CONTENTS

7.0 LEGISLATIVE CONTEXT AND PLANNING POLICY

7.1 Introduction

7.1.1 This chapter provides an overview of the legislative and policy context that is relevant to the Proposed Development.

7.1.2 Section 7.2 details the legislative and decision-making framework set out in the Planning Act 2008 ('2008 Act') (HM Government, 2008). Section 7.3 provides an overview of the National Policy Statements ('NPS') and Marine Policy Statements ('MPS') of most relevance to the Proposed Development.

7.1.3 Section 7.4 sets out recent UK Government energy and climate change policy which establishes objectives for decarbonising the power and industrial sectors and the legally binding commitment to achieve 'net zero' in terms of greenhouse gas emissions by 2050, with the Committee on Climate Change's May 2019 Net Zero Technical Report identifying a need for gas-fired electricity generation with Carbon Capture and Storage ('CCS') in order to hit the 'net zero' 2050 target.

7.1.4 The National Planning Policy Framework ('NPPF') (Ministry of Housing, Communities & Local Government, 2019a) and local planning policies considered to be of most relevance to the Proposed Development are set out in sections 7.5 and 7.6 respectively. The Proposed Development Site (Described in detail in **Chapter 4:** The Proposed Development (PEI Report Volume I) covers land located within the administrative boundary of North Lincolnshire Council ('NLC') and therefore section 7.6 identifies the key policies within the local development documents pertaining to this authority.

7.2 Legislative Context

7.2.1 Elements of the Proposed Development fall within the definition of a Nationally Significant Infrastructure Project ('NSIP') under Section 14(1)(a) and Sections 15(1) and (2) of the 2008 Act, notably the onshore generating station, which will have a generating capacity greater than 50MW output. As such, a Development Consent Order ('DCO') is required to authorise this part of the Proposed Development in accordance with Section 31 of the 2008 Act.

7.2.2 Section 115 of 2008 Act also states that a DCO can include consent for 'associated development', that is, development that is not part of, but is associated with the NSIP. This may be development that supports the construction or operation of the NSIP, which helps to address the impacts of the NSIP or is of a type normally brought forward with the particular type of NSIP (here the generating station). The proposed gas, water and electricity connections would support the operation of the Proposed Development and are considered to be associated development for the purposes of Section 115 of the 2008 Act.

7.2.3 Under the 2008 Act regime, the policy framework for examining and determining applications for a DCO is provided by NPS. Section 5 of the 2008 Act allows the Secretary of State ('SoS') to designate NPS setting out national policy in relation to the types of NSIP listed at Section 14 of the 2008 Act.

7.2.4 Section 1 of the 2008 Act confirms that where NPS are in place, these shall be the primary basis for decisions by the SoS on applications for NSIP. Section 104 requires the SoS to determine applications for NSIP in accordance with the relevant NPS unless this would:

- lead to the UK being in breach of its international obligations;
- be in breach of any statutory duty that applies to the SoS;
- be unlawful;
- result in the adverse impacts of the development outweighing the benefits; or
- be contrary to regulations about how decisions are to be taken.

7.2.5 In making decisions on NSIP, the 2008 Act (Section 105) also states that the SoS must have regard to any local impact report submitted by a relevant local authority, any relevant matters prescribed in regulations and any other matters that the SoS thinks are both 'important and relevant'. In the case of the Proposed Development, other matters that are important and relevant may include recent and relevant UK Government energy and climate change policy in the National Infrastructure Plan 2014 (HM Treasury, 2014), the National Infrastructure Delivery Plan 2016 (Infrastructure and Projects Authority, 2016), the Clean Growth Strategy 2017 (Ref) and the UK Carbon Capture Usage and Storage deployment pathway - An Action Plan 2018 (Department for Business, Energy and Industrial Strategy, 2018), all of which set out important Government objectives for decarbonising the power and industrial sectors in addition to the Government's target (enshrined in law) of achieving 'net zero' in terms of greenhouse gas emissions by 2050. Such matters may also include the policies within the NPPF and local development plan documents.

7.2.6 The designated NPS that are considered to be of the most relevance to the Proposed Development are as follows:

- Overarching NPS for Energy (NPS EN-1) ('EN-1') (DECC, 2011a); and
- NPS for Fossil Fuel Electricity Generating Infrastructure (NPS EN-2) ('EN-2') (DECC, 2011b).

7.2.7 The above designated NPS, so far as they are relevant to the Proposed Development, are considered further below.

7.2.8 In addition, the following designated NPS are also considered relevant to the Proposed Development:

- NPS for Gas Supply Infrastructure and Gas and Oil Pipelines (NPS EN-4) ('EN-4') (DECC, 2011c); and
- NPS for Electricity Networks Infrastructure (NPS EN-5) ('EN-5') (DECC, 2011d).

7.2.9 Each technical chapter of the PEI Report refers to the policies from these NPS that are relevant to the assessment of the environmental effects reported within that chapter.

7.2.10 The UK Marine Policy Statement ('the MPS') (Department for Environment, Food & Rural Affairs, 2011) is the framework for preparing Marine Plans and taking decisions affecting the marine environment. The East Inshore and East Offshore Marine Plans

(Department for Environment, Food and Rural Affairs, 2014) establishes the plan led system for the marine area in which the riverine parts of the Site are located. These are considered further below.

7.2.11 Regard has also been given (in section 7.5) to the NPPF (Ministry of Housing, Communities & Local Government, 2019a) which sets out the Government's general planning policies for England and how these are to be applied. Paragraph 5 of the NPPF is clear that it does not contain specific policies for NSIP, and these are to be determined in accordance with the decision-making framework set out in the 2008 Act and relevant NPS, as well as any other matters that are important and relevant, which may include the NPPF itself. As stated above, such matters can also include local development plan documents (set out in section 7.6).

7.3 National Planning Statements (NPS) and Marine Policy Statements (MPS)

7.3.1 As identified above the relevant designated NPS are:

- Overarching NPS for Energy (NPS EN-1) ('EN-1') (DECC, 2011a).
- NPS for Fossil Fuel Electricity Generating Infrastructure (NPS EN-2) ('EN-2') (DECC, 2011b).
- NPS for Gas Supply Infrastructure and Gas and Oil Pipelines (NPS EN-4) ('EN-4') (DECC, 2011c); and
- NPS for Electricity Networks Infrastructure (NPS EN-5) ('EN-5') (DECC, 2011d).

7.3.2 The SoS for Business, Energy and Industrial Strategy has indicated in recent legal proceedings that he is minded to review the Energy NPS, however, the Statements will not be suspended during this review.

7.3.3 The appropriate marine policy documents are the UK Marine Policy Statement (Department for Environment, Food & Rural Affairs 2011) and the East Inshore and East Offshore Marine Plan (Department for Environment, Food and Rural Affairs, 2014).

7.3.4 These documents, from a planning policy perspective, have been the main focus in terms of scoping the EIA, as reported on in the EIA Scoping Report (Appendix 1A, PEI Report Volume II).

Overarching National Policy Statement for Energy (NPS EN-1)

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

- 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;
- 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 closes as a result of the European Union Emissions Trading System ('EU ETS') and the UK moves toward a low carbon economy.

7.3.6 Part 3 of EN-1 sets out the need for nationally significant energy infrastructure. Paragraph 3.1.1 states that the UK *'needs all the types of energy infrastructure covered by this NPS in order to achieve energy security'* and that the *'Government does not consider it appropriate for planning policy to set targets for or limits on the different technologies'* (Paragraph 3.1.2). Notably, Paragraph 3.1.3 stresses that the SoS should assess applications for DCOs for the types of infrastructure covered by the energy NPS on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them. Paragraph 3.1.4 confirms that the SoS should give substantial weight to the contribution that all projects would make toward satisfying this need when considering applications under the 2008 Act.

7.3.7 Section 3.3 of Part 3 of EN-1 sets out why the Government believes that there is an urgent need for new electricity infrastructure, including:

- meeting energy security and carbon reduction objectives – all types of energy infrastructure covered by the NPS are needed to achieve energy security in the UK at the same time as reducing greenhouse gas emissions;
- the need to replace closing electricity generating capacity – at least 22GW of existing electricity generating capacity will need to be replaced in the coming years, as a result of aging power stations and tightening environmental regulation. Additionally, 10GW of nuclear generating capacity is expected to close over the next 20 years;
- the need for more electricity capacity to support the increased supply from renewables sources – decarbonisation of electricity generation is reliant on a dramatic increase in the amount of renewable energy; however, some renewable sources (such as wind, solar and tidal) are intermittent and cannot be adjusted to meet demand. Furthermore, EN-1 recognises that there will still be a role for fossil fuel generation to provide a cost-effective means of 'back up' electricity generation at short notice to support renewable technologies; and
- future increases in electricity demand – the demand for electricity is expected to increase and total electricity consumption could double by 2050. Depending upon the choice of how electricity is supplied, total capacity may need to more than double to be sufficiently robust to all weather conditions.

7.3.8 Paragraph 3.3.15 states the urgency at which new energy infrastructure should be brought forward as soon as possible and certainly within the next 10-15 years (from 2011).

7.3.9 Paragraphs 3.6.4 - 3.6.7 explains the role CCS can have in meeting emissions targets but maintaining security of supply as CCS has the potential to reduce carbon emissions by up to 90%. Paragraph 3.6.4 notes that as the complete chain of CCS has yet to be demonstrated at commercial scale on a power station, there is therefore uncertainty about the future deployment of CCS in the economy, which can be resolved by demonstrating CCS at commercial scale.

7.3.10 Paragraph 3.6.5 notes the Government is supporting commercial scale demonstration projects which are a priority for UK energy projects. The projects are intended to demonstrate the full chain of CCS involving the capture, transport and storage of carbon dioxide in the UK. Paragraph 3.6.5 states the examining authority *"should take*

account of the importance the Government places on demonstrating CCS, and the potential deployment of this technology beyond the demonstration stage, in considering applications for consent of CCS projects and associated infrastructure".

7.3.11 In order to support the delivery of CCS policy, the Government has placed a condition on the consenting of new fossil fuel generating stations (EN-1, Paragraph 3.6.6); that all commercial scale (at or above 300MWe) combustion generating stations have to be constructed to be Carbon Capture Ready ('CCR').

7.3.12 Paragraph 3.6.8 again emphasises the need for new fossil fuel generation to provide back-up to renewable generating capacity and to help with the transition to low carbon electricity generation:

"It is important that such fossil fuel generating capacity should become low carbon, through development of CCS, in line with carbon reduction targets. Therefore there is a need for CCR fossil fuel generating stations and the need for the CCS demonstration projects is urgent."

7.3.13 Part 4 of EN-1 sets out a number of 'assessment principles' that must be taken into account by applicants and the SoS in preparing and determining applications for nationally significant energy infrastructure. General points include (Paragraph 4.1.2) the requirement for the SoS, given the level and urgency of need for the infrastructure covered by the energy NPS, to start with a presumption in favour of granting consent for applications for energy NSIP. This presumption applies unless any more specific and relevant policies set out in the relevant NPS clearly indicate that consent should be refused or any of the considerations referred to in Section 104 of the 2008 Act (noted above) apply.

7.3.14 Paragraph 4.1.3 goes on to state that in considering any project, and in particular, when weighing its adverse impacts against its benefits, the SoS should take into account:

- its potential benefits, including its contribution to meeting the need for energy infrastructure, job creation and any long-term or wider benefits; and
- its potential adverse impacts, including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.

7.3.15 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.

7.3.16 Other assessment principles include the matters to be covered within any ES, the Habitats and Species Regulations; the consideration of alternatives; criteria for 'good design'; consideration of CHP; consideration of CCS and CCR; climate change adaptation; and grid connection, amongst others.

7.3.17 Paragraph 4.7.4 states that the Government has taken a number of steps to facilitate and encourage the demonstration of CCS technology and that the demonstration programme was extended to include gas-fired generating stations.

7.3.18 Paragraph 4.7.7 states that the most likely method for transporting captured carbon dioxide is through pipelines that will be located both onshore and offshore. It notes that there are currently no carbon dioxide pipelines in the UK and considerable future investment in pipelines will be required for the purpose of the demonstration programme.

7.3.19 Paragraph 4.7.10 states that:

"to ensure that no foreseeable barriers exist to retrofitting carbon capture and storage (CCS) equipment on combustion generating stations, all applications for new combustion plant which are of generating capacity at or over 300MW and of a type covered by the EU's Large Combustion Plant Directive (LCPD) should demonstrate that the plant is "Carbon Capture Ready" (CCR) before consent may be given."

7.3.20 Paragraph 4.7.10 therefore does not envisage the inclusion of carbon capture equipment within new power developments at this stage, however, this Proposed Development does include a Carbon Capture Plant ('CCP').

7.3.21 Part 5 of EN-1 lists a number of 'generic impacts' that relate to most types of energy infrastructure, which both applicants and the SoS should take into account when preparing and considering applications. These include air quality and emissions; biodiversity; landscape and visual; and flood risk impacts, amongst others. Paragraph 5.1.2 stresses that the list of impacts is not exhaustive, and that applicants should identify the impacts of their projects in the ES in terms of both those covered by the NPS and others that may be relevant. In relation to each of the generic impacts listed within Part 5 of EN-1, guidance is provided on how the applicant should assess these within their application and also the considerations that the SoS should take into account in decision-making.

National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (NPS EN-2)

7.3.22 EN-2 confirms the vital role fossil fuel generating stations will play in providing reliable electricity supplies and a secure and diverse mix as the UK makes its transition towards a secure decarbonised electricity system. It also restates from EN-1 (DECC, 2011a) the Government policy that all new generating stations should be required to capture and store the carbon emissions from a substantial proportion of their capacity.

7.3.23 EN-2 confirms at Paragraph 2.3.4 that the SoS should not give development consent for new combustion generating stations with a generating capacity at or over 300MW unless it is satisfied that the proposed development meets all the criteria for CCR set out in EN-1. The Proposed Development in this case exceeds the minimum CCR requirements in that design, sizing and assessment of a CCP has been undertaken as part of the development proposals.

7.3.24 Section 2.4 confirms the impacts of fossil fuel generating stations, as set out in the generic impacts identified in Part 5 of EN-1, providing additional detail on air emissions, landscape and visual, noise and vibration, water quality and resources, amongst others.

UK Marine Policy Statement (MPS)

7.3.25 The MPS (Department for Environment, Food & Rural Affairs, 2011) is the framework for preparing Marine Plans and taking decisions affecting the marine environment. It establishes a vision for the marine environment, which is for 'clean, healthy, safe, productive and biologically diverse oceans and seas'. The MPS underpins the process of marine planning, which establishes a framework of economic, social and environmental considerations in that will deliver these high level objectives and ensure the sustainable development of the UK marine area.

7.3.26 Relevant high level marine objectives relevant to the Proposed Development include:

- achieving a sustainable marine economy:
  - infrastructure is in place to support and promote safe, profitable and efficient marine businesses.
- ensuring a strong, healthy and just society:
  - people appreciate the diversity of the marine environment, its seascapes, its natural and cultural heritage and its resources and act responsibly;
  - the use of the marine environment is benefiting society as a whole, contributing to resilient and cohesive communities that can adapt to coastal erosion and flood risk, as well as contributing to physical and mental wellbeing;
  - the coast, seas, oceans and their resources are safe to use;
  - the marine environment plays an important role in mitigating climate change; and
  - there is equitable access for those who want to use and enjoy the coast, seas and their wide range of resources and assets and recognition that for some island and peripheral communities the sea plays a significant role in their community.
- living within environmental limits:
  - biodiversity is protected, conserved and where appropriate recovered and loss has been halted.

7.3.27 Chapter 3 sets out sectoral issues, such as defence and national security, ports and shipping, and marine aggregates. A recognised sector is energy production and infrastructure development (3.3). It is recognised that the UK offshore area is considered to be one of the most promising locations anywhere in the world to permanently store carbon dioxide (Paragraph 3.3.31).

7.3.28 The East Inshore and East Offshore Marine Plans (Department for Environment, Food and Rural Affairs, 2014) establishes the plan led system for the marine area in which the riverine parts of the Site are located.

7.3.29 In section 2 the vision and objectives for the East marine plan areas is stated. The vision (page 23) comprises:

"By 2034, sustainable, effective and efficient use of the East Inshore and East Offshore Marine Plan Areas has been achieved, leading to economic development while protecting and enhancing the marine and coastal environment, offering local

communities new jobs, improved health and well-being. As a result of an integrated approach that respects other sectors and interests, the East marine plan areas are providing a significant contribution, particularly through offshore wind energy projects, to the energy generated in the United Kingdom and to targets on climate change."

7.3.30 Section 3 comprises the plan policies. Key policies include:

- Policy EC1: "Proposals that provide economic productivity benefits which are additional to Gross Value Added currently generated by existing activities should be supported.";
- Policy EC2: "Proposals that provide additional employment benefits should be supported, particularly where these benefits have the potential to meet employment needs in localities close to the marine plan areas.";
- Policy SOC3, which requires that proposals that affect the terrestrial or marine character of an area firstly avoid, or then mitigate, or then justify, these effects;
- Policy BIO1, which requires appropriate weight should be attached to biodiversity using an evidence based approach;
- Policy BIO2, which requires that where appropriate, proposals for development should incorporate biodiversity and geological enhancement;
- Policy CCS1, which seeks to ensure that sufficient offshore storage sites are available for CCS over the long term in view of the importance of the East marine areas to England's CCS potential;
- Policy CCS2, which requires CCS proposals to demonstrate consideration of the re-use of existing oil and gas infrastructure rather than the installation of new infrastructure;
- Policy CC1, which requires proposals to incorporate climate change mitigation and adaptation, and minimise impacts on adaptation and mitigation measures;
- Policy CC2, which requires the minimisation of greenhouse gas emissions; and
- Policy PS3, which requires that proposals firstly avoid, or then mitigate, or then justify, interfering with current and future port and harbour expansion opportunities.

7.3.31 Section 3.11 'Carbon Capture and Storage' recognises that combustion (e.g. gas-fired) power stations may want to utilise coastal or estuarine sites within the East inshore plan area to make use of once through water cooling systems for efficiency and economic purposes" (Paragraph 325).

7.3.32 Paragraph 326 recognises that:

"The East marine plan areas afford a significant opportunity for the industry due to the large number of saline aquifers within the Bunter sandstone formation. Saline aquifers are estimated as having around 85% of the United Kingdom's potential storage capacity. Also, there are significant active and inactive hydrocarbon fields that could be used for storage. In addition, several clusters of industrial facilities emitting large amounts of carbon dioxide occur along England's East coast."

7.4 Other Matters that may be 'Important and Relevant'

7.4.1 In making decisions on applications for NSIP, Section 104 of the 2008 Act states that the SoS must also have regard to any other matters that they consider to be both 'important and relevant' to their decision.

7.4.2 A body of recent energy and climate change law, policy, and guidance is of potential relevance and is described below. Collectively these provide further support to the urgent need for new energy infrastructure, including CCS and unabated fossil fuel plant, set out in EN-1, providing energy security and supporting the development of hydrogen turbines and CCUS clustering in support of a net zero economy.

7.4.3 Paragraph 4.1.5 of EN-1 provides some clarification on the other matters that the SoS may consider both important and relevant, such as national planning policy and local plan documents. These are covered below in Sections 7.5 and 7.6.

National Infrastructure Plan

7.4.4 The National Infrastructure Plan (HM Treasury, 2014) (the 'NIP 14') sets out a vision for the UK's infrastructure, reinforcing the Government's commitment to investing in infrastructure and improving its quality and performance.

7.4.5 Chapter 1 of the NIP 14 sets out the Government's strategy for infrastructure. Paragraph 1.1 emphasises the strong case for infrastructure investment and that this has a significant positive effect on output, productivity, and growth rates, being a key driver for jobs throughout the economy. The Executive Summary highlights the economic benefits of infrastructure investment, including:

- for every £1 billion spent on infrastructure investment, 5,000 construction jobs could be supported as well as many more indirectly in design, engineering and planning; and
- for every £1 spent on infrastructure construction there is an increase of £2.84 in overall economic activity.

7.4.6 Chapters 3 to 13 of the NIP 14 deal with different infrastructure sectors. Chapter 8 deals with 'Energy'. It reports on the progress made since 2010, with 20GW of new electricity capacity created (enough for 23 million homes), much of it being low carbon or renewable. However, a key objective of the NIP 14 in terms of energy investment (paragraph 8.1) is to *"…reduce carbon emissions in order to mitigate climate change and meet legally binding targets."*

7.4.7 Paragraph 8.3 states that large-scale investment in gas and low-carbon electricity generation is vital in order to replace ageing energy infrastructure, maintain secure energy supplies and meet legally binding environmental targets. Around £100 billion of investment is estimated to be required in electricity generation and networks by 2020. Paragraph 8.5 continues:

"As legacy coal, gas and nuclear power stations come offline, they will increasingly be replaced with a combination of renewable energy, new nuclear power and fossil fuel power stations fitted with Carbon Capture and Storage (CCS) technology. New gas plant is also needed as a vital backup for less flexible renewable generation and to

ensure that the system can meet peak electricity demand. Demand for gas to supply heat to homes and businesses will also remain significant for some time to come." [underlining added]

7.4.8 The NIP 14 therefore recognises the continuing need for new gas-fired power stations to provide back-up to less flexible renewable generation. The provision of such infrastructure is critical to ensure that the National Grid can meet peak electricity demand as the amount of renewable generation increases. The clear inference though is that for fossil fuel power stations to remain part of the energy mix in the long-term they should be fitted with CCS technology if that can be shown to be commercially viable.

7.4.9 At paragraph 8.28 the NIP 14 sets out the Government's Top 40 'Priority Investments' to support its objectives for the energy sector. Alongside increased generation from renewables and new nuclear these include more electricity generation from gas and the deployment of carbon capture and storage.

7.4.10 The Proposed Development would contribute to the delivery of the NIP 14 and in particular the Government's objectives for the energy sector through the deployment of a new gas-fired power station that is fitted with CCS technology. The Proposed Development would assist with moves to decarbonise the power sector, while ensuring the security of electricity supplies and supporting the continued deployment of renewables.

Clean Growth Strategy

7.4.11 The 'Clean Growth Strategy – Leading the way to a low carbon future' (Department for Business, Energy & Industrial Strategy, 2017) ('the CGS') sets out the aims of the Government to deliver increased economic growth while reducing carbon emissions.

7.4.12 The Executive Summary (page 9) confirms that for the UK to achieve its fourth and fifth carbon budgets (2023-27 and 2028-2032) it will be necessary to drive a significant acceleration in the pace of decarbonisation. The Executive Summary (pages 12-16) also sets out a number of key policies and proposals relating to 'Improving Business and Industry Efficiency'. These include to:

"4. Publish joint industrial decarbonisation and energy efficiency action plans with seven of the most energy intensive industrial sectors;

5. Demonstrate international leadership in carbon capture usage and storage (CCUS), by collaborating with our global partners and investing up to £100 million in leading edge CCUS and industrial innovation to drive down costs.

6. Work in partnership with industry, through a new CCUS Council, to put us on a path to meet our ambition of having the option of deploying CCUS at scale in the UK, and to maximise its industrial opportunity.

7. Develop our strategic approach to greenhouse gas removal technologies, building on the Government's programme of research and development and addressing the barriers to their long-term deployment."

7.4.13 Chapter 3 (page 47) of the CGS sets out the Government's approach and states:

"…we must create the best possible environment for the private sector to innovate and invest. Our approach will mirror that of our Industrial Strategy: building on the UK's strengths …; improving productivity across the UK; and ensuring we are the best place for innovators and new business to start up and grow. We are clear about the need to design competitive markets and smart regulation to support entrepreneurs and investors who will develop the new technologies at the scale we need."

… we are laying the groundwork for major decisions in the areas where we face greatest uncertainty and challenge: in how we work with industry to make carbon capture, usage and storage (CCUS) a viable future option."

7.4.14 Page 49 of the CGS goes on to state that:

"We want to use the power of Government to support innovation in a low carbon economy using all the tools available to us, including market design, taxation and regulation, as well as investment in our education systems, our science base and innovative companies. Our aim is to become one of the best places in the world for low carbon innovation."

7.4.15 Chapter 3 of the CGS 'Our Clean Growth Strategy' sets out the various projects that have been announced as part of the 'BEIS Energy Innovation Programme' (page 50). This includes up to £20 million of investment in a carbon capture and utilisation demonstration programme.

7.4.16 The Proposed Development would accord with the Government's approach set out above, in particular, removing uncertainty and working with industry to make CCUS a viable option.

7.4.17 Chapter 4 of the CGS deals with different sectors of the UK economy. Pages 61-71 deal with 'Improving Business and Industry Efficiency and Supporting Clean Growth'. Page 62 confirms that business and industry account for approximately 25% of the UK's emissions and 50% of its electricity use.

7.4.18 This section of Chapter 4 sets out various policies and proposal to increase energy efficiency on business and industry. However, it is acknowledged (page 64) that energy intensive industries will require steps beyond energy efficiency:

"Out to 2030, this will require industry to make progress in switching from fossil fuel use to low carbon fuels such as sustainable biomass, in line with broader Government priorities in delivering on clean air, and clean electricity. Beyond 2030, this switching will need to substantially increase in scale and be coupled with the deployment of new technologies, for example, carbon capture, usage and storage (CCUS). Over the course of this Parliament, we will therefore also develop a framework to support the decarbonisation of heavy industry."

7.4.19 Page 69 deals with CCUS in detail. It states:

"There is a broad international consensus that carbon capture, usage and storage (CCUS) has a vital role in reducing emissions. This could be across a wide range of

activities such as producing lower-emission power, decarbonising industry where fossil fuels are used and/or industrial processes as well as providing a decarbonised production method for hydrogen which can be used in heating and transport. This makes CCUS a potentially large economic opportunity for the UK. The International Energy Agency estimates there will be a global CCUS market with over £100 billion – even a modest share of this global market, UK GVA could increase between £5 billion and £9 billion per year by 2030."

7.4.20 Subsequently in September 2019 one of the 'Grand Challenges' missions set by government was confirmed as 'to establish the world's first net-zero carbon industrial cluster by 2040 and at least 1 low-carbon cluster by 2030'. In March 2020 £800 million funding was confirmed in the Budget to establish two or more new carbon capture and storage clusters by 2030. The Proposed Development is sited to be able to connect into the Humber Low Carbon (HLC) cluster.

7.4.21 Pages 93 - 101 of Chapter 4 cover 'Delivering Clean, Smart, Flexible Power'. The overriding objective is to deliver a reduction in emissions from the power sector. Page 96 states that in order to achieve this it will be necessary to continue to bring down the costs of low carbon generation from renewables and nuclear and ensure that the UK can deploy CCUS at scale during the 2030s. Page 101 reiterates that Government's commitment to supporting CCUS innovation and deployment through the BEIS Energy Innovation Programme.

7.4.22 The Proposed Development would clearly contribute to the delivery of the CGS in terms of the Government's objective to decarbonise both the industrial and energy sectors.

Clean Growth – The UK Carbon Capture Usage and Storage deployment pathway – An Action Plan

7.4.23 'Clean Growth – The UK Carbon Capture Usage and Storage deployment pathway - An Action Plan' (Department for Business, Energy & Industrial Strategy, 2018) ('the Action Plan') was published by the Government in 2018. The Executive Summary (pages 5 and 6) confirms that the Government's vision is for the UK to become a global leader in CCUS. The Action Plan is aimed at enabling the development of the first CCUS facility in the UK, with commissioning in the mid-2020s, which would support the ambition of being able to deploy CCUS at scale during the 2030s, subject to the costs coming down sufficiently. It goes on to state (page 6):

"Through our Clean Growth Strategy we re-affirmed our commitment to the domestic deployment of CCUS subject to cost reductions. This Plan sets out our next steps to progress this commitment."

7.4.24 The Action Plan goes on to state that this can only be achieved through close Government and Industry partnership (page 14). The Committee on Climate Change ('CCC') is quoted as emphasising the importance of CCUS to cost reductions *"as well as its crucial role in enabling deeper emissions reduction beyond that".* Modelling by the Energy Systems Catapult ('ESC') for the Energy Technologies Institute ('ETI') supports the conclusion by the CCC that energy system decarbonisation could be up to 50% cheaper by 2050 if CCUS is deployed at scale, and conclude that delaying deployment beyond the 2020s will increase the risks of decarbonising the UK's energy

system. Both the CCC and ETI analysis concludes that initial deployment is required during the 2020s in order to have the option of deploying at scale during the 2030s, and in particular to keep open the option of UK CCUS deployment towards the levels both state are required in 2050. This timeline was endorsed by the CCUS Cost Challenge Taskforce, and the conclusion was also reached by the Parliamentary Advisory Group on CCS7. A key message from all these independent bodies is that deployment of CCUS during the 2020s is essential to unlock the greatest opportunities for cost reduction.

7.4.25 At page 32 (Industrial decarbonisation with CCUS) the Action Plan highlights the importance of CCUS in decarbonising energy intensive industries ('EIIs'), including iron and steel, cement, chemicals, and oil refining. It goes on to state:

"Some of these industries produce volumes of emissions from chemical processes, in addition to combustion of fossil fuels, for example, up to 70% of emissions from cement production are from the process of producing cement, rather than from energy use. These emissions cannot be abated by fuel switching or electrification.

Overall, CCUS could provide 37% of the total abatement potential in EIIs by 2050. A recent study by McKinsey on decarbonising EIIs showed that where carbon dioxide storage sites are accessible, CCUS is the lowest-cost decarbonisation option at current commodity prices. CCUS also enables the large-scale use of hydrogen as an industrial fuel, which the recent CCC and Element Energy reports have indicated could be one cost-effective pathway to industrial decarbonisation."

7.4.26 The Action Plan (pages 35 to 37) also highlights the role of CCUS in decarbonising electricity generation, alongside an expansion of other forms of low and zero-carbon power generation to achieve 'deep decarbonisation' of the UK power sector.

7.4.27 The Proposed Development is consistent with the vision and ambition of the Action Plan.

The Climate Change Act 2008 (2050 Target Amendment) Order

7.4.28 The Climate Change Act 2008 (2050 Target Amendment) Order 2019 (June 2019) enshrines in law the Government's commitment to achieve 'net zero' in terms of greenhouse gas emissions by 2050. This is in line with the recommendations of the Committee for Climate Change ('CCC').

7.4.29 The executive summary to the CCC report (The Committee on Climate Change, 2019) (page 12) states that the net zero target cannot be met simply by adding mass removal of carbon dioxide on to existing plans for the previous target of an 80% reduction by 2050 compared to 1990 levels. It highlights that CCUS is crucial to the delivery of zero greenhouse gas emissions and that it is of strategic important to the economy. However, it raises concern that of the 43 large-scale CCUS projects operating worldwide, none are in the UK.

7.4.30 The report states that the remaining greenhouse gas emissions in the UK must be offset by removing carbon dioxide and permanently sequestering it through technologies such as CCUS. The report highlights the necessity of CCUS in terms of capturing the carbon dioxide from the production of hydrogen (given that a move to a

hydrogen economy is critical to achieving net zero) and from non-renewable electricity production (page 23).

Net Zero – Opportunities for the Power Sector

7.4.31 'Net Zero - Opportunities for the Power Sector' (National Infrastructure Commission, 2020) states that decarbonising the power sector is integral to achieving the goal of net zero by 2050.

7.4.32 The National Infrastructure Commission provides impartial advice to the government on infrastructure needs and solutions. Its terms of reference are set by government, and while NIC recommendations do not constitute government policy, the government is required to formally respond to the recommendations and they may form the evidence base for future policy.

7.4.33 Page 18 acknowledges that there will be a mix of technologies in net zero power systems, including unabated thermal (with low running hours) and at least 18GW of gas CCS capacity by 2050, generating 23TWh of electricity.

7.4.34 Page 21, which covers the role of system flexibility, suggests that one key challenge for future electricity systems is the ability to meet peak demands, especially through the winter months. Gas CCS helps to meet this demand in all scenarios covered by the report. Furthermore, in the scenario with the highest percentage of renewable energy some small amount of gas CCGT generation is still occasionally required.

7.5 National Planning Policy Framework and Planning Practice Guidance

7.5.1 The latest version of the NPPF was adopted in February 2019 (Ministry of Housing, Communities and Local Government, 2019a). The policies contained within the NPPF are expanded upon and supported by the 'Planning Practice Guidance' (Ministry of Housing, Communities and Local Government, 2019b).

7.5.2 The NPPF sets out the Government's planning policies for England and how these are to be applied. It is a material consideration in planning decisions. Paragraph 5 of the NPPF states that the document does not contain specific policies for NSIP and that applications in relation to NSIP are to be determined in accordance with the decision-making framework set out in the 2008 Act and relevant NPS, as well as any other matters that are considered both important and relevant. However, matters that can be considered to be both important and relevant to NSIP may include the NPPF and the policies within it.

7.5.3 Sections of the NPPF that are of particular relevance relevant to the scope of the EIA include:

- 2 – Achieving sustainable development;
- 6 – Building a strong, competitive economy;
- 11 – Making effective use of land;
- 12 – Achieving well designed places;
- 14 – Meeting the challenge of climate change, flooding and coastal change;

- 15 – Conserving and enhancing the natural environment; and
- 16 – Conserving and enhancing the historic environment.

7.6 Local Planning Policy

7.6.1 The Site lies entirely within the administrative area of NLC. The statutory development plan for the area currently comprises the following documents:

- North Lincolnshire Local Development Framework Core Strategy (NLC, 2011) - adopted June 2011;
- North Lincolnshire Local Development Framework Housing and Employment Land Allocations (NLC, 2016) - adopted March 2016; and
- Saved Policies of the North Lincolnshire Local Plan (Local Development Frameworks Government Office for Yorkshire and The Humber, 2007) - adopted May 2003, saved September 2007.

7.6.2 It is considered that these documents may be 'important and relevant' as defined by EN-1. The following policies are considered relevant to the Proposed Development:

Core Strategy (2011)

7.6.3 The following policies are considered relevant from the Core Strategy:

- CS2 – Delivering More Sustainable Development;
- CS5 – Delivering Quality Design in North Lincolnshire;
- CS11 – Provision and Distribution of Employment Land;
- CS16 – North Lincolnshire's Landscape, Greenspace and Waterscape;
- CS17 – Biodiversity;
- CS18 – Sustainable Resource Use and Climate Change;
- CS19 – Flood Risk;
- CS20 – Sustainable Waste Management; and
- CS25 – Promoting Sustainable Transport;

Saved Policies of the Local Plan (2003)

7.6.4 The following saved policies are considered relevant:

- IN10 – Wharves;
- RD1 – Development involving High Quality Agricultural Land;
- RD2 – Development in the Open Countryside;
- T1 – Location of Development;
- T2 – Access to Development;

- T5 – Green Travel Plans;
- T6 – Pedestrian Routes and Footpaths;
- T8 – Cyclists and Development;
- T14 – The North Lincolnshire Strategic Road Network (NLSRN);
- T19 – Car Parking Provision and Standards;
- T23 – Water Freight;
- LC1 – Special Protection Areas, Special Areas of Conservation and Ramsar Sites;
- LC2 – Sites of Special Scientific Interest and National Nature Reserves;
- LC4 – Development Affecting Sites Of Local Nature Conservation Importance
- LC5 – Species Protection
- LC6 – Habitat Creation
- LC7 – Landscape Protection;
- LC12 – Protection of Trees, Woodland and Hedgerows;
- HE5 – Development affecting Listed Buildings;
- HE9 – Archaeological Evaluation;
- DS1 – General Requirements;
- DS7 – Contaminated Land;
- DS10 – New Hazardous Installations and Pipelines;
- DS11 – Polluting Activities;
- DS12 – Light Pollution;
- DS13 – Groundwater Protection and Land Drainage;
- DS14 – Foul Sewage and Surface Water Drainage;
- DS15 – Water Resources;
- DS16 – Flood Risk; and
- DS17 – Overhead Power Lines and High-Powered Electrical Installations.

7.6.5 To the south of the Proposed Development Site is the Stainforth and Keadby Canal. The lock at the junction of the canal and the River Trent are grade II listed and are designated by NLC as a heritage asset in their adopted Local Plan. The lock is located adjacent to the Waterborne Transport Offloading Area.

7.6.6 The River Trent, immediately to the east of the Proposed Development Site is part of the designated RAMSAR, Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) for the Humber Estuary.

7.6.7 The Stainforth and Keadby Canal is designated as a Local Wildlife Site.

7.6.8 The Proposed Development Site is predominantly within the open countryside, albeit the proposed 'Water Connection Corridor' is adjacent to Keadby Development Boundary. The 'Water Discharge Corridor' partially runs through the Keadby Development Boundary.

Emerging Policy

7.6.9 NLC are preparing a new Local Plan to 2036. Once agreed (formally adopted), it will replace the current North Lincolnshire Local Plan, the Core Strategy and the Housing and Employment Land Allocations Development Plan Documents (DPD).

7.6.10 The Council undertook their Regulation 18 'Preferred Options' consultation between February and March 2020.

Summary

7.6.11 The designated energy NPS and the Marine Policy Statement (Department for Environment, Food & Rural Affairs, 2011) represent the principal policy documents against which applications for NSIP are determined. They set out a number of generic impacts and considerations relevant to the scoping of projects, and assessment principles with which applications for NSIP are expected to comply.

7.6.12 EN-1 (DECC, 2011a) also sets out the government's need case for new energy NSIP. A range of evidence from the National Infrastructure Plan (HM Treasury, 2014) (the 'NIP 14'), the Clean Growth Strategy – Leading the way to a low carbon future (Department for Business, Energy & Industrial Strategy, 2017) ('the CGS'), Clean Growth - The UK Carbon Capture Usage and Storage deployment pathway - An Action Plan (Department for Business, Energy & Industrial Strategy, 2017), 'Net Zero – Opportunities for the Power Sector' (National Infrastructure Commission), and the Climate Change Act 2008 (2050 Target Amendment) Order, as outlined above, demonstrates the continued relevance and urgency of the need case set out in EN-1. The Proposed Development would support the delivery of NPS policy, the NIP 14, and the CGS and support the statutory target of 'net zero' greenhouse gas emissions by 2050. Each technical chapter of the PEI Report (Chapters 8-20) explains the policies in the NPS that have informed, and are informing, the design, assessment, and controls applicable to the Proposed Development.

7.6.13 EN-2 (DECC, 2011b) does not prescribe locations for this type of energy NSIP but establishes criteria by which developers should identify suitable sites. **Chapter 3:** The Site and Surrounding Area (PEI Report Volume I) explains the suitability of the chosen site for the Proposed Development.

7.6.14 For these reasons, the Applicant considers that there is a clear and compelling national need for the Proposed Development. The Proposed Development would also support the objectives of the Clean Growth Strategy and would exceed the requirements of NPS policy on CCR, through the inclusion of a Carbon Capture Plant and by the Applicant working with industry partners to remove uncertainty around commercial scale CCUS. The Applicant therefore proposes to submit an application for a DCO for the Proposed Development and has selected the Proposed Development Site for relevant environmental, technical and commercial reasons.

7.6.15 A range of national and local policy and guidance is also likely to be important and relevant to the determination of the application and has been considered as part of scoping the EIA.

7.7 References

Department for Business, Energy & Industrial Strategy (2017) *Clean Growth Strategy.*

Department for Business, Energy & Industrial Strategy (2018) *The UK carbon capture, usage and storage deployment pathway: an action plan.*

Department for Energy and Climate Change (2011a) *Overarching National Policy Statement (NPS) for Energy: EN-1.*

Department for Energy and Climate Change (2011b) *National Policy Statement for Fossil Fuel Generating Infrastructure: EN-2.*

Department for Energy and Climate Change (2011c) *National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines: EN-4.*

Department for Energy and Climate Change (2011d) *National Policy Statement for Electricity Networks: EN-5.*

Department for Environment, Food & Rural Affairs (2011) *UK Marine Policy Statement*.

HM Government (2008) *The Planning Act 2008*

HM Treasury (2014) *National Infrastructure Plan 2014*.

Infrastructure and Projects Authority (2016) *National Infrastructure Delivery Plan 2016 – 2021*.

Local Development Frameworks Government Office for Yorkshire and the Humber (2007) *Saved Policies of the North Lincolnshire Local Plan*.

Ministry of Housing, Communities & Local Government (2019a) *National Planning Policy Framework*.

Ministry of Housing, Communities & Local Government (2019b) *Planning Practice Guidance*.

National Infrastructure Commission (2020) *Net Zero: Opportunities for the power sector*.

North Lincolnshire Council (2011) *North Lincolnshire Local Development Framework Core Strategy*.

North Lincolnshire Council (2016) *North Lincolnshire Local Development Framework Housing and Employment Land Allocations Development Plan Document*.

The Committee on Climate Change (2019) *Net Zero – Technical Report*.