed between these parties agreed that they had reached agreement in principle in relation to the form of PPs to be included in the Order and the side agreement to protect NG's apparatus within and adjacent to the Order Limits. This SoCG [REP7-004] also agreed that the final wording was being settled between the parties and once the agreement is completed, NG will be in a position to withdraw its objection to the Proposed Development.

6.2.4. As such, the SoS for BEIS with need to satisfying themselves that National Grid, being National Grid Electricity Transmission plc and National Grid Gas plc, and the Applicant have agreed their side agreement and the PPs in Part 2 of Schedule 8 of the Development Consent Order (DCO) should the DCO be made.

Issues arising in the LIR

6.2.5. Whilst deferring to the views of other Interested Parties (IPs) or statutory authorities on some matters, NELC's LIR concluded that the Proposed Development and its impacts would be very similar to the 49.9 Megawatt (MW) Energy from Waste (EfW) power station granted under its reference DC/1070/18/FUL (the NELC Planning Permission). As such NELC did not raise any specific issues in the LIR in respect of the DCO application and no conflicts were identified with the development plan. Furthermore, the Applicant submitted a SoCG completed with NELC [REP4-006] agreeing: all matters in respect of the effects of the Proposed Development; that appropriate mitigation had been proposed and could be secured through the draft DCO (dDCO); and no matters of disagreement remained between these parties.

Conformity with National Policy Statements (NPSs)

6.2.6. In relation to NPS EN-1, NPS EN-3 and NPS EN-5 I find:

- no instances of non-compliance with NPSs were identified by IPs;
- the need for the Proposed Development is established through the NPSs;
- the Proposed Development conforms to high-level policy in NPS EN-1, NPS EN-3 and NPS EN-5;
- in terms of alternatives, the Proposed Development represents the best option for the choice of site, taking into account the environmental, social, economic effects and commercial feasibility; and
- the compliance of the Proposed Development has been examined against policy detail and tests applicable to individual planning issues as set out in relevant NPS paragraphs.

Conformity with the Development Plan

6.2.7. The Proposed Development conforms with the development plan for NELC and no instances of unaddressed policy conflict have been identified. Moreover, there are no issues arising from development plan policies of NELC that conflict with relevant policy directions arising from NPSs. Accordingly, development plan policies will be fully met by a decision that is in accordance with relevant NPSs.

Application of other policies

6.2.8. I have found that the Proposed Development conforms with other relevant policies identified by NELC and the Applicant. Furthermore, as there are no conflicts between NPS EN-1, NPS EN-3 and NPS EN-5 and these other policies they would be addressed by a decision that is in accordance with relevant NPSs.

Environmental Impact Assessment/ Environmental Statement

6.2.9. No submissions were made which raised concerns about the overall adequacy of the EIA or the Environmental Statement (ES). The ES and associated information submitted by the Applicant during the Examination sufficiently considered alternatives, including in terms of the location and nature of the power generation proposed, and provided an adequate assessment of the environmental effects of the Proposed Development which meets the requirements of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations). I have taken full account of all environmental information in my consideration of this application.

HRA considerations

6.2.10. I am satisfied that the evidence indicates that the Proposed Development, with the mitigation proposed and secured in the Requirements, would have no adverse effects, either alone or in combination with other plans or projects, on the integrity of any European site and its features. I am also satisfied that the SoS has sufficient information available to discharge his obligations on this matter under The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations).

Environmental Permitting Regime

6.2.11. The Proposed Development falls under The Environmental Permitting (England and Wales) Regulations 2016 and therefore will require an Environmental Permit (EP). The Environment Agency (EA), as the regulatory authority for EPs, confirmed the agreed approach for the submission of an application to vary the existing EP for the South Humber Bank Power Station (SHBPS) varied by the EA in March 2020 to incorporate the NELC Planning Permission, to increase the electrical output for the Proposed Development and transfer the Proposed Development into a new separate EP.

6.2.12. The EA has received the EP variation application and it has been 'duly made'. The EA is not expected to determine the new EP application prior to the end of the Examination but it is not anticipated that there will be any substantial issues due to the EP applied for being very similar to that for the NELC Planning Permission. There are no reasons as to why the new EP application, as applied for, would not be granted. However, in the absence of an EP specific to this Proposed Development, it is important to control the maximum RDF throughput to no more than that specified in the submitted DCO documentation and NELC Planning Permission (753,500 tpa). Subject to such a control, which is specified in Schedule 1 (Authorised Development) of the rDCO attached at Appendix D of this report, I have no concerns in this regard should the Secretary of State (SoS) grant the application.

Other Consents and Licences

6.2.13. In relation to other outstanding consents and licences, in addition to the above mentioned EP, I have considered the available information bearing on these and, without prejudice to the exercise of discretion by future

decision-makers, have concluded that there are no apparent impediments to the implementation of the Proposed Development, should the SoS grant the application.

Principle of the Development

6.2.14. The need for the Proposed Development is established through the NPSs. The Applicant has given sufficient consideration to the design and layout and adequate information has been given on the consideration of alternatives to satisfy the requirements of NPS EN-1.

6.2.15. Furthermore, I accept that the provision of Combined Heat and Power (CHP) is not presently economically viable but consider the Proposed Development should be constructed so as to be 'CHP ready'. Requirement 35 of the rDCO, attached to this report at Appendix D, adequately secures the submission, approval and subsequent provision of a scheme to make the Proposed Development 'CHP ready', that would be acceptable to the appropriate Local Planning Authority. As such I consider the scheme would be 'CHP ready'.

6.2.16. Additionally, in the absence of an EP specific to this Proposed Development, it is important to control the maximum RDF throughput to no more than that specified in the submitted DCO documentation and NELC Planning Permission (753,500 tpa). I have no concerns in regard to the principle of the development, subject to such a control, which is specified in Schedule 1 (Authorised Development) of the rDCO.

Waste hierarchy and fuel availability

6.2.17. The Fuel Availability and Waste Hierarchy Assessment adequately assesses fuel availability and the Proposed Development in the context of the conformity with the waste hierarchy. I am satisfied that the Applicant has demonstrated the Proposed Development is in conformity with the waste hierarchy and that sufficient fuel is available as a result of diverting waste that currently goes to either landfill or abroad, which is an aim of the Resource and Waste Strategy for England 2018. I also consider the erection of a EfW power station, which generates up to 95MW of electricity, would be a significant benefit having regard to the need for all types of infrastructure set out in NPS EN-1.

Air Quality

6.2.18. The air quality assessment undertaken by the Applicant adequately assesses impacts on air quality. However, in the absence of an EP specific to this Proposed Development, it is important to control the maximum RDF throughput to no more than that specified in the submitted DCO documentation and NELC Planning Permission (753,500 tpa).

6.2.19. In regard to air quality I am satisfied, subject to the controlling of the maximum RDF throughput and the imposition of appropriate Requirements in the DCO, that no significant effects on air quality are likely to arise. The RDF throughput is specified in Schedule 1 (Authorised

Development) of the rDCO and I consider residual impacts can be effectively managed through the mitigation measures secured in Requirements 15 (Construction Environmental Management Plan (CEMP)) and 33 (Decommissioning) of the rDCO. The rDCO is attached to this report at Appendix D.

6.2.20. I consider the requirements of both the Air Quality Directive and NPS EN-1 will be met. Air quality effect is therefore neutral in the planning balance.

Biodiversity and Nature Conservation

6.2.21. I am satisfied all biodiversity, ecological, and nature conservation concerns raised by IPs, including those from Natural England, have been adequately addressed during the Examination. Furthermore, I am satisfied that the Proposed Development is unlikely to have a significant effect on biodiversity, ecological, and/ or nature conservation, subject to the imposition of Requirements: 9 (Lighting Scheme); 11 (Biodiversity Protection); 12 (Biodiversity Mitigation and Enhancement); 15 (Construction Environmental Management Plan (CEMP)); and 17 (Piling) of the rDCO; and the imposition of an additional Requirement (Requirement 38), which secures the South Humber Gateway (SHG) mitigation contribution, originally agreed to and secured through the s106 agreement attached to the NELC Planning Permission, being paid to the relevant planning authority prior to the commencement of the Proposed Development. (Note: The original s106 agreement referred to the SHG mitigation contribution as the 'Habitat Contribution'). The above Requirements are as set out in the rDCO attached at Appendix D of this report.

6.2.22. I am also satisfied that the Requirements detailed above, and as set out in the rDCO attached at Appendix D of this report, would adequately secure the mitigation necessary to address the biodiversity, ecological and nature conservation effects of the Proposed Development. Furthermore, I am satisfied that biodiversity, ecological and nature conservation issues have been adequately assessed and that the requirements of NPS EN-1 are met. As such the biodiversity, ecological and nature conservation effects are a neutral consideration in the planning balance.

Landscape and Visual Amenity

6.2.23. The assessments of landscape and visual effects of the Proposed Development meet the requirements of NPS EN-1 and EN-3. I am satisfied that the Proposed Development is unlikely to have a significant effect on landscape or visual amenity. Requirements 5 (Detailed Design (Position and Scale)) and 6 (Detailed Design (Appearance)) of the rDCO (attached at Appendix D of this report) will ensure that further consideration will be given to the design of the Proposed Development so as to reduce its visual impact. The visual impact is therefore neutral in the planning balance.

Transport and Traffic

6.2.24. I am satisfied that the transport and traffic assessment set out in the ES meets the requirements of NPS EN-1. I am also satisfied that no significant traffic or transportation effects are likely to arise from the Proposed Development providing, in the absence of an EP specific to the Proposed Development, the RDF throughput is limited to no more than that set out in the submitted DCO application documentation and controlled in the NELC Planning Permission (753,500 tpa). While I acknowledge there would be an increase in traffic impacts, the control and management measures included in the rDCO would be sufficient to mitigate any negative impacts to an acceptable level. The overall effect in the planning balance is neutral.

Water Quality, Flood Risk and Flood Resilience.

6.2.25. I am satisfied that the Applicant's submitted Flood Risk Assessment (FRA) was appropriately undertaken and meets the requirements of the NPS. I consider that the mitigation identified in the FRA and ES is sufficient and would be appropriately secured by Requirements 21 (Procedure in case of unexpected Contamination), 22 (Flood risk mitigation) and 23 (Flood warning and evacuation plan) of the rDCO, attached at Appendix D of this report, to guard against the risk of flooding.

6.2.26. I am satisfied that water quality and resources issues arising from the Proposed Development have been adequately addressed. I am content adequate mitigation measures relating to water quality, flood risk and flood resilience are secured in the rDCO, attached at Appendix D of this report, including under Requirements 13 (Surface Water Drainage), 14 (Foul Water Drainage), 15 (CEMP), 17 (Piling), Requirement 19 (Investigation and Remediation of Contamination), Requirement 20 (Implementation of Remediation Scheme), Requirement 21 (Procedure in Case of Unexpected Contamination), Requirement 22 (Flood Risk Mitigation), Requirement 23 (Flood Warning and Evacuation Plan) and Requirement 33 (Decommissioning).

6.2.27. I consider the Proposed Development would thus accord with relevant legislation and policy requirements, including those of NPS EN-1, NPS EN-3 and the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 and that water quality, flood risk and flood resilience effects are a neutral consideration in the planning balance.

Noise, Light and Vibration

6.2.28. Given the evidence presented, in the absence of an EP specific to the Proposed Development, subject to the RDF throughput being limited to no more than is set out in the submitted DCO application documentation and controlled in the NELC Planning Permission (753,500 tpa), I consider that noise and vibration issues have been addressed adequately and meet the requirements specified in Section 5.11 of NPS EN-1. This aspect is neutral in the planning balance.

Ground Conditions and Contamination

6.2.29. I am satisfied that the Proposed Development accords with all relevant legislation and policy requirements in respect of ground conditions and contamination and that relevant matters are adequately provided for and secured in the rDCO, as attached at Appendix D of this report. This includes Requirement 13 (Surface Water Drainage), Requirement 14 (Foul Water Drainage), Requirement 15 (CEMP), Requirement 17 (Piling), Requirement 19 (Investigation and Remediation of Contamination), Requirement 20 (Implementation of Remediation Scheme), Requirement 21 (Procedure in Case of Unexpected Contamination) and Requirement 33 (Decommissioning).

6.2.30. I am also satisfied that the Proposed Development would therefore accord with relevant legislation and policy requirements, including NPS EN-1 and NPS EN-3. Matters relating to ground conditions and contamination are therefore a neutral consideration in the planning balance.

Cultural Heritage

6.2.31. I have found above that the Applicant has adequately assessed the significance of the heritage assets affected by the Proposed Development so that the extent of the impact can be understood and that the application meets the requirements of NPS EN-1 in that regard.

6.2.32. I consider the Proposed Development would not adversely affect any of the non-designated heritage assets or the majority of the designated heritage assets, as identified in the application documents. However, I agree with Natural England that the Proposed Development would result in less than substantial harm to the Churches of St. Peter and St. Paul, Stallingborough and St. Nicolas, Great Coates, which are designated heritage assets.

6.2.33. Additionally, the Proposed Development would result in a number of public benefits including its contribution to meeting the identified need for additional generating capacity and support for the local economy. After considering the assessment of effects on heritage and historic assets, I am satisfied that, although the Proposed Development results in less than substantial harm to the significance of designated heritage assets, that harm is clearly outweighed by the public benefits of the Proposed Development. Therefore, taking full account of Regulation 3 of the Infrastructure Planning (Decisions) Regulations 2010, NPS EN-1, the NPPF and development plan policies, I consider the Proposed Development is acceptable in this regard.

6.2.34. Bearing the above in mind, the Cultural Heritage effects of the Proposed Development are considered to be a neutral consideration in the planning balance.

Waste Management

6.2.35. I am satisfied that the Proposed Development would not result in any significant effects arising from waste generated during its construction, operation or decommissioning, especially when bearing in mind they are identical to the NELC Planning Permission, which I consider to be a realistic 'fallback position'. I am also satisfied that matters relating to mitigation in respect of waste can be adequately secured through the rDCO, via Requirement 15 (CEMP), attached at Appendix D of this report.

6.2.36. I am also satisfied the Proposed Development would meet all legislative and policy requirements relating to waste management, including those of NPS EN-1, and there are no disbenefits which weigh against the Proposed Development in this regard. As such I consider waste management effects to be a neutral consideration in the planning balance.

Socio-economic effects (including human health)

6.2.37. With regard to human health, I am satisfied that the ES has adequately addressed and considered human health matters relating to the Proposed Development and that necessary mitigation to avoid adverse effects in this regard would be appropriately secured through:

- specifying the RDF throughput in Schedule 1 of the rDCO to ensure RDF is limited to no more than is set out in the submitted DCO application documentation and controlled in the NELC Planning Permission (753,500 tpa); and
- the relevant Requirements of the rDCO, including Requirement 15 (Construction Environmental Management Plan (CEMP) and Requirement 16 (Construction Traffic Management Plan).

As such, I consider the Proposed Development to be acceptable in terms of human health and would accord with all relevant policies, including NPS EN-1 and NPS EN-5.

6.2.38. The operation of the Proposed Development would be regulated by the EA through an EP to control emissions from the Proposed Development using Best Available Technology (BAT). The Proposed Development would thus comply with relevant legislation and policy in respect of human health, including that of NPS EN-1 and NPS EN-5, and there are no disbenefits which weigh against the Proposed Development in this regard. As such Human Health effects are a neutral consideration in the planning balance.

6.2.39. In terms of socio-economic effects, I consider the Applicant has adequately assessed the socio-economic effects of the Proposed Development and has provided sufficient evidence to support its conclusions on those effects. I am satisfied that the Proposed Development would support economic development in the area and would accord with all relevant policies, including NPS EN-1. This is of moderate public benefit in the planning balance.

Climate Change

6.2.40. Whilst there would be a small increase in GHG emissions, it would not be significant especially when taking into account the 'fallback position' of the NELC Planning Permission, where I consider there to be a greater than theoretical possibility of that consent being implemented prior to the determination of this DCO application or should this DCO application be refused or withdrawn.

6.2.41. I am satisfied from the evidence presented in the Examination, that the Proposed Development would result in similar carbon impacts during construction and a lower carbon intensity (72 tCO2e per GWh) when in operation than the NELC Planning Permission (93 tCO2e per GWh), as a result of the higher planned operational efficiency of the Proposed Development.

6.2.42. Additionally, GHG emissions from operation of the Proposed Development will be partly offset by emissions savings achieved by diverting waste from landfill and recycling of metals in bottom ash, so the carbon intensity of the Proposed Development compares favourably to the current grid average carbon intensity (72 tCO2e per GWh for the proposed Development compared to the current grid average carbon intensity of 173 tCO2e per GWh).

6.2.43. In my view, in the absence of an EP specific to the Proposed Development, providing the RDF throughput is limited to no more than is set out in the submitted DCO application documentation and controlled in the NELC Planning Permission (753,500 tpa), the Proposed Development would contribute to meeting the UK's carbon commitment and supporting the transition to a low carbon economy, whilst bearing in mind the need for all types of infrastructure and maintaining the need for security and flexibility of supply as set out in NPS EN-1.

6.2.44. On balance, I am satisfied that the Proposed Development would accord with the guidance in NPSs EN-1 and EN-3 and would be in accordance with the UK's commitments under the Climate Change Act 2008 and the Paris Agreement 2015. Therefore, I consider the climate change effects are a neutral consideration in the planning balance. However, the SoS may wish to satisfy themselves as to any impact of the Carbon Dioxide (CO_2) equivalent emissions for the construction and operational phases of the Proposed Development in the light of The Carbon Budget Order 2021, which came into force after the close of the Examination, especially in regard to the cumulative impact of emissions in the context of any revised net carbon target and any other projects and programmes.

Cumulative and Combined Effects

6.2.45. I am satisfied that no long term and cumulative adverse impacts are likely to arise from construction, operation and decommissioning activities that would be associated with the Proposed Development. Accordingly, I am satisfied that the requirements of NPS EN-1 are met in this regard and the cumulative and combined effects are a neutral consideration in the planning balance.

6.3. THE PLANNING BALANCE

6.3.1. Taking the above factors into account, there are no adverse impacts of sufficient weight to argue against the DCO being made. The Proposed Development would result in less than significant harm to heritage assets, which are outweighed by the substantial benefit from the provision of energy to meet the need identified in NPS EN-1 and by the other benefits of the application as summarised above. Additionally, there are a number of non-significant effects, all of which have been mitigated as required by NPS policy. Overall, I conclude that there is no breach of NPS policy.

6.3.2. For the reasons set out in the preceding chapters and summarised above, I find that the Proposed Development is acceptable in planning terms.

7. DRAFT DEVELOPMENT CONSENT ORDER AND RELATED MATTERS

7.1. INTRODUCTION

7.1.1. The application draft Development Consent Order (dDCO) [APP-005] and the Explanatory Memorandum (EM) [APP-006] were submitted by the Applicant as part of the application for development consent. The EM describes the purpose of the dDCO as originally submitted, with each of its Articles and Schedules.

7.1.2. The application dDCO [APP-005] was broadly based on the Model Provisions (MP), as set out in the (now withdrawn) Infrastructure Planning (Model Provisions) (England and Wales) Order 2009, but with differences. The EM [APP-006] notes and explain variations made in the dDCO compared to the MP. The application dDCO [APP-005] and subsequent iterations are in the form of a statutory instrument as required by section (s) 117(4) of the Planning Act 2008 (PA2008).

7.1.3. During the Examination, several further drafts of the DCO were submitted by the Applicant incorporating progressive changes arising from the Examining Authority's (ExA's) written questions, points made by Interested Parties (IPs), and from the proceedings at the DCO hearing held on 9 February 2021.

7.1.4. This Chapter provides an overview of the changes made to the dDCO during the Examination process, between the application dDCO [APP-005] and the final dDCO [REP7-003] submitted at Deadline (DL) 7. It then considers changes made to the final dDCO in order to arrive at the recommended Development Consent Order (rDCO) in Appendix D to this report.

7.1.5. I do not report on every change made in the updated versions of the dDCO, as some were the result of typographical or grammatical errors, were minor changes, reflected updated documents, or were changes in the interests of clarity or consistency following discussion between the Applicant and relevant IPs, or as a result of my written questions. Accordingly, and in the interest of conciseness, I have focussed on key changes made in the updated versions of the dDCO.

7.2. THE DCO AS APPLIED FOR

7.2.1. This section records the structure of the dDCO. It is based on the Applicant's final dDCO [REP7-003] submitted at DL7, and is as follows:

- Part 1, Article 1 sets out how the Order may be cited and when it comes into force. Article 2 sets out the meaning of the various terms, whilst Article 3 sets out the position on electronic communications for the purposes of the Order;

- Part 2 sets out the framework for the operation of the Proposed Development. Article 4 provides development consent for the

Proposed Development, while Article 5 provides for how the Order and the Planning Permission granted by North-East Lincolnshire Council under its Planning Reference DM/18/1070/FUL interact. Articles 6 and 7 allow the Proposed Development to be maintained and operated, whilst Articles 8 and 9 set out who has the benefit of the powers of the Order and how those powers can be transferred;

- Part 3 Articles 10 to 14 provide for the Applicant or a person who has the benefit of the Order in accordance with Articles 8 and 9, referred to above, to be able to carry out works to and within streets, to create or improve accesses, to temporarily stop up streets, and to be able to divert and temporarily stop up public rights of way;

- Part 4, Articles 15 and 16 set out two supplemental powers relating to discharge of water, and authority to survey and investigate land;

- Part 5, Article 17 provides powers in relation to trees which need to be removed or lopped in relation to the Proposed Development; and

- Part 6 is concerned with miscellaneous and general matters. Article 18 provides protection for Statutory Undertakers (SU) through the Protective Provisions (PPs) (set out in Schedule 8). Articles 19 to 28 include provisions relating to: the repositioning of apparatus belonging to SU; apparatus and rights of SUs in stopped up streets; recovery of costs of new connections; application of landlord and tenant law; operational land; defence to proceedings in respect of statutory nuisance; certification of plans; service of notices; procedure in relation to certain approvals; requirements and appeals; and the arbitration procedure in the event of a dispute.

7.2.2. There are eight Schedules to the Order. Schedule 1 providing for the description of the Authorised Development, whilst Schedule 2 sets out the requirements which apply to it. Schedule 3 pairs the conditions imposed on the planning permission granted by North East Lincolnshire Council (NELC), under its Planning Reference DM/1070/18/FUL, with the Requirements contained in Schedule 2 of the Order.

7.2.3. In terms of the remaining Schedules 4 to 7 are linked, as they relate to access and adjoining streets, including identifying streets subject to street works (Schedule 4), identifying streets subject to permanent alteration of layout (Schedule 5), Access in terms of who will be responsible for maintenance of the relevant parts of the access (Schedule 6) and which streets are to be temporarily stopped up (Schedule 7). Schedule 8 sets out the PPs.

7.2.4. I find that the structure of the Applicant's final dDCO [REP7-003] as outlined above is fit for purpose and no changes to the structure are recommended. However, for reasons set out below, I consider Article 5(12) should be deleted, an additional Requirement (Requirement 38) needs to be included within Schedule 2 and that the Secretary of State (SoS) will need to satisfy themselves that the PPs; set out in Schedule 8; Part 2; related to the protection of assets owned and/ or operated by

National Grid (NG), as electricity and gas undertaker's assets are as finally agreed between the parties.

7.2.5. Additionally, I am satisfied that the Proposed Development's gross electrical output of 95 megawatts (MW) is controlled in the Applicant's final dDCO [REP7-003] as this limit is specified in the description of the authorised development at Schedule 1. However, in the absence of an EP specific to the Proposed Development, I consider it important and relevant to control the amount of RDF throughput to that specified in the DCO application documentation and as controlled in the Planning Permission granted by NELC for a 49.9 MW Energy from Waste power station and associated development on this Site under their reference DM/1070/18/FUL (NELC Planning Permission) (753,500 tpa). The mechanism to achieve this is set out in Table 3 below.

7.3. CHANGES DURING EXAMINATION

7.3.1. The Applicant updated the dDCO several times during the Examination, responding to issues raised in questions, to Written Representations (WR) and as a consequence of the hearing process. At each revision, the Applicant submitted a clean copy and a copy showing tracked changes from the previous clean copy version. Additionally, except for DL7, the Applicant submitted a table of amendments documenting the changes. The versions of the updated dDCO submitted by the Applicant were as follows:

- Version 1 (DL2 version) [REP2-014] (clean) and [REP2-015] (tracked);
- Version 2 (DL3 version) [REP3-003] (clean) and [REP3-008] (tracked);
- Version 3 (DL4 version) [REP4-004] (clean) and [REP4-010] (tracked);
- Version 4 (DL5 version) [REP5-003] (clean) and [REP5-006] (tracked);
- Version 5 (DL6 version) [REP6-003] (clean) and [REP6-005] (tracked); and
- Version 6 (DL7 version) [REP7-003] (clean) and [REP7-006] (tracked).

7.3.2. No final table of amendments documenting changes was submitted at DL7. However, as indicated in paragraph 7.3.1 above, the changes to the various iterations of the dDCO can be followed as the Examination progressed through the submission of the Applicant's 'Schedule of Changes to the dDCO'. The various versions of this document can be found at Version 5 [REP6-006]; Version 4 [REP5-007]; Version 3 [REP4-011]; Version 2 [REP3-009], and Version 1 [REP2-007]. Progression through the versions of this documentation provides a clear explanation of the majority of changes made to the dDCO during the Examination.

7.3.3. The key changes to the dDCO during the Examination, and the reasons for these changes, are set out in Table 2 below:

Table 2: Key Changes to the dDCO made during the Examination

Provision	Key Changes
Version 1 [REP2-014]	Definition of "Public Sewer or Drain" moved from Article 15 to Article 2, as a result of the Applicants response to Question Q5.0.27 of the ExA's First Written Questions (ExQ1). The word "construct" replaced with the word "commence" in Article 5(1) in response to Q5.0.12 of the ExQ1. Article 5(1)(b) amended to clarify that the conditions of the South Humber Bank Energy Centre (SHBEC) planning permission will only cease to have effect within the Order Limits, in response to Q5.0.7 of the ExQ1 Article 9(9) added to clarify the meaning of "relevant statutory undertaker" or "licence holder" for the purposes of the Article, in response to Q5.0.22 of the ExQ1. Article 19 was amended to remove the text "extinguish or suspend the rights of, remove or" pursuant to Q5.0.29 of the ExQ1. Schedule 2, Requirement 1 (Interpretation) amended to include the definition of "permitted preliminary works" removing piling works from that definition. Additionally, a new sub-paragraph was added to clarify that for the purposes of Schedule 2, references to Work No. 1 include Work No. 1A and Work No. 1B. Schedule 2, Requirement 5 (Detailed design (position and scale)) amended by adding new requirement 5(2), which has been added to stipulate that only Work No. 1B may have more than three occupied storeys. Schedule 2, Requirement 13 (Surface water drainage) was amended by adding Anglian Water (AW) as a consultee within requirement 13(1), as agreed in the Applicant's Statement of Common Ground with AW.

Provision	Key Changes
	Schedule 2, Requirement 14 (Foul water drainage) amended at requirement 14(1) to include both AW and the Environment Agency (EA), as agreed in the Applicant's SoCG with those IPs. Schedule 2, Requirement 16 (Construction traffic management and travel planning) amended at Requirement 16(2) to refer to the framework construction traffic management plan dated December 2020, being the revised plan submitted at DL1. Schedule 2, Requirement 17 (Piling) was amended at Requirement 17(1) to allow the permitted preliminary works to take place before the piling specification has been approved, as agreed with NELC. Additionally, Requirement 17(1) was amended to include the EA as a consultee as agreed in the Applicant's SoCG completed with the EA. Furthermore, in response to Question Q10.0.18 of ExQ1 the wording of requirement 17(2) was updated to set out that the piling specification must include seasonal piling restrictions and/ or the use of Continuous Flight Auger piling in accordance with the biodiversity strategy. Schedule 2, Requirement 19 (Investigation and remediation of contamination) and Requirement 20 (Implementation of remediation scheme) were amended at Requirement 19(1) and Requirement 20(2) to include the EA as a consultee. These amendments were as agreed in the Applicant's SoCG with the EA. Schedule 2, Requirement 21 (Procedure in cases of unexpected contamination) has been amended, as agreed in the SoCG with the EA, at Requirements 21(2) and 21(4). The effect of these amendments was to include the EA as a consultee. Additionally, to avoid confusion as to the timing of the consultation, the consultation in respect of sub-paragraph (3) was drafted in sub-paragraph (2). At Schedule 2, Requirement 29 (Road condition survey) In response to Q9.0.39 of ExQ1 the wording of requirement 29(1) was updated for consistency with other requirements.

Provision	Key Changes
	A new sub-paragraph Schedule 2, Requirement 34 (Amendments agreed by the relevant planning authority) was added to ensure that approvals pursuant to 'tailpieces' in other requirements are adequately controlled. This revision resulted from Q5.0.37 of ExQ1. Within Schedule 2 (Requirements) the Applicant deleted the words "in writing" from: Requirement 8 (Means of enclosure and hard landscaping); Requirement 10 (Soft landscaping); Requirement 11 (Biodiversity protection); Requirement 13 (Surface water drainage); Requirement 14 (Foul water drainage); Requirement 19 (Investigation and remediation of contamination); Requirement 20 (Implementation of remediation scheme); Requirement 22 (Flood risk mitigation); Requirement 24 (Delivery and servicing plan); Requirement 25 (Operational travel plan); and Requirement 30 (Air safety). This is due to the fact that Requirement 4 requires written approval to be obtained from the Local Planning Authority. This amendment was introduced to ensure consistency with other requirements. Schedule 8, Part 1 (AW PPs) paragraph 9 was updated was amended to reflect what was agreed in the Applicant's SoCG with AW.
Version 2 [REP3-003]	Article 2 (Interpretation) of this draft of the dDCO was amended to include: ▪ The definition of "framework construction traffic management plan". This was done to reflect the updated document which was submitted at DL1. Previously the term was defined within Requirement 16 (Construction traffic management and travel planning) but was moved to Article 2 because it is also used in Article 25 (Certification of plans, etc.). ▪ A definition of "key watercourses and flow direction plan". This was included to reflect the updated document submitted at DL3. The term was also used in Article 25 (Certification of plans, etc.).

Provision	Key Changes
	▪ The definition of "Network Rail". This term was moved to Article 2 from Requirement 16 (Construction traffic management and travel planning) as it appears in a number of Requirements. ▪ A definition of "swept path analysis plan". This was added to reflect the document submitted at DL3. The term is used in Article 25 (Certification of plans, etc.), Requirement 26 (Visibility splays) and Requirement 27 (New highway access). Article 25 (Certification of plans, etc.) was amended to include updated documents, being the framework construction traffic management plan, the key watercourses and flow direction plan and the swept path analysis plan. Schedule 2, Requirement 1 (Interpretation) was amended to include a definition of "arboricultural survey report" as this term was added to requirement 15 (Construction environmental management plan). Additionally, the definition of "indicative biodiversity mitigation and enhancement plan" was corrected to refer to part 8 of the biodiversity strategy. Schedule 2, Requirement 2 (Commencement of the authorised development and notices) was amended due to the removal of the requirement to notify the relevant planning authority of "the commencement of construction of the new access on South Marsh Road". The commencement of construction of this new access was the trigger for submission of an ecologist's report under requirement 11 (Biodiversity protection), however this trigger was updated as a result of alterations to Requirement 11 and accordingly the notification provision was no longer required. Schedule 2, Requirement 9 (Lighting scheme) - Requirement 9(2) was updated following discussions with NELC, so that the submitted scheme is to be in accordance with "the principles of" the indicative lighting strategy, rather than in strict accordance with the strategy. Requirement 10 (Soft landscaping) - Requirement 10(1) was updated following discussions with

Provision	Key Changes
	NELC, so that the trigger is the coming into operation of the authorised development rather than the commencement of the authorised development. This amendment aligned the trigger in the requirement with the trigger in the corresponding planning condition. Schedule 2, Requirement 11 (Biodiversity protection) - Requirement 11(2) was updated following discussions with NELC to: a) update the trigger to 18 months from commencement of the authorised development; and b) stipulate that the report must verify implementation of the relevant parts of the biodiversity protection plan and set out the implementation measures for the remaining parts of the biodiversity protection plan. This was amended to reflect the likely position in practice that particular measures have been implemented to a certain extent at the point of reporting, and others will remain to be completed or carried out (as construction continues). The report required by b) above will act as an interim update to NELC on measures implemented, as well as setting out the implementation required for the remaining measures under the plan, allowing NELC to verify what has been and is still to be done. Schedule 2, Requirement 15 (Construction environmental management plan) - Requirement 15(2) was updated following discussions with NELC to include further details that needed to be incorporated in the construction environmental management plan, being fence installation and retention, and tree protection measures. Schedule 2, Requirement 16 (Construction traffic management and travel planning) - Requirement 16(1) was updated following discussions with Network Rail Infrastructure Limited (NR), to include NR as a consultee. As set out above, “framework construction traffic management plan" and “Network Rail” have been defined in Article 2 (Interpretation) and accordingly these definitions were removed from Requirement 16. Schedule 2, Requirement 24 (Delivery and servicing plan) - Requirement 24(1) was updated

Provision	Key Changes
	following discussions with NR, to include NR as a consultee. Schedule 2, Requirement 29 (Road condition survey) - Requirement 29(6) was added following discussions with NELC, dealing with a query raised by NELC in its response to Q5.0.18 of ExQ1. This addition set out that the scheme must be implemented as approved. Schedule 2, Requirement 37 (Heavy goods vehicle prohibition) – This new Requirement 37 was added following discussions with NR, to stipulate that the construction traffic management plan, the delivery and servicing plan and the decommissioning plan must not provide for the use of South Marsh Road by heavy goods vehicles.
Version 3 [REP4-004]	The approach to statutory referencing was updated throughout the dDCO in line with what the Applicant advised it understood to be the preferred approach. Where previously the title of the part/ section referred to followed immediately after the part/ section number, it was moved to follow the name of the Act. For example in the Article 2 definition of "owner" the wording which was "section 7 (interpretation) of the Acquisition of Land Act 1981" is now "section 7 of the Acquisition of Land Act 1981 (interpretation)". In addition to the above, where the wording "carry out/ carrying out/ carried out" was previously used, this was updated by the Applicant with the words "construct/ construction/ constructed", as it considered these to be the more appropriate terminology. Furthermore, where the wording "pursuant to" was previously used, the Applicant changed this to "under" or "in accordance with" (as appropriate), as these are the preferred form of wording for DCO drafting. Also, the Applicant, where appropriate, updated the term "and/ or" to "or", and the term “shall” with "are” or "must". Article 2 (Interpretation) – In this Article the definition of “combined heat and power assessment” was deleted as it is not used in the dDCO. Additionally, the definition of flood risk

Provision	Key Changes
	assessment was updated to clarify that it is included in the environmental statement. Furthermore, a new definition of “indicative landscape strategy” was added as this is referred to in the definition of "arboricultural survey report” and is a certified document. Also the definition of “key watercourses and flow direction plan” was deleted as it is not used in the dDCO. Finally, in terms of Article 2 (Interpretations) quotation marks were added around the terms "numbered works" and "Work No" in Article 2(4) to make clear that these are the expressions being referred to. Article 5 (Effect of the Order on the SHBEC planning permission) - The wording of Article 5(1) was updated to be made clearer, and as a consequence of those updates Article 5(2) was amended to be more concise. Article 5(2)(b)(ii) has been updated to include the word "taken". Article 15 (Discharge of water) - Quotation marks were added around the terms "public sewer or drain" and "watercourse" in Article 15(8) to make clear these are the expressions being referred to. Article 16 (Authority to survey and investigate land) - The words "entering the land" have been deleted from Article 16(3)(a) as they were unnecessary repetition of the wording in 16(3). Article 25 (Certification of plans, etc.) - The reference to “combined heat and power assessment” has been deleted as it is not used in the dDCO. The reference to "flood risk assessment” has been deleted as the flood risk assessment is in the environmental statement which is a certified document. The reference to the “key watercourses and flow direction plan” has been deleted as it is not used in the dDCO. Schedule 2, Requirement 1 (Interpretation) - The definition of “arboricultural survey report" has been corrected to remove the reference to the indicative landscape strategy being within the environmental statement, as it is not. In the definition of "coming into operation"/ "come into operation" the wording has been corrected to "mean" (rather than "means").

Provision	Key Changes
	Schedule 2, Requirement 8 (Means of enclosure and hard landscaping) and Schedule 2, Requirement 9 (Lighting scheme) – Additional drafting was added to each Requirement to secure the implementation and maintenance of the details approved under this Requirement. Schedule 2, Requirement 16 (Construction traffic management and travel planning) – Additional drafting was added to secure the implementation of the plan approved under this requirement. Schedule 2, Requirement 22 (Flood risk mitigation) – The wording of Requirement 22(2) was updated to reflect that the definition of "flood risk assessment" has been updated. Additional drafting was also added to Requirement 22(4) to secure implementation of the scheme approved under this requirement. Schedule 2, Requirement 26 (Visibility splays) – Additional drafting was added to secure the timing of implementation of the details approved under this requirement. Schedule 2, Requirement 27 (New highway access) – The reference to the "proposed culvert for site access plan" was deleted from requirement 27(2) as it is unnecessary. Additional drafting was also added to secure the trigger for implementation of the details approved under this requirement. Schedule 2, Requirement 28 (Parking) – Additional drafting was added to secure the trigger for implementation of the details approved under this requirement. Schedule 3 (Deemed approval of matters referred to in requirements) – The rows relating to the following conditions/ requirements were deleted, as the deemed approval mechanism did not apply to them: ▪ Condition 1 – Development to be commenced within 5 years of the date of planning permission / no corresponding requirement ▪ Condition 2 – Development to be carried out in accordance with specified plans / no corresponding requirement

Provision	Key Changes
	▪ Condition 3 – Interpretation / no corresponding requirement ▪ Condition 8 – So far as relating to biodiversity mitigation and enhancement / requirement 12 – Biodiversity mitigation and enhancement ▪ Condition 10 – So far as relating to construction environmental management plan / requirement 15 – Construction environmental management plan ▪ Condition 16 – Development to be carried out in accordance with FRA / requirement 22 – Flood risk mitigation. In respect of conditions 1, 2 and 3 there are no corresponding requirements for the deemed discharge provisions to apply to, so these have been deleted as listing them in Schedule 3 is considered superfluous. In respect of condition 8 / requirement 12, condition 10 / requirement 15 and condition 16 / requirement 22, the Applicant considers that the deemed discharge mechanism should not apply to these provisions and removed them from the table. Schedule 6 (Access) – The words "Construction of" in the third column of the table in Part 1 were deleted, as the column header makes clear the description should be of the relevant part of the access, not the works. The words "Construction of" and "Works to existing" in the third column of the table in Part 2 were also deleted for the same reason.
Version 4 [REP5-003]	General – In response to ExQ2 QB5.1 the wording "carry out/ carrying out/ carried out" has been reinstated from "construct/ construction/ constructed". Article 2 (Interpretation) – A new definition of "varied condition" was added to Article 2 and is used in Article 5. Article 5 (Effect of the Order on the SHBEC planning permission) – The Applicant has submitted an application under s73 of the Town and Country Planning Act 1990 (as amended) (TCPA1990) seeking to vary conditions Variation

Provision	Key Changes
	of Condition 3 (iii - Preliminary works) to delete reference to piling and Condition 11 (Piling) to vary timing of submission of piling information details as granted on the NELC Planning Permission. At the close of the Examination this application was still under consideration by NELC. However, new paragraphs 6, 7 and 8 were added to Article 5 of the dDCO to set out how the deemed discharge provisions will apply in the event that Planning Permission is determined. Paragraph 6 sets out that deemed discharge will not apply to a varied condition unless the relevant planning authority has issued a notice under paragraph 7. Paragraph 7 allows the relevant planning authority to issue a notice confirming that deemed discharge applies to a varied condition, and/ or where the numbering of conditions has changed, confirming the number of the relevant condition and requirement to which deemed discharge applies. Paragraph 8 stipulates that the relevant planning authority may only issue a notice under paragraph 7 if it is satisfied that applying deemed discharge will not give rise to any materially new/ different environmental effects to those assessed in the environmental statement. Schedule 2, Requirement 1 – A new definition of "Royal Mail" was added to Requirement 1 and is used in Requirement 16. Schedule 2, Requirement 8(4) - In response to ExQ2 QB5.6, the Applicant and NELC agreed to amend the wording in this Requirement from "as part of" to "during". Schedule 2, Requirement 15(2)(g) – Wording has been added to clarify that the timing for the fence installation must be incorporated in the construction environmental management plan. Schedule 2, Requirement 16(3)(a) – In response to ExQ2 QB5.8 reference to Royal Mail was added to this Requirement. Schedule 8, NG PPs - In response to ExQ2 QB5.4 the term "shall" was amended: ▪ to "will" in the definition of "ground monitoring scheme"; and

Provision	Key Changes
	▪ to "must" in paragraph 21 Schedule 8, NR PPs - In response to ExQ2 QB5.5 the Applicant and NR agreed to replace the term "shall" with "must", "will" or "is" as appropriate.
Version 5 [REP6-003]	Article 2 (Interpretation) – The definition of "biodiversity strategy" was updated to reflect the revised biodiversity strategy submitted at DL6. Article 2 (Interpretation) – Follows discussions with NELC The definition of "varied condition" was updated to clarify that it relates to a condition: ▪ imposed under a new planning permission (where such condition differs to its predecessor under the planning permission originally granted on 12 April 2019) pursuant to s73 of the TCPA1990; ▪ varied under s96A of the TCPA1990; or ▪ where the numbering has changed from the numbering under the original planning permission of 12 April 2019. Article 5 (Effect of the Order on the SHBEC planning permission) – Following discussions between the Applicant and NELC, wording was added at Article 5(7)(b) to clarify the text in brackets. Requirement 19 (Investigation and remediation of contamination) and Requirement 20 (Implementation of remediation scheme) - Following discussions between the Applicant and NELC, the wording of Requirements 19(5), 19(6), 20(1) and 20(2) was updated to make clear that they apply to a remediation scheme insofar as a remediation scheme has been required under Requirement 19(4). Requirement 35 (Combined heat and power) – Requirement 35(7) was amended to refer to sub-paragraph (6), rather than sub-paragraph (4) which was an error. Explanatory Note – The Deposit location was added.

Provision	Key Changes
Version 6 [REP7-003]	Article 2 (Interpretation) – The following terms were added and defined in this Article: ▪ "charge"; ▪ "Lloyds Bank plc"; and ▪ "section 106 agreement". Article 5 (Effect of the Order on the SHBEC planning permission) – Following the ExA's Rule 17 letter, dated 28 April 2021 [PD-013], where concerns were raised that the interests of the Mortgagee, Lloyds Bank plc, were not currently bound by the s106 agreement completed as part of the NELC Planning Permission (DM/1070/18/FUL), the Applicant added Article 5(12)) to address these concerns and "…put the matter beyond doubt…" Article 5(12) must be complied with prior to serving an Article 5 notice (which itself must be done before commencing works under the DCO). Article 5(12) requires that one of the following must have taken place, to the satisfaction of the relevant planning authority: ▪ The charge is discharged; ▪ Lloyds Bank plc provides its consent to the planning/ development consent obligations binding the land; or ▪ If Lloyds Bank plc has taken possession of land within the Order Limits, then anyone who has an interest in the land at the relevant time must bind their interest to the planning obligations/ development consent obligations. As noted above, the Applicant also added definitions of 'charge', 'Lloyds Bank plc' and 'section 106 agreement' in Article 2, to ensure the new provision is clear. The effect of Article 5(12) is should it not be complied with, an offence would have been committed under s161 of the PA2008 ('Breach of terms of order granting development consent'), and the relevant planning authority would be able to take enforcement action. Explanatory Note – The Deposit location was updated to include the full postal address.

7.3.4 The only Statutory Party that maintained an objection at the close of the Examination was NG. This was due to the Applicant and NG failing to agree to the finalised wording of the PPs and related side agreement being negotiated between those parties. Irrespective of this, NG were clear in its e-mail dated 5 May 2021 [REP7-008] and in the SoCG [REP7-004] completed between these parties that agreement on the principles, in relation to the form of the PPs to be included in the dDCO and a side agreement to protect NG's apparatus within and adjacent to the Order Limits, had been reached. However, neither the Applicant or NG provided any update as to progress of the PP and side agreement prior to the close of the Examination and these matters remained outstanding.

7.3.5 As such, should the SoS for Business, Energy and Industrial Strategy (BEIS) be minded to make the DCO they will need to satisfy themselves that the wording of the PPs contained in Schedule 8, Part 2 of the DCO are as finally agreed between the Applicant and NG and that the parties are satisfied in relation to any side agreement completed between these parties.

7.3.6 In addition to the above, despite the responses of both the Applicant [REP7-007] and NELC [REP7-010] in relation to concerns raised by me in regard to the submitted Deed of Variation (DoV), which does not bind the Mortgagee, and the confirmatory deed remaining unsigned, I consider there remains a risk, albeit small, that the mortgagee could take possession of the property and sell to a third party free from the obligations of the s106 agreement (the requirement to pay the South Humber Gateway (SHG) mitigation contribution (referred to in the Original s106 agreement as the 'Habitat Contribution')). I am not satisfied that the DoV and the attached confirmatory deed remove this risk and as such should the SoS for BEIS be minded to make the DCO, revisions would be required to the DCO.

7.3.7 The provisions in respect of which I have recommended changes to the Applicant's final dDCO [REP7-003] in the rDCO at Appendix D, and the reasons for this, are set out in Table 3 below:

Table 3: dDCO provisions recommended to be changed

Provision	Recommendations	Reason
Introduction, prior to Part 1 Preliminary.	Remove the paragraph worded "The Secretary of State's determination was published on [xxx]."	This paragraph is superfluous.
Article 2 (Interpretations).	Remove "section 106 agreement", "Lloyds Bank plc"	With the removal of Article 5(12), as recommended below, these

Provision	Recommendations	Reason
	and "charge" from the list of interpretations in Article 2.	interpretations become superfluous as they only appear in Article 5(12).
Article 2 (Interpretations).	Add the word "Newlyn" at the end of the definition of "AOD".	To add clarity and in the interests of precision.
Article 5(5)(2)(b)(ii).	Add the word "place" after the word "taken".	Typographical error, add the word "place" after the word "taken" to add clarity and in the interests of precision.
Article 5(12).	Remove Article 5(12).	Article 5(12) would become superfluous with the imposition of Requirement 38 in Schedule 2 of the DCO.
Article 10(4).	After the wording "…Paragraphs (1) and (2)…" change the word "are" with the word "is".	Typographical error and in the interests of precision.
Schedule 1 (Authorised Development).	Within the description of "Work No. 1" after the wording "…refuse derived fuels…" add wording ", with a capacity to process up to 753,500 tonnes of refuse derived fuels per annum,".	The DCO application is predicated on the assumption that it is based on the same waste fuel input of 753,500 tonnes of refuse derived fuels per annum as the existing NELC Planning Permission, but with an electricity output almost doubled to 95MW. In the absence of an Environmental Permit issued by the EA specific to the Proposed Development, unless the input volumes are controlled within Schedule 1 (Authorised Development) the conclusions in my Recommendation Report,

Provision	Recommendations	Reason
		especially in regard to environmental effects, impacts on traffic, air quality, noise and vibrations, Etc., could be incorrect. Throughout the DCO documentation, the Applicant has been clear about the annual waste processing capacity of the Proposed Development. As such, it is considered: ▪ necessary; ▪ relevant to planning; ▪ relevant to the DCO development under consideration; ▪ enforceable; ▪ precises; and ▪ reasonable in all other respects to control refuse derived fuel input by specifying the amount within Schedule 1, which specifies the Authorised Development.
Schedule 1 (Authorised Development).	After the Wording "Works No. 2 comprising…" add "associated development –" After the Wording "Works No. 3 – add wording "associated development being…" After the Wording "Works No. 4–" and Works No. 5–" add wording "associated development comprising…"	To make it precise within Schedule 1 (Authorised Development) that Work Nos. 2, 3, 4 and 5 are 'associated development' as set out in Paragraph 3.2.3 of the Applicant's EM [APP-006].

Provision	Recommendations	Reason
	At the paragraph which starts "In connection with and in addition to Work Nos. 1, 1A, 1B, 2, 3, 4 and 5…" between the words "further" and "development" add the word "associated".	
Schedule 2 Requirements – Requirement 1 (Interpretation).	Remove the definition of "AOD" as this is already defined in Article 2 (Interpretations).	"AOD" is already defined in Article 2 (Interpretations) and therefore the reference to "AOD" in Schedule 2 Requirements (Requirement 1 – Interpretation) is superfluous.
Schedule 2 Requirements – Requirement 1 (Interpretation).	Add "SCANNER" to this list of interpretations by adding at the bottom of the list the following wording: ""SCANNER" means Surface Condition Assessment for the National Network of Roads."	The term "SCANNER" is used in Schedule 2, Requirement 29 (Road Condition Survey) without any definition or explanation. This term therefore needs to be defined in the interests of precision and enforceability.
Schedule 2 Requirements – Requirement 8 (Means of enclosure and hard landscaping).	At the end of the sentence delete the full stop and add the text ", as set out in Section 7 and illustrated in figure 1 of the biodiversity strategy."	To add precision and enforceability to the Requirement by making it clear the precise location and length of close board fencing to be erected at 2.5 metres in height along the southern and eastern boundary of Works No. 1.
Schedule 2 Requirements – Requirement 23 (Flood Warning and Evacuation Plan).	At Requirement 23(2) before the words "Floodline Warning Direct service", add the wording	To add precision to the Requirement by making it clear that it is the EA's "Floodline Warning Direct service" that the requirement is referring to.

Provision	Recommendations	Reason
	"Environment Agency's".	
Schedule 2 Requirements – Requirement 28 (Parking).	Delete the words "and two wheeler".	This term is superfluous to this Requirement, as it is covered under the terms "vehicle" and/ or "bicycle".
Requirement 38.	Insert new Requirement 38 (Habitat contribution)".	The wording of this Requirement, as suggested by the Applicant in its response to my Rule 17 letter dated 28 April 2021 [REP7-007], would secure the payment of the SHG mitigation contribution (referred to in the Original s106 agreement as the 'Habitat Contribution') prior to commencement of development in the DCO. I consider the imposition of an additional Requirement to be the clearest, neatest and safest way to secure the above mentioned payment, which is essential to mitigating the effect of the development on the adjoining designated National Site Network and Ramsar site and is critical in enabling the SoS to positively conclude an Appropriate Assessment (AA) required to be undertaken by the Conservation of Habitats and Species Regulations 2017 (as amended) (The Habitat Regulations).
Schedule 8 PPs – Part 2 (For the protection of NG as Electricity and Gas Undertaker).	SoS for BEIS should satisfy himself that NG, being National Grid Electricity Transmission plc and National Grid	The side agreement and PPs remained to be agreed between NG, being National Grid Electricity Transmission plc and National Grid Gas

Provision	Recommendations	Reason
	Gas plc, and the Applicant have agreed their side agreement and the PPs to be included in Part 2 of Schedule 8 of the Development Consent Order.	plc, and the Applicant at the close of the Examination.
Schedule 8 PPs – Part 5 (For the Protection of NR).	Paragraph 47(c), last line replace the word "reasonable" with the word "reasonably".	Correction of a typographical error and in the interests of precision.
Explanatory Note.	Delete the full stop at the end of the second line of the first paragraph and add the following text "…located on land at the South Humber Bank Power Station Site, South Marsh Road, near Stallingborough, Lincolnshire, fuelled by refuse derived fuels, with a capacity to process 753,500 tonnes of refuse derived fuel per annum, with a gross generation capacity of up to 95 MW at International Organization for Standardization (ISO) conditions."	In order to clarify what the Order is enabling, in the interests of precision.

7.3.8 With regard to Requirement 38, I consider that this Requirement needs to be negatively worded to meet the six tests, as set out in the National Planning Practice Guidance, and that exceptional circumstances exist to justify the imposition of such a Requirement.

7.3.9 As ExA, I consider the exceptional circumstances that justify the use of such a Requirement to be:

- the securing of the SHG mitigation contribution (referred to in the Original s106 agreement as the 'Habitat Contribution') is essential in regard to mitigating the impact of the development on the adjacent designated National Site Network and Ramsar site and in regard to enabling the SoS, as the competent authority, to positively conclude an AA required to be undertaken by The Habitats Regulations;
- NELC have previously failed to bind the interests of the mortgagee to the terms of the original s106 agreement, completed between NELC and the Applicant, when it granted the NELC Planning Permission. As such despite the submission of a DoV, with an appended but unsigned confirmatory deed, I consider there remains a risk, albeit small, that the mortgagee could take possession of the property and sell to a third party free from the encumbrances of the s106 agreement (the requirement to pay the SHG mitigation contribution (referred to in the Original s106 agreement as the 'Habitat Contribution')).
- The Applicant has failed to adequately satisfy me in regard to the risk mentioned above and that without the imposition of such a Requirement the SoS, as the competent authority, would not be able to positively conclude an AA as required to be undertaken by the Habitat Regulations. As a result, I consider there to be clear evidence that the delivery of the Proposed Development would otherwise be at serious risk.

7.4. CONCLUSIONS

7.4.1. I have considered all iterations of the dDCO, as provided by the Applicant, from the application version [APP-005] to the final version [REP7-003] submitted at DL7 and I have considered the degree to which the Applicant's final version has addressed outstanding matters. A number of matters are the subject of recommendations in this Chapter and with the exception of the NG PPs in Schedule 8 Part 2, as they had not been agreed between the Applicant and NG by the close of the Examination, are included in the rDCO in Appendix D of this report.

7.4.2. Taking all matters raised in this Chapter and all matters relevant to the DCO raised in the remainder of this report fully into account, if the SoS for BEIS is minded to make the DCO, it is recommended that, subject to including NG PPs with a form of wording yet to be agreed between the Applicant and NG, the DCO should be made in the form set out in Appendix D of this report.

8. SUMMARY OF FINDINGS AND CONCLUSIONS

8.1. CONSIDERATION OF FINDINGS AND CONCLUSIONS

8.1.1. In relation to section (s) 104 of the Planning Act 2008 (PA2008), I conclude that making the recommended Development Consent Order (rDCO) would be in accordance with National Policy Statement (NPS) EN-1, NPS EN-3 and NPS EN5. It would also accord with relevant development plans and other relevant policy, all of which have been taken into account in this report. I have also had regard to the Local Impact Report produced by North East Lincolnshire Council (NELC) in reaching my conclusion and in respect of which there are no matters of conflict.

8.1.2. Whilst the Secretary of State (SoS) for Business, Energy and Industrial Strategy (BEIS) is the competent authority under the Conservation of Habitats and Species Regulations 2017, and will make the definitive assessment, I conclude that subject to:

- securing the maximum refuse derived fuel throughput, by specifying it within Schedule 1 (Authorised Development); and
- the imposition of Requirements within Schedule 2, especially Requirements:
  - 11 (Biodiversity Protection Plan);
  - 12 (Biodiversity Mitigation and Enhancement);
  - 13 (Surface Water Drainage);
  - 14 (Foul Water Drainage);
  - 15 (Construction Environmental Management Plan);
  - 16 (Construction Traffic Management and Travel Plan);
  - 17 (Piling); and
  - 38 (Habitat Contribution);

the Proposed Development would have no adverse effects, either alone or in combination with other plans or projects, on the integrity of any European sites and its features and I have taken this finding into account in reaching my recommendation.

8.1.3. I have had regard to the Public Sector Equality Duty (PSED) throughout the Examination and in producing this report. The Proposed Development would not harm the interests of persons who share a protected characteristic or have any adverse effect on the relationships between such persons and persons who do not share a protected characteristic. On that basis, there would be no breach of the PSED.

8.1.4. I have further considered whether the determination of this application in accordance with the relevant NPSs would lead the United Kingdom to be in breach of any of its international obligations where relevant, including the Climate Change Act 2008 and the Paris Agreement 2015. Subject to any consideration of the implications arising from the making and/ or coming into force of The Carbon Budget Order 2021 and the cumulative

effects of carbon emissions as set out I am satisfied this would not be the case.

8.1.5. With regard to all other matters and representations received, I have found no important and relevant matters that would individually or collectively lead to a different recommendation to that below.

8.1.6. In relation to s104(7) of the PA2008, and with the mitigation proposed through the rDCO in Appendix D to this report, I consider that there are no adverse impacts arising from the Proposed Development that would outweigh its benefits. Furthermore, there is nothing to indicate that the application should be decided other than in accordance with the relevant NPSs.

8.2. RECOMMENDATION

8.2.1. My findings and conclusions on important and relevant matters are set out in this report and my recommendation is subject to the SoS for BEIS satisfying themselves on the following matters:

- National Grid, being National Grid Electricity Transmission plc and National Grid Gas plc, and the Applicant agreeing their side agreement and the protective provisions in Part 2 of Schedule 8 of the Development Consent Order; and
- The Carbon Budget Order 2021 for the sixth carbon budget was made after the close of the examination. The SoS for BEIS may wish to consider the impact of the Carbon Dioxide (CO_2) equivalent emissions for the construction and operational phases of the Proposed Development in relation to The Carbon Budget Order 2021.

8.2.2. Subject to the above, I consider that the Proposed Development meets the tests in s104 of the PA2008. On that basis, I recommend that the SoS for BEIS makes the South Humber Bank Energy Centre Development Consent Order in the form attached at Appendix D to this report.

APPENDICES

APPENDIX A: THE EXAMINATION II
APPENDIX B: EXAMINATION LIBRARY III
APPENDIX C: LIST OF ABBREVIATIONS IV
APPENDIX D: THE RECOMMENDED DCO V

APPENDIX A: THE EXAMINATION

APPENDIX B: EXAMINATION LIBRARY

APPENDIX C: LIST OF ABBREVIATIONS

APPENDIX D: THE RECOMMENDED DCO