

PLANNING

NATIONAL GRID VIKING LINK COMPULSORY PURCHASE ORDER 2019

PROOF OF EVIDENCE

**LIZ WELLS
CONSENTS MANAGER
NATIONAL GRID VIKING LINK LIMITED**

1. QUALIFICATIONS AND EXPERIENCE

- 1.1 My name is Liz Wells and I am the Consents Manager at National Grid Ventures (NGV). I completed a Masters in Town and Country Planning (MTCP) at the University of Manchester in 2008, becoming a Chartered Member of the Royal Town Planning Institute (MRTPI) in 2010.
- 1.2 In my role within NGV I am responsible for strategic consenting advice across the Business Development portfolio, including procuring consenting and environmental services and suppliers, and providing planning advice on projects within our portfolio at both the development and delivery stages.
- 1.3 On graduating I commenced practice as a planner in a private engineering consultancy (WYG Consulting) with clients covering a range of sectors including residential (social and private housing), retail, energy and land promotion through local plans.
- 1.4 Whilst in consultancy I was appointed on secondment to National Grid as a Consents Officer supporting the project lead on the Yorkshire and Humber Carbon Capture and Storage (CCS) cross country pipeline; an application that was promoted through the Development Consent Order process pursuant to the Planning Act 2008. By virtue of its linear buried nature and scale, the CCS project and associated Issue Specific Hearings (ISH) in which I was involved, has allowed lessons to be learnt and applied both in the planning and Compulsory Purchase Order (CPO) context on subsequent projects. In particular, the UK Onshore element of the Viking Link Interconnector Project (the "UK Onshore Scheme") for which we have now received planning permission has very carefully considered, and where appropriate reflected, the views of landowners and tenants directly and indirectly affected by the development.
- 1.5 I was appointed to National Grid on a permanent basis in September 2014 and took up the lead Consents Officer role on the UK Onshore Scheme for Viking Link Interconnector in July 2015. Since April 2017 and commencement of the role of Consents Manager within the Business Development Department at NGV, I have maintained the role as stakeholder lead for the UK Onshore Scheme. This role has entailed leading discussions with the affected local planning authorities, statutory and non-statutory stakeholders, including landowners and leading the lands and consents work stream on the Viking Link Interconnector. Having regard to this role and my professional qualifications and experience, I am well placed to present the planning evidence in this CPO inquiry; indeed, I provided

the planning evidence at the associated successful planning appeal inquiry for the section of the UK Onshore Scheme routed through the East Lindsey District Council (ELDC) administrative area, circa 55 km of High Voltage Direct Current (HVDC) cable.

Declaration

This proof of evidence has been prepared and provided for this inquiry and given in accordance with the guidance of the Royal Town Planning Institute. I further confirm that the opinions expressed are my true and professional opinions.

A handwritten signature in black ink, appearing to read 'Liz Wells', written in a cursive style.

Signed:

Liz Wells

2. INTRODUCTION AND SCOPE OF EVIDENCE

2.1 The structure of my proof of evidence is set out in paragraph 2.3 below.

2.2 In broad terms my proof will explain the consenting position of the Viking Link Interconnector as whole insofar as it relates to England, Germany, The Netherlands and Denmark and how its Project of Common Interest (PCI) status carries obligations under the TEN-E Regulation (Trans-European Energy infrastructure). Further detail will be provided on the four Town and Country Planning Act (TCPA) consents obtained for the UK Onshore Scheme (which is the element of the Viking Link Interconnector to which the Order relates) and the proposed approach in respect of obtaining secondary and tertiary consents as the UK Onshore Scheme transitions to delivery. It will also provide evidence on the alternatives to siting and routeing considered, and Local Planning Authority (LPA) endorsement of both compliance with the extant Development Plan and recognition of project need in granting planning permission. My proof of evidence will conclude that planning and other consenting matters do not present any impediment to delivery of the Viking Link Interconnector.

2.3 My proof of evidence is set out as follows:-

Section 3, Project Need: I will begin by detailing the overall compelling case and need for this international infrastructure project. I will also advise how this need has been recognised not only by the affected LPAs in granting consent for the UK Onshore Scheme, but also by the Planning Inspector in considering and approving the planning appeal for the ELDC part of the route.

Section 4, Alternatives to the Scheme: I will explain how alternatives to the UK Onshore Scheme were considered through the site and route optioneering process employed and how this was influenced through stakeholder feedback, including landowners and tenants.

Section 5, Planning position: I will outline the relevant planning policy at a national and local level considered as part of the development of the UK Onshore Scheme, the planning application process and description of development for which consent was sought and granted. In this section I will also describe the planning determination process, providing evidence from each LPA that they considered the applications within their area to comply with the extant Development Plan. I will also provide detail on the planning appeal required for

the ELDC component of the route. This section will demonstrate how the approval of planning consent across the whole of the UK Onshore Scheme means that there is no impediment to its delivery from a planning perspective.

Section 6, Other Consents: In this section I will describe the wider project position and the status reached on consents in the UK, German, Netherlands, and Danish waters as well as the Danish Onshore Scheme, and the project's compliance with the TEN-E Regulation. I will also detail the secondary and tertiary consents required to construct and operate the Viking Link Interconnector in the UK. Again, this will demonstrate the absence of any other consenting impediments to its delivery.

Section 7, Conclusion: My proof of evidence will show that there is an urgent and compelling need for the Viking Link Interconnector and that the requisite consents are in place such that there are no impediments to the delivery of the UK Onshore Scheme. It will also conclude that the benefits of the Viking Link Interconnector will be lost if the Order is not confirmed given there are no reasonable alternatives.

3. PROJECT NEED

3.1 This section of my proof will provide evidence of the overall compelling case for interconnectors as international infrastructure projects, and how this need has been recognised in both the Officer Reports of the affected LPAs as well as by the Secretary of State in his consideration and approval of the ELDC planning appeal. This section of my proof also sets out the projected and urgent need for additional generating capacity in the United Kingdom (UK) to meet present and future energy needs and how this is reflected in UK energy and planning policy.

3.2 I confirm that for the purposes of this evidence the term 'GB' is used for the purpose of describing the transmission network, and the term 'UK' when describing the Viking Link Interconnector and works related to the UK Onshore Scheme.

The need for additional generating capacity in the UK

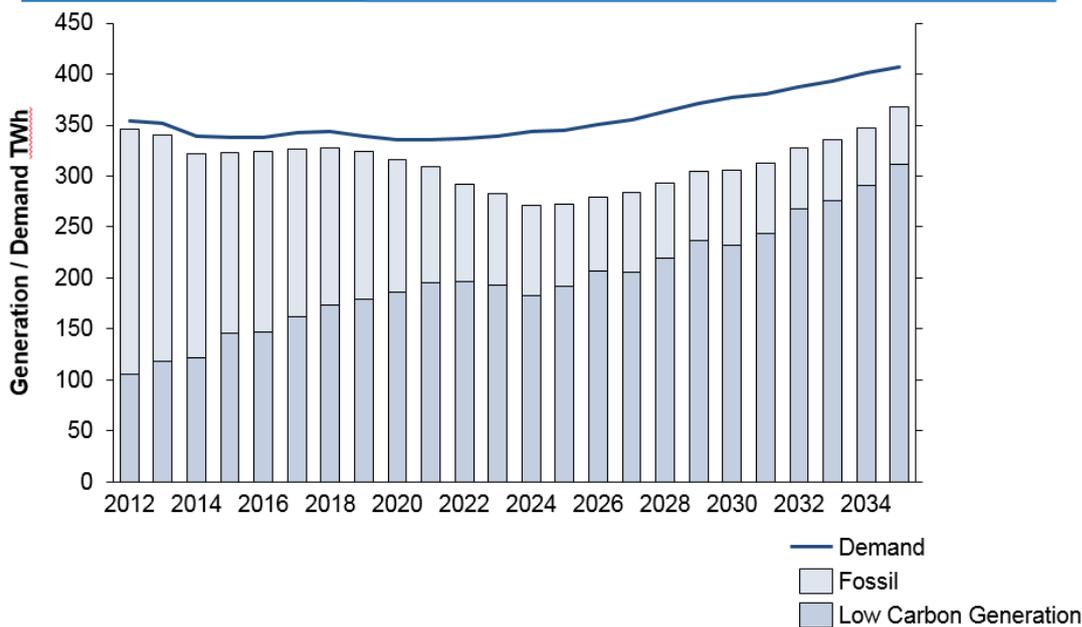
3.3 Electricity supports every aspect of our lives and our quality of life is very much dependent on having adequate supplies now and into the future. Electricity heats and lights our homes, powers our essential services (such as hospitals), and powers our businesses, supporting the country's economy.

3.4 The need for electricity is predicted to increase in the future. The National Needs Assessment: A Vision for UK Infrastructure (October 2016) (CD Ref: A.18) sets out on page 32 in the section 'Future demand for energy' that *"Population and economic wealth are projected to grow under every ITRC [Infrastructure Transition Research Consortium] scenario, which will increase the demand for electricity and heating services. A growing population together with increasing numbers of home appliances and consumption of electronics means that electricity demand will increase over the long term."*

3.5 The UK needs to ensure that there is sufficient electricity capacity to meet current and future demands at all times, including a 'margin' of spare capacity to accommodate unforeseen fluctuations in supply or demand and to mitigate against risks such as extreme weather events. The larger the 'margin' (i.e. the difference between available capacity and demand) the more resilient the electrical system will be in dealing with unexpected events which reduces the risk of having to interrupt electrical supplies. This helps to protect consumers, vital services and businesses.

- 3.6 In order to ensure security of energy supply, National Grid (as system operator) produces forecasts of energy that the UK is likely to need in the coming years. These forecasts are known as the Future Energy Scenarios (FES) and outline different credible pathways for the future use of energy for the next 30 years and beyond including looking at what changes will mean for consumers.
- 3.7 The FES are used for planning how the gas and electricity systems are developed and operated and are used across the energy industry to inform decision making.
- 3.8 As well as projected need being predicted to grow, there is also predicted to be a shift in the way in which this need can be met. A growth in intermittent renewables, alongside a decline in the traditional energy generation (closure of coal, nuclear power stations and combined cycle gas turbines reaching the end of their working lives) impacts on the UK's energy supply and its future security.
- 3.9 The FES July 2018 publication (CD Ref: E.3) states that *"We are entering a new world of energy. The expected growth of low carbon and decentralised generation means the electricity system will need to change"*. Further it advises that an *"Increase in capacity from 103 GW today to between 189 GW and 268 GW by 2050"* will be required.
- 3.10 The Department for Business, Energy and Industrial Strategy (BEIS) also produce energy projections for the future including examining how the need will be met. The graph below (and also found at CD Ref: A.16) illustrates the projected growth in demand between 2012 and 2034 including the changing balance between fossil fuels and low carbon generation.

BEIS Energy Projections (2017) Reference Case - UK



3.11 As wind energy now accounts for some 15-20% of the UK's total generating capacity, it is vital to ensure that there is sufficient infrastructure in place to efficiently utilise this energy. Wind energy generation is, by its very nature, intermittent, so new power capacity in GB has to be flexible enough to respond to rapid changes in generating output. This new generating capacity will need to be accompanied by new infrastructure

3.12 It is therefore clear that there is an urgent need for new generating capacity and infrastructure within the UK in order to meet present and future energy need.

Government Energy and Planning Policy on Need and Energy Infrastructure

3.13 The urgent need for new generating capacity described above is reflected in Government energy policy. The UK Government's vision is to ensure safe, secure and affordable supplies for the future involves the construction of a new fleet of nuclear generation, rapid expansion of renewable energy (mainly through offshore wind) and the development of interconnector projects.

3.14 The UK Government recognises the importance and urgency of new energy developments and published a series of National Policy Statements (NPS) which

set out national policy for energy infrastructure recognising that providing affordable, reliable and sustainable energy is a key issue in UK Government policy.

3.15 Those relevant for present purposes are:

3.15.1 The Overarching National Policy Statement for Energy (EN-1) (CD Ref: A.27); and

3.15.2 The National Policy Statement for Electricity Networks Infrastructure (EN-5) (CD A.26).

3.16 Although applying strictly to those projects falling within the definition of Nationally Significant Infrastructure Projects (NSIPs), the NPSs are also a material consideration for projects progressed under the Town and Country Planning Act 1990 (as amended) and indeed paragraph 1.2 of EN-1 makes this clear where it states that *"In England and Wales this NPS is likely to be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended)."*¹ A similar comment is also made at paragraph 1.2.3 of EN-5.

3.17 At paragraph 2.2.16, EN-1 sets out that *"about a quarter of the UK's generating capacity is due to close by 2018 and new low carbon generation is required which is reliable, secure and affordable."* This paragraph also notes that *"with the total investment requirement in the electricity sector alone estimated to be over £100 billion by the end of this decade, much more has to be done to unlock this investment"*.

3.18 EN-1 further sets out at paragraph 2.2.20 that *"it is critical that the UK continues to have secure and reliable supplies of electricity as we make the transition to a low carbon economy. To manage the risks to achieving security of supply we need:*

- *sufficient electricity capacity (including a greater proportion of low carbon generation) to meet demand at all times. Electricity cannot be stored so demand for it must be simultaneously and continuously met by its supply. This requires a safety margin of spare capacity to accommodate unforeseen fluctuations in supply or demand;*

¹ As underground electricity cables are not included within the types of development requiring a Development Consent Order under section 14 of the Planning Act 2008, Viking Link Interconnector was consented under the Town and Country Planning Act 1990.

- *reliable associated supply chains (for example fuel for power stations) to meet demand as it arises;*
- *a diverse mix of technologies and fuels, so that we do not rely on any one technology or fuel. Diversity can be achieved through the use of different technologies and multiple supply routes (for example, primary fuels imported from a wide range of countries); and*
- *there should be effective price signals, so that market participants have sufficient incentives to react in a timely way to minimise imbalances between supply and demand."*

3.19 EN-1 notes at paragraph 3.7.2 that *"Existing transmission and distribution networks will have to evolve and adapt in various ways to handle increases in demand..."*

3.20 EN-5 sets out at paragraph 1.1.1 that *"the new electricity generating infrastructure that the UK needs to move to a low carbon economy while maintaining security of supply will be heavily dependent on the availability of a fit for purpose and robust electricity network. That network will need to be able to support a more complex system of supply and demand than currently and cope with generation occurring in more diverse locations"*.

3.21 The Department of Energy and Climate Change (now BEIS) 'Planning our electric future: a White Paper for secure, affordable and low-carbon electricity' (July 2011) (CD A.25) sets out the Government's commitment to transform the UK's electricity system to ensure that future supply is secure, low-carbon and affordable. In the Ministerial Forward it sets out that *"Around a quarter of our existing capacity-mainly coal and nuclear power stations-will close in the next decade. Keeping the lights on will mean raising a record amount of investment. However, the current market arrangements will not deliver investment at the scale and pace we need."*

3.22 Paragraph 3 (page 5) of the White Paper sets out the unprecedented challenges facing the UK in terms of energy in the coming decades:

- ***"security of supply is threatened as existing plant closes:*** *over the next decade we will lose around a quarter (around 20 GW) of our existing generation capacity as old or more polluting plant close. Modelling suggests that de-rated capacity margins could fall below five per cent around the end of this decade, increasing the likelihood of*

costly blackouts. In addition to this huge reduction in existing capacity, the future electricity system will also contain more intermittent generation (such as wind) and inflexible generation (such as nuclear). This raises additional challenges in terms of meeting demand at all times, for example when the wind does not blow;

- **we must decarbonise electricity generation:** it is vital that we take action now to transform the UK permanently into a low-carbon economy and meet our 15 per cent renewable energy target by 2020 and our 80 per cent carbon reduction target by 2050. To put us on this latter trajectory, power sector emissions need to be largely decarbonised by the 2030s. Without reform, the electricity sector would have an emissions intensity in 2030 of over three times the level advised by the Climate Change Committee. Electricity Market Reform will put in place the institutional and market arrangements to deliver the scale of change in the power sector needed to meet the UK's carbon budgets, including the recently-adopted fourth carbon budget;
- **demand for electricity is likely to rise:** despite the improvements in household and non-domestic energy efficiency which will be generated through the introduction of the Green Deal and the roll-out of Smart Meters across the country, overall demand for electricity may double by 2050 due to the electrification of the transport, heat and other carbon intensive sectors; and
- **electricity prices are expected to rise:** increases in wholesale costs, the carbon price and environmental policies are likely to lead to higher bills in the future, even without factoring in the huge investment needed in new infrastructure. The Government is committed to reducing the impact on consumers by making sure investment takes place in the most cost-effective way possible. The cumulative benefits to the economy of Electricity Market Reform are expected to be over £9 billion higher than business as usual over the period 2010-30."

3.23 On page 30 of the White Paper it summarises the UK's emissions and renewables targets, stating that:

"The Climate Change Act 2008 establishes a long-term framework to tackle climate change. The Act aims to encourage the transition to a low-carbon

economy in the UK through unilateral legally binding emissions reductions targets. This means a reduction of at least 34 per cent in greenhouse gas emissions by 2020 and at least 80 per cent by 2050. The first three carbon budgets, covering 2008-12, 2013-17 and 2018-22 were set in law in spring 2009 and require greenhouse gas emissions to be reduced by at least 34 per cent below the 1990 baseline by 2020. The level of the Fourth Carbon Budget for the period 2023-2027 was set in law at 1950 mtCO₂ at the end of June 2011. The level set equates to a 50 per cent reduction in greenhouse gas emissions on 1990 levels for each year over the Fourth Carbon Budget period”.

- 3.24 Since the White Paper the Energy Market Reform (EMR) has delivered a subsidy mechanism to deliver nuclear and renewable growth, a carbon tax to incentivise low carbon generation and a capacity market to deliver security of supply.
- 3.25 The reductions to which the UK Government has committed mean that the electricity need will however still have to be met through additional new low-carbon energy infrastructure.

Interconnectors as a means of meeting the need

What are interconnectors and how do they work

- 3.26 Electricity interconnectors are the physical infrastructure links that allow the transfer of electricity across borders. They are transmission cables that allow electricity to flow from one country to another.
- 3.27 Electricity consumers throughout Europe use electricity differently, at different times of day and at different times of year which means that there is a fluctuating demand between different countries.
- 3.28 However, the amount of energy which can be supplied to meet the demand is dependent on the type of generation, current conditions and the nature of the infrastructure.
- 3.29 Interconnectors allow electricity to be moved to where it is required at that time to meet this demand in an efficient manner, providing access to alternative sources of supply and balancing energy supply across international borders.
- 3.30 Having a diverse range of connections to several European countries allows this system balance to be optimised and to perform as efficiently as possible whilst protecting security of supply.

- 3.31 Increased interconnection can also help with intermittency issues posed by renewable generation (mainly wind), supporting electricity security of supply. Interconnectors, such as the Viking Link Interconnector, provide an effective way to manage these fluctuations in supply and demand, by enabling energy generated in one geographical market to be used in another market. If too much renewable energy is generated in one region, the energy that is surplus to requirements can be easily transmitted through the interconnector to a region where the level of demand is higher but where there may not be enough supply to meet this need. This is especially important where one geographical region may be experiencing extreme weather conditions or power plant failures meaning that demand is high, but supply is insufficient.
- 3.32 By facilitating access to generation beyond national borders, interconnectors can improve security of supply, ensuring that the market accurately reflects supply and demand, and that physical flows of electricity across interconnectors follow prices, i.e. that the benefits of lower generation costs in one country can be shared with another.

Policy on new electricity infrastructure and interconnectors

- 3.33 There is widespread consensus across the political spectrum in the UK that energy should be affordable; damaging greenhouse emissions need to be reduced; and energy supplies need to be reliable for businesses and consumers to facilitate the UK's economic recovery. Interconnectors can play a key role in supporting the modernisation and transformation of electricity generation in the UK.
- 3.34 UK Energy and Planning Policy recognises the need for and importance of new electricity infrastructure being developed and, in particular, recognises the benefits which interconnectors can bring to the UK.
- 3.35 It is recognised that in order to have a competitive, sustainable and secure supply of energy, there is a need to invest in new infrastructure and diversify the way in which the energy market operates. Electricity networks will need to be able to support a more complex system of supply and demand and cope with generation occurring in locations of greater diversity due to the increase in low carbon generating sources.
- 3.36 Paragraph 3.7.2 of EN-1 (CD Ref: A.27) sets out that *'construction of new lines of 132kv and above will be needed to meet the significant national need for*

expansion and reinforcement of the UK's transmission and distribution networks".

- 3.37 Paragraph 3.7.7 of EN-1 further advises that *"...new lines will have to be built, and the location of renewable energy sources and designated sites for new nuclear power stations makes it inevitable that a significant proportion of those new lines will have to cross areas where there is little or no transmission infrastructure at present, or which it may be claimed should be protected from such intrusions. The urgency of need for new generating capacity means that the need for new transmission infrastructure that is required to connect that capacity will be similar."*
- 3.38 This paragraph emphasises four important points:
- 3.38.1 that new energy infrastructure including electric lines are needed to meet the UK's energy needs which is an urgent requirement;
 - 3.38.2 it is inevitable that these new lines will need to cross rural areas or areas with protected designations where there currently may be no such infrastructure;
 - 3.38.3 the need for this new infrastructure is urgent; and
 - 3.38.4 the pressure for this infrastructure is such that even overhead lines are contemplated in such areas.
- 3.39 EN-5 (CD Ref: A.26) highlights in paragraph 1.1 that: *"The new electricity generating infrastructure that the UK needs to move to a low carbon economy while maintaining security of supply will be heavily dependent on the availability of a fit for purpose and robust electricity network. That network will need to be able to support a more complex system of supply and demand than currently and cope with generation occurring in more diverse locations."*
- 3.40 Paragraph 3.7.3 of EN-1 (CD Ref: A.27) goes onto state: *"It is important to note that new electricity network infrastructure projects which will add to the reliability of the national energy supply, provide crucial national benefits, which are shared by all users of the system."*
- 3.41 Interconnectors, such as the Viking Link Interconnector, will form an integral part of the UK's electricity networks and provide energy reliably whilst ensuring

security of supply (i.e. in an emergency, interconnectors enable a system with a supply shortage to import power from a system with a surplus).

- 3.42 At paragraph 3.3.31 of EN-1 (CD Ref: A.27) it sets out that the "*Government expects that demand side response, storage and interconnection, will play important roles in a low carbon electricity system*" (emphasis added).
- 3.43 As explained in more detail in paragraph 5.3 below, the National Planning Policy Framework (February 2019) ("NPPF") (CD A.11) sets out three dimensions to sustainable development, social, economic and environmental. With regards to the economic strand, the planning system has a role in contributing to building a strong, responsive and competitive economy through a number of means, including the provision of infrastructure. The environmental role includes mitigating and adapting to climate change including moving to a low carbon economy. This is reflected within the 12 core planning principles.
- 3.44 Interconnection assists in reducing the cost of electricity generation capacity by allowing electricity networks to balance supply and demand across international borders. The importing country may be able to defer the requirement for new domestic power plants. Interconnectors, such as the Viking Link Interconnector, assist with the implementation of the UK policy on the rapid deployment of renewable energy like wind turbines and the closure of old power stations partly due to EU (non-Green House Gas) emissions limits.
- 3.45 This view on the benefits of interconnection was reiterated by the present Government in its October 2017 'Clean Growth Strategy' (CD Ref: A.17), in which the BEIS set out its policy to "*ensure significant private investment in new electricity interconnectors, which will help keep prices low for consumers, ensure a more secure grid and help integrate clean generation.*"
- 3.46 Whilst it is recognised that interconnectors are one of the technologies that can be used to compensate for the intermittency of renewable generation, the development and deployment of these technologies at the necessary scale has yet to be achieved. EN-1 (CD Ref: A.27) at paragraph 3.3.32 notes that the UK electricity system is largely isolated from other systems, with only a 2 GW link with France, 1 GW interconnector with the Netherlands and 450 MW link with Northern Ireland in place.
- 3.47 In December 2013, the Department of Energy and Climate Change (DECC) published the then UK Government's view of the need for further Interconnection

in its policy document *'More Interconnection: improving energy security and lowering bills'*² (CD Ref: A.23). Evidence commissioned by the Government and published at that time showed that more interconnection could realise benefits for British consumers of up to £9 billion under some scenarios.

- 3.48 This view on the benefits of interconnection was reiterated by the present Government in its October 2017 *Clean Growth Strategy*³ (CD Ref: A.17) as stated above, in which BEIS set out its policy to *"ensure significant private investment in new electricity interconnectors, which will help keep prices low for consumers, ensure a more secure grid and help integrate clean generation."*
- 3.49 Most recently this position has been reiterated in by The UK Parliamentary Office of Science and Technology (POST) in note 569 dated February 2018 (Appendix 1) which stated, on the benefits of overseas interconnection for security of supply: *"Interconnection can contribute to security of electricity across a range of timescales. Imports that are driven by long-term average price differences (such as differences in carbon prices) can help to meet total annual electricity demand. Interconnectors can also address risks to security of supply across shorter timescales (such as from changes in wind output). National Grid's 2017 Future Energy Scenarios projected that interconnection will be increasingly important for grid balancing as future demand is supplied by more intermittent renewables."*
- 3.50 The note confirms that the *"UK currently imports around 6% of its energy from northwest Europe. Imports are expected to increase significantly"*.
- 3.51 The note further states in the section headed 'Converging Wholesale Electricity Prices' that *"Interconnection can be a cost-efficient method of providing electricity, as it can offset the need to build generating capacity and provides access to different sources of electricity from abroad. The link between wholesale markets causes prices in each to converge: they reduce in the importing market and increase in the exporting market. To date, GB has been a net importer, which has reduced prices. Because wholesale costs comprise a significant portion of consumer electricity bills (approximately a third in 2016), interconnection has reduced costs for consumers."* This section goes onto advise that *"Stakeholders*

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/266460/More_interconnection_-_improving_energy_security_and_lowering_bills.pdf

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/651916/BEIS_The_Clean_Growth_online_12.10.17.pdf

widely agree that some additional interconnection would further decrease prices, because of the prevailing higher GB wholesale price."

- 3.52 In October 2016 the Institution of Civil Engineers (ICE) published the report titled '*National needs assessment - A vision for UK infrastructure*⁴ (CD Ref: A.18). The document includes a sectorial analysis which provides a description of the main sector specific challenges.
- 3.53 One key recommendation is that "*the Government should commit to a plan for low carbon electricity generation capacity which ensures security of supply through to at least 2035. To create a stable environment for these long term investments, Government should commit to a diverse mix of energy generation based on nuclear, renewables, gas and interconnectors and set out an expectation as to the approximate proportions of different sources of generation.*"
- 3.54 In the section covering energy it states that "*energy efficiency, demand response and stronger interconnection will enable more effective management of peak demand.*"
- 3.55 The National Infrastructure Commission (NIC) published its report in March 2016 '*Smart power: A National Infrastructure Commission Report*⁵ (CD Ref: A.20) addressing how the UK can better balance supply and demand. Interconnection was one of three innovations identified by the NIC report that could save consumers up to £8 billion per year by 2030 and help the UK meet its 2050 carbon targets:

"In the coming decades the UK is uniquely placed to benefit from three innovations which could help fire a smart power revolution.....Interconnection – connecting our electricity network to our continental neighbours is already bringing down bills and helping to balance the system. More connections to cheap, green power supplies, such as Norway and Iceland could bring great benefits to the UK. Government should redouble its efforts to open new connections."

⁴ <https://www.ice.org.uk/media-and-policy/policy/national-needs-assessment-a-vision-for-uk-infrastr>

⁵ <https://www.gov.uk/government/publications/smart-power-a-national-infrastructure-commission-report>

- 3.56 NIC's 'National Infrastructure Assessment'⁶ (CD Ref: A.15) published in July 2018 reiterates the importance of interconnection:

"To date, carbon intensive fossil fuels have met some of this need by providing plenty of flexible supply. But as they come off the system in favour of (mostly variable) renewable energy, flexibility will need to be maintained in other ways... In all scenarios, extra flexibility, which includes technologies such as storage, interconnection and demand side response, is a low regrets investment which reduces estimated total energy system costs by between £1-7 billion per year on average between 2030 and 2050. This finding echoes the conclusions of the Commission's Smart Power report."...

"Interconnectors, of which there is a large pipeline of projects, are likely to become of increasing importance throughout this period, and the Government should ensure that the current pipeline is not affected by the UK's exit from the EU."

- 3.57 It is therefore clear that UK Government policy recognises interconnectors as a vital tool in managing energy security, costs to consumers and providing long term security and sustainability.

The Role of Interconnectors in Meeting the UK's Need

- 3.58 The preceding section demonstrates that UK energy and planning policy clearly recognise the vital role of interconnectors in meeting the UK's energy need, in terms of diversifying and securing energy supply and meeting climate change obligations.
- 3.59 Developing interconnectors means putting in place the infrastructure which will allow cleaner, more flexible and more responsive energy system in the future.
- 3.60 In July 2018 National Grid Ventures published a document titled 'Connecting for a smarter future' (Appendix 2). The purpose of this document was to explain the impacts and benefits of existing interconnectors and plans for future interconnection. In the section headed '£11 billion opportunity' it states:

"The GB government, through its Clean Growth Strategy, has identified new opportunities to build interconnectors that would deliver a further 9.5 GW of capacity. Our analysis shows that these projects can deliver at least £11 billion

⁶ https://www.nic.org.uk/wp-content/uploads/CCS001_CCS0618917350-001_NIC-NIA_Accessible.pdf

of benefits to consumers, compared to a scenario where additional power stations are built to provide GB with the same level of flexibility and security of supply."

3.61 Under 'Maximising benefits' the document advises: *"Interconnectors are integral to today's energy system and will continue to be in future..."*

3.62 This is further emphasised in the section on 'Affordability', which states:

"By the early 2020s, GB consumers will see significant benefits from the interconnector projects that have secured investment and regulatory approval in the past few years. Interconnectors make the market more economically efficient, by ensuring everyone has access to the lowest priced electricity available. When the market is tight in an individual country, interconnectors make it possible to import power from countries with less expensive generation resources, for example a surplus of electricity generated by wind turbines on a windy day. As more interconnectors help to bring down wholesale prices, consumers will benefit from lower bills."

3.63 In March 2016 the NIC issued a report titled 'Smart power'⁷ (CD Ref: A.20) which highlighted that interconnectors allow Great Britain to access low cost, low carbon power as well as providing the ability to export British renewable energy during levels of high generation. The report goes on to state that interconnectors provide flexibility allowing large volumes of electricity to be moved from where it is not needed to where it is, which provides the potential to reduce wholesale electricity costs and improve security of supply. Interconnectors can enable Great Britain to access low carbon electricity at a lower cost. In the Government response to this report issued in April 2016, the Government agreed with the Commission's recommendation that a greater degree of interconnection was in the interests of consumers, whilst making an important contribution to security of supply and helping to integrate more clean energy into the energy system. The response also included the statement that:

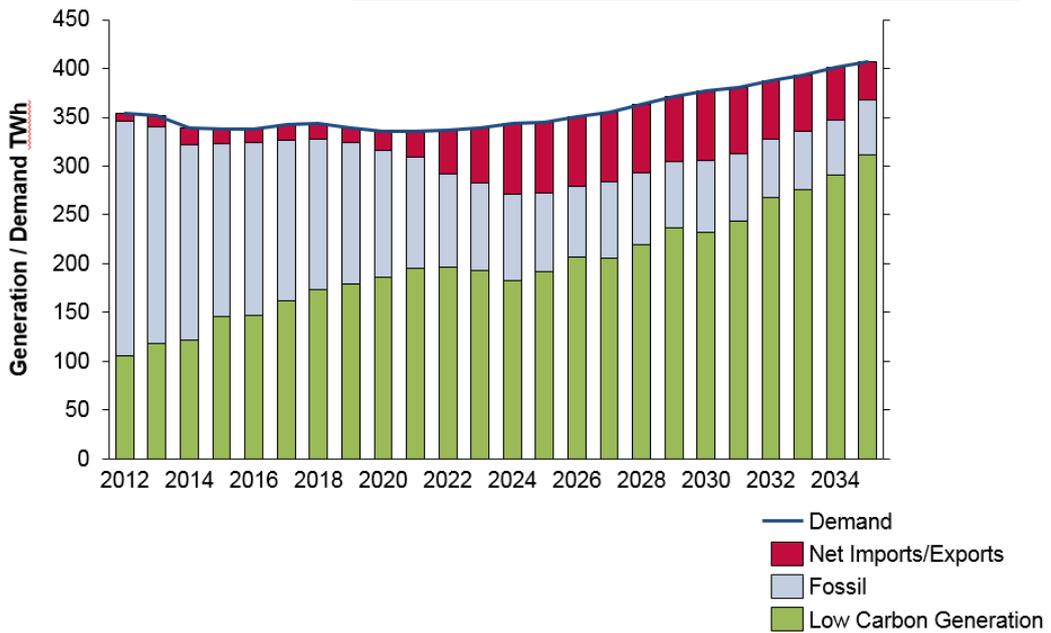
"The government has previously stated that an increase of 5GW of additional interconnection capacity could be considered beneficial to GB consumers. Given evidence provided by Ofgem and the commission, the government now supports the market delivery of at least 9GW of additional interconnection capacity, believing this to be beneficial to consumers."

⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/505218/IC_Energy_Report_web.pdf

- 3.64 As noted above, in March 2016 the Infrastructure and Projects Authority issued a report titled '*National Infrastructure Delivery Plan 2016-2021*'⁸ (CD Ref: A.19). The report recognises that a modern society and economy are built around energy infrastructure and that homes and businesses could not function without energy infrastructure which ensures we stay warm, keep the lights on and support our day to day activities. The report highlights that the Government recognises the important role that interconnectors play in supporting energy security, affordability and decarbonisation objectives and confirms the Government's ambition for greater electricity interconnection of at least 9 GW of additional capacity.
- 3.65 Further, interconnectors are an important method of meeting the needs and goals set out in the 2007 Energy White Paper referred to in paragraph 3.21. By facilitating the export and import of power, the development of interconnectors will help to encourage and support the development and use of renewable energy in the UK; assist in meeting the challenges related to security of supply; and help to achieve a more competitive European Union (EU) energy market.
- 3.66 The diagram below (and at CD Ref: A.16) illustrates how import and export of electricity through interconnection can fill the gap between energy supply and demand as well as facilitating renewable energy growth which in turn further helps to meet need.

⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/520086/2904569_nidp_deliveryplan.pdf

BEIS Energy Projections (2017) Reference Case - UK



3

Relevant European Regulation and Policy

3.67 UK policy is not the only driver for the Viking Link Interconnector project. There is an important European dimension to the need case too.

Policy of the European Council

3.68 The first aspect of this relates to the policy of the European Council, which in 2014 called for all EU countries to achieve a level of interconnection of at least 10% of their installed electricity production capacity by 2020, recognising the importance of and benefits such technology brings to Members States in providing more flexible and secure electrical supply and also in helping to meet renewable energy obligations.

3.69 What this means in practice is that each country should have in place electricity cables that allow at least 10% of the electricity produced by its power plants to be transported across its borders to neighbouring countries. The EU agreed in September 2016 its 2030 energy and climate framework, which refers to Member States achieving 10% interconnection by 2020 and further aiming for 15% by 2030.

3.70 The European Commission reports that 17 countries are already on track to reach or have reached this target. However, the UK is not one of these countries.

When compared with other EU countries, Great Britain is in the lower quartile of interconnector capacity.

TEN-E Regulation

- 3.71 The second, related, continental driver for the Viking Link Interconnector relates to the application of the Regulation on guidelines for trans-European energy infrastructure EU 347/2013 (TEN-E Regulation) (CD Ref: A.8).
- 3.72 The TEN-E Regulation lays down rules for the timely development and interoperability of energy networks in EU Member States and the European Economic Area (EEA). The TEN-E Regulation sets out guidelines for streamlining the permitting processes for major energy infrastructure projects that contribute to European energy networks.
- 3.73 These infrastructure projects are known as Projects of Common Interest (PCI) and are key infrastructure projects (as recognised by the Regulation), especially cross border projects that link the energy systems of EU countries. They are intended to help the EU achieve its energy policy and climate objectives: affordable, secure and sustainable energy for all citizens, and the long-term decarbonisation of the economy in accordance with the Paris Agreement.
- 3.74 The list of PCIs is updated every 2 years. The Viking Link Interconnector has been designated as a PCI and therefore is subject to the provisions of the TEN-E Regulation.
- 3.75 PCIs are designated on the basis five criteria. They must:
- 3.75.1 have a significant impact on at least two EU countries;
 - 3.75.2 enhance market integration and contribute to the integration of EU countries' networks;
 - 3.75.3 increase competition on energy markets by offering alternatives to consumers;
 - 3.75.4 enhance security of supply by diversifying sources of energy; and
 - 3.75.5 contribute to the EU's energy and climate goals. They should facilitate the integration of an increasing share of energy from variable renewable energy sources.

3.76 Further information on the TEN-E Regulation can be found at CD Ref: A.21.

Consequences of being a PCI

3.77 All PCIs are recognised as projects of "*overriding public interest*" as the need has already been examined as part of the PCI selection process.

3.78 Due to this status, there is an expectation that the Viking Link Interconnector should progress through the planning process as quickly and efficiently as possible. Indeed, the TEN-E Regulation lays down an accelerated planning and permit granting procedure including a binding three-and-a-half year time limit for the granting of the permit in recognition of the importance of and need for the projects.

3.79 Recital 20 of the Regulation sets out that "*Projects of common interest should be given 'priority status' at national level to ensure rapid administrative treatment*" and "*Projects of common interest shall be considered by competent authorities as being in public interest*".

3.80 Paragraph 1.3 of the UK Manual of Procedures (the UK's published guidance on the implementation of the TEN-E Regulation) (CD Ref: A.21) sets out that the Regulation "*establishes that PCIs are necessary to take forward EU energy networks policy and should be given the most rapid consideration in the permitting process that is legally possible*".

3.81 PCIs are eligible for funding under the Connecting Europe Facility (CEF). CEF is a key EU funding instrument to promote growth, jobs and competitiveness through targeted infrastructure investment at a European level and supports the development of high performing, sustainable and efficiently interconnected trans-European networks in the fields of transport, energy and digital services.

3.82 As the Viking Link Interconnector has been accepted as a PCI, its international importance in meeting the objectives set out above as a key infrastructure project in the development of energy networks in Europe has been recognised and was awarded a CEF Grant in July 2016 to support the project's development.

3.83 It is therefore clear that the TEN-E Regulation emphasises the need for PCIs to be consented as quickly and efficiently as possible, recognising the vital nature of these schemes in meeting energy need.

Brexit

- 3.84 The outcome of the referendum on the UK's membership of the EU and the subsequent steps being taken to implement the outcome of that referendum do not influence the plans to build and operate the Viking Link Interconnector between the UK and Denmark, nor its status as a PCI. National Grid Viking Link Limited (NGVL) and Energinet remain fully committed to the project as it serves to deliver significant benefits. The UK Government continues to support the building of electricity links between Britain and other countries to maintain a more secure, sustainable and affordable source of electricity supply for consumers.
- 3.85 The Joint Development Agreement between both partners is based on commercial terms and does not have any dependency on the UK's membership of the EU. Furthermore, the project retains a strong business case from a GB and Danish perspective. Based on this commercial nature of the project, the Viking Link Interconnector will still benefit both countries by helping to provide a secure energy supply, ensure value for money for consumers, increase the market for producers such as wind power generators, and help the move towards more renewable and low carbon sources of energy.
- 3.86 The above is confirmed by the White Paper on Brexit, which sets out that *"The UK is seeking broad energy cooperation with the EU, including arrangements for trade in electricity and gas, cooperation with EU agencies and bodies, and data sharing to facilitate market operations. It is common practice for countries to trade internationally in electricity and gas, and there has been a trend towards greater interconnectivity that has brought mutual benefits to trading partners, including lower prices for consumers and improved security of supply."*

How does Viking Link Interconnector help meet the identified need?

- 3.87 The UK currently has 4GW of installed interconnector capacity through the following interconnectors which are in operation, representing only 5% of the existing energy generated in the UK⁹. These comprise:
- 3.87.1 an interconnector to France known as IFA;
 - 3.87.2 an interconnector to the Netherlands known as BritNed;
 - 3.87.3 an interconnector to Northern Ireland known as Moyle;

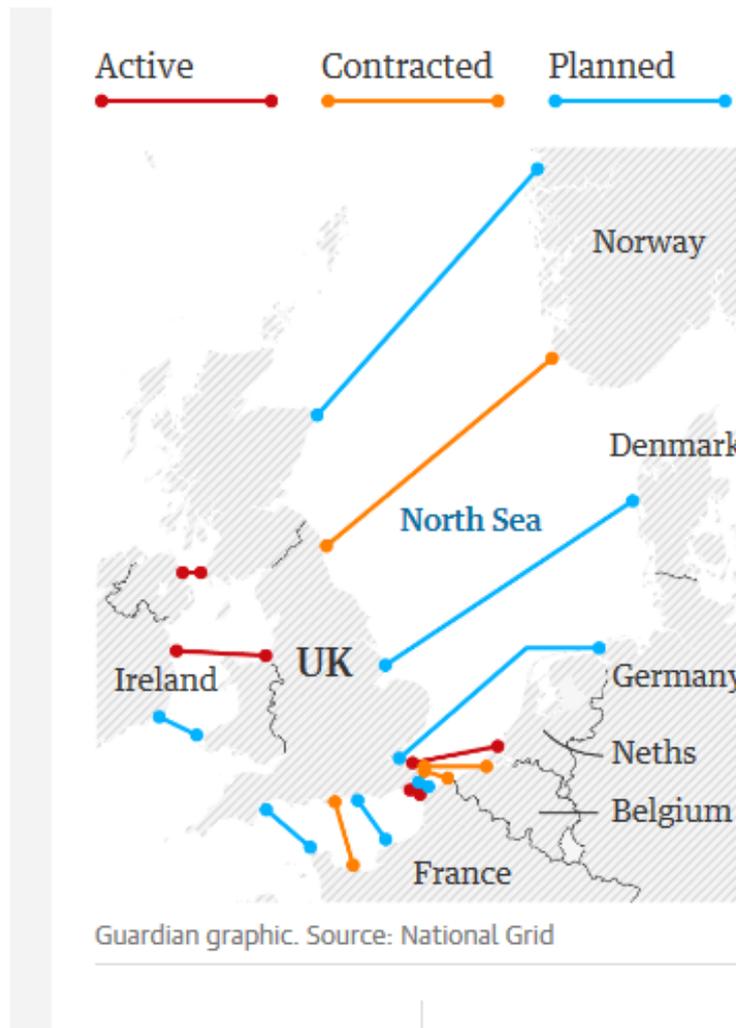
⁹

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/510525/2904569_NIDP_2016-2021_updated.pdf

- 3.87.4 an interconnector to the Republic of Ireland known as East West;and
- 3.87.5 an interconnector to Belgium known as Nemo Link.
- 3.88 Of these existing interconnectors, National Grid, through other subsidiaries similar to NGVL, has already delivered IFA, BritNed and Nemo Link.
- 3.89 As noted above, in March 2016 the NIC issued a report titled '*Smart power*'¹⁰ (CD Ref: A.20) which highlighted that interconnectors allow Great Britain to access low cost, low carbon power as well as providing the ability to export British renewable energy during levels of high generation. The report goes on to state that interconnectors provide flexibility allowing large volumes of electricity to be moved from where it is not needed to where it is, which provides the potential to reduce wholesale electricity costs and improve security of supply. Interconnectors can enable Great Britain to access low carbon electricity at a lower cost.
- 3.90 Again, as also noted, the Government response to this report which was issued in April 2016. In the response the Government agreed with the commission's recommendation that more interconnection was in the interests of consumers, whilst making an important contribution to security of supply and helping to integrate more clean energy into the energy system. The response also included the statement:
- "The government has previously stated that an increase of 5GW of additional interconnection capacity could be considered beneficial to GB consumers. Given evidence provided by Ofgem and the commission, the government now supports the market delivery of at least 9GW of additional interconnection capacity, believing this to be beneficial to consumers."*
- 3.91 Indeed, in the National Grid Network Options Assessment 2018/19 (CD Ref: E.6), it sets out that *"Analysis suggests a total interconnection capacity range of between 18.4 GW to 21.4 GW between GB and European markets by 2031 would provide optimal benefit"*.
- 3.92 The construction of Viking Link Interconnector in combination with the other interconnectors proposed would help the UK to meet this target and realise the subsequent energy benefits.

¹⁰ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/505218/IC_Energy_Report_web.pdf

- 3.93 The Viking Link Interconnector is one of 6 current interconnectors proposed and under development with a further 4 planned for future development. The Viking Link Interconnector will have a capacity of 1400MW and, once constructed, will represent a near 40% increase in interconnector capacity in the UK, providing power for over 1 million homes.
- 3.94 The additional interconnectors proposed, each of which will be required in order to satisfy the scale of the need described above, are as follows:
- 3.94.1.1 an Interconnector to France known as ElecLink;
 - 3.94.1.2 an Interconnector to Norway known as NSL;
 - 3.94.1.3 an Interconnector to France known as FabLink;
 - 3.94.1.4 an Interconnector to France known as IFA2; and
 - 3.94.1.5 an Interconnector to Ireland known as Greenlink.



3.95 The Viking Link Interconnector is therefore an important part of a wider shift in energy infrastructure, which is responding to the need for increased interconnection and the benefits which can be realised.

3.96 The Viking Link Interconnector is the only interconnector which is currently planned to link the GB with Denmark which provides resilience if other EU countries experience issues on their electrical networks.

Planning Application Determination

3.97 Both the need for additional connection capacity and the role that the Viking Link Interconnector can play in meeting this need was recognised by each of the affected LPAs when considering and consenting their applications, as well as the Secretary of State (SoS) in relation to the ELDC appeal.

3.98 In South Holland District Council’s (SHDC) Officer Report dated February 2018 (CD Ref: C.1), at 7.67 “*The importance of the development as essential National*

and European infrastructure which is in the public interest along with the locational requirements of the type and scale of development proposed are material considerations which weigh in favour of the proposed development". Also at 7.70 "Having regards to the clear need and national policy support for the proposed development and local level policy compliance and balancing the weight afforded to identified material planning considerations alongside mitigation measures proposed, the proposed development is considered to be policy compliant and there are no material planning considerations in place which would override this position".

- 3.99 In Boston Borough Council's (BBC) Officer Report dated April 2018 (CD Ref: C.2), at 2.17 *"It is recognised that in order to have a competitive, sustainable and secure supply of energy, there is a need to invest in new infrastructure and diversify the way in which the energy market operates. Interconnectors are a fundamental part of this enabling electricity to flow between countries and markets, and can be used to both import and export power as required". Also at 7.21 "Having regard to the clear need and national policy support for the proposed development and local level policy compliance, and the balancing of the weight to be afforded to identified material planning considerations, alongside the mitigation measures proposed, it is considered that the proposed development is policy compliant, and that there are no material planning considerations in place which would override this position"¹¹.*
- 3.100 In North Kesteven District Council's (NKDC) Officer Report dated May 2018 (CD Ref: C.3) at 1.2 *"The scale of the scheme is significant, potentially facilitating the transfer of energy to power over a million homes, in addition to providing energy supply security and reduction in wholesale electricity prices. The project has also been identified as a Project of Common Interest under the TEN-E (Trans-European Networks for Energy) Regulations by virtue of the benefits it offers for Member States. These benefits carry significant material weight in decision making".*
- 3.101 In his decision notice dated 12th December 2018 (CD Ref: C.7), the Planning Inspector who heard the ELDC planning appeal stated at his paragraphs 24 and 25 that *"I am satisfied that the development of further interconnection capacity is an important aim of UK Government policy. In general terms, interconnectors are seen as a means of increasing our energy capacity, ensuring an adequate*

¹¹

For the avoidance of doubt, it should be noted that the BBC officer report follows SHDC's word for word and as such they are identical in this regard in these sections.

supply, increasing security, flexibility and resilience, and helping to drive down prices. It seems to me that these relevant Government policies are clearly designed to encourage and enable such developments"

and

"In the present case, the Viking Link project offers a capacity of up to 1.4 GW. This is said to be sufficient to power around one million homes. There is no reason to doubt that new capacity on this scale would make a significant contribution to the Government's aims in respect of achieving greater energy security and affordability. In the light of the challenges and problems identified above, it seems to me that the proposed link would be a substantial benefit to the UK's national energy requirements."

Conclusion

- 3.102 As is demonstrated above, both international, national and local energy and infrastructure policy detail the compelling need for additional interconnection capacity and the role that the Viking Link Interconnector will play in achieving this is widely recognised. The scheme's compliance with this extant policy was referenced by all relevant decision makers in approving planning consent for the UK Onshore Scheme, discussed in greater detail in section 5 below.

4. ALTERNATIVES TO THE SCHEME

Introduction

- 4.1 This section of my proof details the approach taken in siting and routing of the converter station, landfall and HVDC/High Voltage Alternating Current (“HVAC”) cables. It explains the process taken in the consideration of alternatives, via a route and site optioneering process, and how the UK Onshore Scheme for which consent has been secured was arrived at.
- 4.2 The development of the UK Onshore Scheme comprised two main steps; firstly, the identification and assessment of alternative landfall and converter station sites (Siting); secondly, the identification and assessment of alternative cable routes (Routing). The approach to identifying and assessing alternative sites and routes ensured the integrated and iterative consideration of potential impacts on the environment and local communities, alongside technical and engineering considerations, and at key stages also drew upon feedback received from statutory and non-statutory consultees and members of the public. This approach identified sites or routes which best balanced these factors, before establishing the landfall and converter station sites and HVDC and HVAC route (collectively referred to as the UK Onshore Scheme).

Approach to Converter Station Siting

- 4.3 In setting the connection point, NGVL followed the same process as any other connected to the GB high voltage electricity transmission network by applying to National Grid Electricity Transmission plc (NGET) for a connection offer. A number of potential connection points were assessed through the optioneering process to arrive at Bicker Fen Substation as the preferred connection point. This substation was identified by NGET having regard to the capacity within this part of the network and the ability to accommodate the Project without any further reinforcement works (e.g. additional overhead lines) and any additional cost to GB consumers. Further detail of the optioneering process can be found in the Strategic Options Report, April 2016 (CD Ref: C.17).
- 4.4 A key project constraint in siting has always been that the high voltage electricity transmission network operates as an HVAC system and the National Electricity Transmission System (NETS) is only located in the western part of Lincolnshire. However, at longer distances HVDC technology is more efficient as

it can transmit larger volumes of electricity with fewer losses than an equivalent HVAC system. Furthermore, the existing HVAC networks in both countries are not synchronised, which means that they operate at different frequencies which would prevent direct HVAC interconnection. This is the reason that HVDC technology is being used for the submarine and onshore cables on the Viking Link Interconnector project. As a consequence of using HVDC technology a converter station is required to convert the HVDC electricity to HVAC (or vice versa) to be used on the high voltage electricity transmission network.

4.5 The location for the converter station needed to be within 5 kilometres (km) of the connection point, as any further extension to this distance leads to an economic and technological impediment to the scheme resulting in energy depletion. If the converter station had been sited at the coast, increased infrastructure would be required including either larger subsurface cable runs (as HVAC cable systems are based on multiples of three cables) or an overhead line (OHL) between the converter station and the connection point. Compensation stations would also be required at intervals along an HVAC underground cable. These booster stations are essentially small substations with an area of around 150 metres (m) x 150 m. An HVAC underground cable route corridor would need to be wider than the equivalent for HVDC underground cable arrangements. This is to accommodate the larger cable runs and above ground link boxes would be required at joint bays. Due to the agricultural character of the area, this would have caused increased disruption to farming and agricultural operations as it would effectively sterilise areas of land and there would be an increased permanent loss of land.

4.6 Given the relatively short distance from the converter station site to the existing Bicker Fen 400 kV Substation (approximately 2 km) the approach to HVAC route development focused predominantly on consideration of engineering requirements and feedback from potentially affected landowners. Key considerations which informed the selection of the proposed HVAC route included:

- The potential temporary and permanent land take required.
- The potential impact on agricultural land.
- The requirement to cross drains and other obstacles.

- 4.7 Three alternative options for the AC underground cable route were considered as illustrated in Figure 17.6 of the Environmental Statement (CD Ref: C.8):
- Eastern option (approximately 2.3 km long) exiting the converter station site in an eastern direction then bearing north. This option approached the connection point from the east and required connections to switch bays at the north and south of Bicker Fen 400 kV Substation.
 - Southern option (approximately 1.36 km long) exiting the converter station site in a northern direction continuing north. This option approached the connection point from the south and required routeing within Bicker Fen 400 kV Substation to make connections to switch bays at the north and south of the connection point.
 - Western option (approximately 2.14 km long) exiting the converter station site in a northern direction. This option approached the connection point from the west and required connections to switch bays at the north and south of Bicker Fen 400 kV Substation.
- 4.8 The eastern option was identified as the preferred option. This option best balanced technical and engineering requirements with impact on agricultural land use. This option is routed within open agricultural land with a short section within an area of saturated ground to the east of Bicker Fen 400 kV Substation. The route requires up to six crossings including four drains as well as crossings of Middle Fen Drove and Vicarage Drove.
- 4.9 The identification of potential converter station sites took into account a range of environmental and technical constraints at a high level including the proximity of settlements, individual residential properties and sites designated for their landscape, ecological and/or archaeological interests or value and areas of flood risk as well as technical considerations such as the approximate footprint of a converter station and accessibility. This resulted in the identification of twenty one potential converter station sites.
- 4.10 Taking into account the findings of the technical and environmental assessments of the shortlisted converter station sites as well as the feedback received in response to Phase 1 Consultation, NGVL identified 'CS1' (i.e. land at North Ing Drove in South Holland) as the preferred converter station site. This is illustrated in Figure 2.8 in the Environmental Statement (CD Ref: C.8). Whilst CS1 would require an overall longer HVDC cable route, on balance of the

different factors evaluated, this site is considered to best meet the requirements of NGVL. It is technically feasible and, compared to the alternative sites considered, it provides the opportunity to mitigate potential impacts on the environment and local community through planning and design.

- 4.11 Further detail of the optioneering process can be found in the UK Onshore Scheme Site Selection Report (CD Ref: C.15).

Approach to Landfall Siting

- 4.12 The identification of the landfall site to bring the submarine cables ashore and connect to the onshore cables was undertaken following a landfall siting assessment. Following the identification of the connection point at the existing NGET Substation a study area was identified extending between Sutton on Sea in the north and Skegness in the south in order to ensure that potential landfall sites could be identified which would facilitate the development of (1) feasible and economic underground HVDC cable routes to potential converter station sites in the vicinity of the connection point and (2) feasible and economic submarine HVDC cable routes to Denmark.
- 4.13 The identification of potential landfall sites took into account a range of environmental and technical constraints at a high level including the proximity of settlements and sites designated for their landscape, ecological and/or archaeological value as well as technical considerations such as accessibility and the nature of the coastline (for example rocky or sandy). As a result of this and initial engagement with consultees five potential landfalls were identified with a sixth option emerging during the assessment.
- 4.14 Taking into account the findings of the technical and environmental assessments of the shortlisted landfall sites as well as the feedback received in response to the Phase 1 Consultation, NGVL selected 'LF1a' (i.e. Boygrift in East Lindsey) as the preferred landfall site. This is illustrated in Figure 2.5 in the ES (CD Ref: C.8). This site meets the requirements of NGVL; it is technically feasible from the onshore and offshore points of view and, compared to alternative landfall sites; and it provides the opportunity to avoid or reduce the potential impact on nearby communities and other coastal environmental constraints such as the Lincolnshire Coastal Grazing Marshes (LCGM) and designated bathing waters.
- 4.15 Further detail of the optioneering process can be found in the UK Onshore Scheme Site Selection Report (CD Ref: C.15).

Approach to Cable Routeing

- 4.16 The overall objective of the routeing assessment was the identification of a route corridor within which the detailed alignment of the HVDC (from the landfall to the converter station) and HVAC cables (from the converter station to the connection point) would be finalised. The approach to cable routeing comprised three main steps/stages:
- 4.16.1 Stage 1- Identification of the Cable Route Search Area based on shortlisted landfall and converter station sites;
 - 4.16.2 Stage 2- Development and Assessment of Cable Route Corridors; and
 - 4.16.3 Stage 3- Development of Route Alignment with the identification of a cable route corridor.
- 4.17 The development of the proposed HVDC route is explained in detail in the following documents: (1) Route Corridor Selection Report (CD Ref: C.14) (2) Preferred Route Report (CD Ref: C.12) and (3) Environmental Statement in chapters 2 and 5 (CD Ref: C.8).
- 4.18 As explained above, the routeing process was undertaken in a number of stages. During each stage, consideration was given to a range of environmental, planning, technical, engineering and cost factors as well as feedback from consultation with statutory consultees and other stakeholders, including feedback from local communities. The level of information considered increased in detail as the route corridors were narrowed down to route alignments.

Stage 1

- 4.19 Once the connection point, and potential landfall and converter station sites had been identified and assessed, a search area was established in which to focus the development of potential route corridors between the shortlisted landfall and converter station sites, taking into account environmental and technical constraints. These included designated sites, settlements, roads, topography and watercourses. A detailed description of the factors which influenced the Search Area is set out in Route Corridor Selection Report (CD Ref: C.15).
- 4.20 The majority of designated sites which are present, such as Sites of Special Scientific Interest (SSSI) or Scheduled Monuments, occupy relatively small or discrete areas and whilst they are widespread throughout the Area of Search

they can be avoided in developing the route corridors. As a result, some smaller designated sites are located within the Search Area. Two larger designated sites are present which informed the extent of the Search Area: the Lincolnshire Wolds AONB which lies to the north/west of the low lying Lincolnshire fenlands and the Wash which is designated a Special Protection Area (SPA), Special Area of Conservation (SAC) and SSSI which lies to the south/east.

- 4.21 Consideration was given to a route through the Wash, but this was discounted as it was concluded that the Viking Link Interconnector could not be developed in the protected sites without resulting in a significant impact on their qualifying features and interests.
- 4.22 Consideration was given to limiting the Search Area to the lower lying fenlands thereby avoiding the Lincolnshire Wolds AONB. However, within the lower lying fenlands the number and size of watercourses and drains which would have to be crossed by a cable route present a key technical constraint. Extending the Cable Route Search Area further east towards the Wash would only increase the number of crossings and the constraints that they present.
- 4.23 Reducing the Search Area to areas outside the Lincolnshire Wolds AONB would have limited the scope of routeing opportunities to corridors requiring significant engineering works. Taking into account the proposed underground nature of the proposed HVDC cable route consideration was given to extending the search area into the Lincolnshire Wolds AONB thereby providing greater scope for alternative route corridors. On this basis, it was decided to include the southern section of the AONB in the Cable Route Search Area. We adopted this approach due to the nature of the Project and, in particular, the contained and temporary construction impacts of the underground cable installation. As a consequence, NGVL considered that there was the potential that a route through the AONB might be capable of being found acceptable in planning terms and should be explored further. The basis for limiting the search to the southern extent of the AONB was that it would enable direct route corridors to the connection point where route corridors crossing it would be less than 10 kilometres.

Stage 2

- 4.24 The key routeing considerations are described in detail in the Route Corridor Selection Report but in summary included:

- 4.24.1 environmental and planning factors – for example, the location and potential to impact on environmental constraints such as designated sites (ecology, heritage and landscape related with either international, national or local designations); the location and potential to impact on settlements and visitor/community facilities; the nature of agricultural land and soil characteristics traversed by the route corridors proposed as well as relevant national and local planning policies; and
 - 4.24.2 technical and engineering factors – for example, physical constraints including topography; the need to cross man-made and natural obstacles such as watercourses and other infrastructure; construction requirements, including access to the route corridors as well as other temporary requirements including construction compounds or works areas.
- 4.25 As shown on Figure 4.3 in CD Ref: C.8, three route corridors were identified (RCA, RCB and RCC) which provided alternative routing options from the shortlisted landfalls and onwards around the different constraints which are present in the east of the Cable Route Search Area including the Lincolnshire Wolds AONB, Registered Parks and Gardens at Well Hall and Gunby Hall, SSSI including Willoughby Wood, Hopland Wood and Claxby Chalk Pit, the LCGM at Burgh le Marsh as well as settlements including Alford, Burgh le Marsh and Wainfleet All Saints. In forming a continuous route corridor only one of these three corridors would be required. To the southwest of Stickford, where these three options converged, RCD and RCE continued towards the shortlisted converter station sites.
- 4.26 From these options, RCC was not selected because it was considered that any route within this corridor would result in greater environmental impacts and disturbance of the local community and would be more technically complex than alternatives in RCA or RCB. Two further route corridors were then identified, the Purple Route Corridor (comprising parts of RCA) and the Orange Route Corridor (comprising parts of RCB). These options and the constraints which influenced the route corridor selection are illustrated on Drawing Nos. 6634_001-004 (Appendix 3) and comprised:
- 4.26.1 The Purple Route Corridor: From the preferred landfall to the east of Stickford the Purple Route Corridor is in more elevated land through the Lincolnshire Wolds AONB. Within the AONB the Purple Route

Corridor comprised two alternative sub-options for avoiding an area of settlement and some technically challenging topography close to Langton.

- 4.26.2 The Orange Route Corridor: From the preferred landfall to the east of Stickford the Orange Route Corridor is in low lying coastal areas. In this area in order to avoid Gunby Hall and its surrounding estate land the Orange Route Corridor comprises two sub-options; the first sub-option requiring an approximate 3 km route corridor through the AONB, and the second sub-option which avoids the AONB comprising a longer route corridor which crosses more watercourses, is closer to a number of settlements and is routed through the Burgh le Marsh Target Area of the LCGM.
- 4.27 At this point in the route selection process, three of the four route corridor sub-options passed through part of the AONB. Any other route corridors avoiding the AONB and further to the east would have been subject to even greater engineering constraints as noted above.
- 4.28 These routes were then, subject to consultation (referred to as Phase 2 Consultation) and the results of this consultation are reported in the Phase 2 Consultation Feedback Report (CD Ref: C.13). These consultation responses were evaluated alongside key routing considerations. This concluded in the Purple Route Corridor being identified as the preferred route corridor option. The reasons underpinning this are described in the Preferred Route Corridor Report (CD Ref: C.12) and chapter 2 of the Environmental Statement (CD Ref: C.8). In summary the reasons for this included:
- 4.28.1 Crossing requirements: The Purple Route Corridor requires significantly fewer crossings (watercourses, drains, roads and other utilities) than the Orange Route Corridor. An increase in the number of crossings will, for example, have an increase on the land requirements and environmental impact for the UK Onshore Scheme during construction because more land is required to accommodate the specialist plant and machinery needed to construct the crossings.
- 4.28.2 Dewatering requirements: The Purple Route Corridor crosses land with a lower water table meaning dewatering requirements are less. An increase in dewatering requirements, will, for example, increase the land requirement and environmental impact during construction

as more land and plant or machinery is required to accommodate water management including pumps, generators and storage lagoons.

- 4.28.3 Access requirements: The Purple Route Corridor is in closer proximity to the main road network and so benefits from better accessibility. The Orange Route Corridor would require additional accesses to be established which, for example, increases the land take and environmental impact during construction as more land is required to establish the access roads needed. This would also require additional vehicle movements to deliver and remove material required to establish temporary access roads.
- 4.28.4 Impact on local community: The Purple Route Corridor typically avoids larger settlements whilst the Orange Route Corridor is in closer proximity to a number of these. As a result the Orange Route Corridor would affect more residents during construction and this impact would be amplified by the increased duration of construction, nature of construction activities (e.g. use of more plant and machinery) and related increase in vehicle movements caused by the additional crossing, plant and machinery requirements.
- 4.28.5 Impact on agriculture: The Purple Route Corridor traverses less sensitive soils than the Orange Route Corridor, requires less land take during construction and would take less time to construct meaning that it has less of an impact on agricultural land than the Orange Route Corridor.
- 4.28.6 Peat deposits: Sections of the Orange Route Corridor would require routeing within peat deposits which are avoided by the Purple Route Corridor. In engineering terms peat does not provide suitable cover for the cable as it is subject to shrinkage which could reduce the cover level over the cables and hence protection of the cable and the potential for restoration. Once operational this would require greater monitoring to ensure sufficient cover and protection is provided.
- 4.28.7 AONB: Both the Purple Route Corridor and Orange Route Corridor traversed the AONB. Whilst the Orange Route Corridor would require a lesser area of intervention than the Purple Route Corridor the engineering assessment concluded that the physical intervention and

the consequential harm of routing through the Orange Route Corridor far exceeded the impact of pursuing the Purple Route Corridor.

- 4.29 The Purple Route Corridor was therefore identified as the preferred route corridor. The reasons underpinning this are described in further detail in the Preferred Route Corridor Report (CD Ref: C.12), Chapter 2 of the Environmental Statement (CD Ref: C.8), and the Planning Statement (CD Ref: C.11).

Consideration of alternatives in the planning process

- 4.30 Routeing and siting alternatives were addressed by each of the affected LPAs when considering and consenting their applications, as well as by the Planning Inspector in relation to the ELDC appeal.
- 4.31 SHDC's Officer Report dated February 2018 (CD Ref: C.6) at 7.18 states '*Taking account of the cable route corridor there are no significant conflicts or severance of land located in and around the proposed route corridor and the Scheme is appropriate and in scale with a countryside location*'. Further 7.68 advises '*Through careful siting and routeing as well as embedding mitigation within the base scheme design and the provision of further mitigation where possible and appropriate, it is considered a number of potentially significant environmental effects have been prevented or reduced*'.
- 4.32 NKDCs Officer Report dated May 2018 (CD Ref: C.5) at 3.2 acknowledges that '*The route chosen is relatively remote in terms of residential properties, the closest to the red line working site boundary being around 400m distant, which it should be noted defines the maximum limit of deviation; with the actual works likely to be further away*'. Under Section I conclusion, 1.3 states '*The submitted Environmental Statement which accompanies the application appropriately identifies and assesses the likely significant environmental effects which would result from the construction and operation of the Interconnector. Through significant submission assessment and careful siting/routing, and where necessary appropriate necessary mitigation, it is considered that the number of potentially significant environmental impacts have been either reduced or satisfactorily resolved*'.
- 4.33 BBC's Officer Report dated April 2018 (CD Ref: C.4) at 7.8 details '*Due to the fact that the application site is in a countryside location, in turn it largely avoids impacts on existing built development within and around settlements, and*

indeed in the countryside, where the line has been routed to avoid, where possible, impacts on settlements and other key environmental concerns'.

- 4.34 The Planning Inspector's decision on the ELDC appeal, dated December 2018, (CD Ref: C.7) at paragraph 35 advises that *'...it seems to me that NGVL's appraisal of the available alternatives has been conducted in a proper and conscientious manner, based on sound evidence and objective judgements. I see no reason to doubt that the conclusions arrived at through this process are justified. Nevertheless, in the light of ELCS Policy SP27 and NPPF paragraph 17, it is necessary also to consider any evidence as to the scope for, or the cost of, any potential alternatives.'*
- 4.35 It further goes on to state at paragraph 39 that *'I conclude that the scope for alternative routes, and their cost, has been rigorously assessed, and that assessment has not revealed any other option which can be said to be clearly preferable to the appeal proposal, having regard to all the relevant planning considerations. In principle therefore, the choice of the Purple route corridor has been adequately justified. Again, to this extent, the relevant requirements of ELCS Policies SP27 and 28, relating to the examination of alternatives, are met.'*
- 4.36 In his concluding comments, the Planning Inspector advises at paragraph 71 that *'For the reasons explained above, I find that the proposed development would help to meet an essential national need for additional electricity supply capacity. Alternative routes have been thoroughly and rigorously examined, and none of the alternatives has been shown to be preferable, on the balance of all relevant environmental, technical and cost considerations.'*

Conclusion

- 4.37 As is demonstrated above, in considering the planning applications that were submitted for the UK Onshore Scheme, no party, be it the determining local planning authorities, or the Planning Inspector who determined the ELDC appeal, challenged the process or consideration of alternatives undertaken by NGVL in arriving at the scheme that was granted planning permission.

5. PLANNING POSITION

Introduction

- 5.1 This section of my proof sets out the Development Plan considered in determining the planning applications, provides detail on the planning application and determination process by the four affected LPAs for the UK Onshore Scheme. It also describes the planning appeal process and subsequent planning inquiry held in respect of the ELDC application and the mitigation secured through the consents granted.

Planning Policy

- 5.2 This section does not seek to rehearse national energy policy as detailed in section three but considers the development plan and national planning policy pertinent to the development for which consent has been granted.

National Planning Policy

- 5.3 The NPPF (CD Ref: A.11) published by the Ministry of Housing, Communities and Local Government (MHCLG) in February, 2019 sets out the Government's planning policies and how they should be applied. At the time of the planning application submission in August 2017, the extant national planning policy comprised the NPPF dated 2012, issued by the Department for Communities and Local Government; this has subsequently been superseded in July 2018 and February 2019 without amendment to the relevant policy guidance applicable in this case that was previously contained in the previous NPPF.
- 5.4 The NPPF has three overarching objectives to sustainable development, social, economic and environmental. With regard to the economic strand, the planning system has a role in contributing to building a strong, responsive and competitive economy through a number of means, including the provision of infrastructure. The environmental role includes mitigating and adapting to climate change including moving to a low carbon economy. This is reflected within the 12 core planning principles, indeed paragraph 148 states: "*The planning system should support the transition to a low carbon future.... It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience.... and support renewable and low carbon energy and associated infrastructure.*"

- 5.5 Section 14 includes the sub section 'Planning for climate change' with paragraph 151 stipulating: *"To help increase the use and supply of renewable and low carbon energy and heat, plans should: provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts)."*
- 5.6 Paragraph 154 advises: *"When 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."*
- 5.7 Paragraph 170 of the NPPF considers the natural and local environment and states: *"Planning policies and decisions should contribute to and enhance the natural and local environment by:*
- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*

f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."

5.8 Paragraph 172 of the NPPF stipulates that:

"Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within these designated areas should be limited. Planning permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;

b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and

c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated."

5.9 Paragraph 83 of the NPPF advises that:

"Planning policies and decisions should enable:

.....b) the development and diversification of agricultural and other land-based rural businesses and c) sustainable rural tourism and leisure developments which respect the character of the countryside..."

5.10 The NPPF at paragraph 180 advises that:

"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should: a) mitigate and reduce to a minimum potential adverse impacts resulting from

noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life”.

Local Planning Policy

East Lindsey District Council

- 5.11 The statutory development plan for ELDC at the time the Planning Application was determined comprised the 'saved' parts of the East Lindsey Local Plan (ELLP) (CD Ref: B.4 and B.5). The ELLP was originally adopted in 1995, was then updated in 1999, and the policies were then reviewed in 2007 and either 'saved' where relevant or deleted where not.
- 5.12 ELDC subsequently adopted a replacement for the ELLP, the ELDC Local Plan (Submissions Modifications Draft) which comprised the Core Strategy and the Settlement Proposals document in July 2018. The Plan is now the statutory development plan for ELDC and the following policies were material considerations in the determination of the appeal:

Policy SP2 Sustainable Development.

Policy SP10 Design.

Policy SP11 Historic Environment.

Policy SP16 Inland Flood Risk.

Policy SP17 Coastal East Lindsey.

Policy SP22 Transport and Accessibility.

Policy SP23 Landscape.

Policy SP24 Biodiversity and Geodiversity.

Policy SP25 Green Infrastructure.

Policy SP27 Renewable and Low Carbon Energy.

Policy SP28 Infrastructure and S106 Obligations.

South Holland District Council

5.13 The South Holland Local Plan 2006 was formally adopted on 18 July 2006. Following a direction from the Government Office for the East Midlands under paragraph 1(3) of Schedule 18 to the Planning and Compulsory Purchase Act 2004, as of 18 July 2009 only certain Local Plan policies have been extended and continue to form part of the development plan. In the context of those saved policies referred to below, it is considered that the Local Plan was adopted in general accordance with the Planning and Compulsory Purchase Act 2004 (albeit under the transitional arrangements). Those policies referred to below are considered to accord with the thrust of guidance set out in the National Planning Policy Framework, and in the context of paragraph 215 of the NPPF therefore continue to fall to be given substantial weight in the decision making process.

Policy SG1 - General Sustainable Development

Policy SG2 - Distribution of Development

Policy SG4 - Development in the Countryside

Policy SG6 - Community Infrastructure and Impact Assessment

Policy SG7 - Energy Efficiency

Policy SG11 - Sustainable Urban Drainage Systems (SUDS)

Policy SG12 - Sewerage and Development

Policy SG13 - Pollution and Contamination

Policy SG14 - Design and Layout of New Development

Policy SG15 - New Development: Facilities For Road Users, Pedestrians And Cyclists

Policy SG16 - Parking Standards in New Development

Policy SG17 - Protection of Residential Amenity

Policy SG18 - Landscaping of New Development

Boston Borough Council

5.14 The BBC Development Plan comprises the Boston Local Plan Adopted 1999 (saved policies) (CD Ref: B.2), of which the following policies were deemed relevant:

G1 – Amenity

G2 – Wildlife and landscape resources

G3 – Foul and surface water disposal

G4 – Safeguarding of the water environment

G6 – Vehicular and pedestrian access

G8 – Air and soil resources

G10 – External lighting schemes

ED11 – Renewable energy

R1 – Protection of existing recreational open space

R4 – Water based recreational facilities

R5 – Witham Way footpath and nature reserve

R8 – Leisure facilities in the countryside

C8 – Stump Views

C7 – Development of sites adjacent to the River Witham

C17 – Sites of nature conservation value

C24 – Protected landscape sites

CO1 – Development in the Countryside

T1 – New accesses onto major roads

T2 – Roads and footpaths in new developments

North Kesteven District Council

- 5.15 The statutory development plan for North Kesteven comprises the Central Lincolnshire Local Plan (CLLP) which was adopted by the Central Lincolnshire Joint Strategic Planning Committee in April 2017 and the replaced the Local Plans of the City of Lincoln, West Lindsey and North Kesteven District Councils. The following policies from the CLLP (CD Ref: B.1) were deemed relevant:

Policy LP1 A Presumption in Favour of Sustainable Development

Policy LP5 Delivery Prosperity and Jobs

Policy LP12 Infrastructure to Support Growth

Policy LP55 Development in the Countryside

Policy LP26 Design and Amenity

Policy LP17 Landscape Townscape and Views

Policy LP18 Climate Change and Low Carbon Living

Policy LP20 Green Infrastructure Network

Policy LP14 Managing Water Resources and Flood Risk

Policy LP16 Protecting the Water Environment

Policy LP21 Biodiversity and Geodiversity

Policy LP25 The Historic Environment

- 5.16 Officer's reports considered their respective applications were compliant with the extant Development Plan, as the following extracts demonstrate.

- 5.17 The SHDC's Officer Report (CD Ref: C.1) at paragraph 7.70 states that *'Having regards to the clear need and national policy support for the proposed development and local level policy compliance and balancing the weight afforded to identified material planning considerations alongside mitigation measures proposed, the proposed development is considered to be policy compliant and there are no material planning considerations in place which would override this position'*.

- 5.18 The NKDC's Officer Report (CD Ref: C.3 at paragraph 1.13 states that *'Given the significant benefits of the scheme which meet both national and local planning*

policy objectives, it is considered that the scheme is acceptable in principle and consideration should focus on any associated impacts’.

- 5.19 The BBC’s Officer Report (CD Ref: C.2) at paragraph 7.21 states that *‘Having regard to the clear need and national policy support for the proposed development and local level policy compliance, and the balancing of the weight to be afforded to identified material planning considerations, alongside the mitigation measures proposed, it is considered that the proposed development is policy compliant, and that there are no material planning considerations in place which would override this position.’¹²*
- 5.20 The Planning Inspector’s report for the ELDC appeal (CD Ref: C.7) at paragraph 27 states that *‘In the light of all these considerations, I conclude that the proposed Viking Link development would meet an essential need for additional electricity supply capacity, which is urgently required in the national and public interest. To this extent, the relevant requirements of ELCS Policies SP27 and SP28, relating to need, are therefore satisfied by the appeal proposal’.*

Planning Applications

- 5.21 NGVL sought full planning permission, under the Town and Country Planning Act (TCPA), for the UK Onshore Scheme from the four affected LPAs of ELDC, BBC, NKDC and SHDC. Applications to all four were submitted in August 2017.
- 5.22 In order to comply with paragraph 011 of the National Planning Policy Guidance (CD Ref: A.13), which states that *‘Where a site which is the subject of a planning application straddles one or more local planning authority boundaries, the applicant must submit identical applications to each local planning authority’;* identical applications were submitted to each of the four Local Planning Authorities.
- 5.23 The description of development for which consent was sought was as follows:
- ‘Works to facilitate the Viking Link electrical interconnector with an approximate capacity of 1400 megawatts (MW) extending from Revsing, Jutland, (Denmark) to Bicker Fen, Lincolnshire (UK) comprising:*

¹² Please see Footnote 11

- Installation of two (2) subsea high voltage direct current (HVDC) cables between Mean Low Water Springs (MLWS) and landfall at Boygrift in East Lindsey;
- Installation of two (2) onshore HVDC cables between the landfall at Boygrift and the converter station at North Ing Drove in South Holland;
- Construction of associated Temporary Construction Compounds (TCC) and Temporary Works Areas (TWA) and temporary vehicle access arrangements required for HVDC and HVAC cable installation;
- Erection of converter station buildings together with the formation of internal roads, permanent access road from the A52, erection of security fencing, formation of landscaping with associated temporary construction compounds;
- Installation of up to six (6) onshore high voltage alternating current (AC) cables between the converter station at North Ing Drove and the existing Bicker Fen 400 kilovolt (400kV) Substation owned and operated by National Grid Electricity Transmission Plc (NGET);
- Installation of link pillars along the AC cable route for inspection and maintenance purposes, these will be contained within fenced areas;
- Installation of two substation bays at Bicker Fen Substation to allow Viking Link to be connected to the National Grid electricity transmission system;
- Installation of all associated drainage mitigation works; and
- Installation of fibre-optic cable(s) with the high voltage HVAC and HVDC cables"

Planning Determinations

- 5.24 All four planning applications went to their respective planning committees with an Officer recommendation to approve.
- 5.25 The planning applications within the administrative areas of SHDC, BBC and NKDC were each respectively unanimously resolved to approve on 7th February 2018, 3rd April 2018 and 15th May 2018.
- 5.26 On the 19th February 2018 LPAs and Councillors where committees had not yet considered their applications were informed by the MHCLG that in accordance

with Article 31 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 (CD Ref: A.5), the Secretary of State had directed all affected LPAs not to grant planning permission on this application, without specific authorisation.

- 5.27 On 11th September 2018, MCHLG confirmed to NGVL and all LPAs that the Article 31 Direction had been lifted.
- 5.28 BBC issued a decision notice on 12th September 2018 (CD Ref: C.4), with further correspondence on the 28th September relating to approved plans, and NKDC (CD Ref: C.5) issued a decision notice on 18th September 2018. The SHDC Decision Notice was issued on the 8th October 2018 (CD Ref: C.6).
- 5.29 The ELDC planning application was considered by Planning Committee on 3rd May 2018.
- 5.30 The application was presented to the Council's Planning Committee on 3rd May 2018 with an officer recommendation for approval. However, the Committee determined that they were minded to refuse planning permission and wished to refer their concerns to the Secretary of State.
- 5.31 The RfR stated that:

"Part of the application site follows a route through the Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) which is a valued landscape and which is afforded great weight to preserving its landscape and scenic beauty. It is considered by this Council, that notwithstanding the details submitted the proposal would be damaging and harmful to the distinctive character of the AONB and that the applicants have failed to adequately demonstrate the exceptional circumstances to justify that this major development should follow a route through the AONB. The applicants have therefore failed to demonstrate adequately that the proposal will protect and enhance such a valued landscape. It is also considered that the proposal would adversely impact on farming practices in the area. The proposal if permitted would therefore be contrary to paragraphs 109 and 116 of the National Planning Policy Framework."

Planning appeal

- 5.32 NGVL submitted an appeal against the refusal by ELDC on 27th July 2018.

- 5.33 Council Officers and NGVL continued dialogue to explore any opportunities to address the refusal reasons and NGVL submitted further clarifying information to ELDC specifically in relation to impacts of the proposal on farming practice.
- 5.34 ELDC subsequently informed NGVL that the position in relation to the appeal would require further formal consideration by the ELDC Planning Committee.
- 5.35 The Planning Committee considered the application as a special item at its 6th September Planning Committee. A report set out the background to the appeal and the requirements for the Council in presenting a case at Inquiry and this was supplied with the LPA's Statement of Case.
- 5.36 The report further considered the robustness of the Council's RfR and set out two options for the Committee to consider, as follows:

"Option 1: *That the reasons for refusal put forward by the Council be narrowed down to now remove the effect on farming practices in the area*

Reason: Given further scrutiny of the submission in the light of the further information received from the applicants, and in recognition of advice from government office [in regard to remediation measures that can be secured by condition as outlined in paragraph 6.3 of this report], to pursue this as a continued reason for refusal could be argued as representing an unreasonable position with the potential of an application for an award of costs against the Council being made.

Option 2: *That the Council don't contest any of the grounds for refusal and leave the case to be contested by any interested third parties.*

Reason: As set out in paragraphs 9.1 and 9.2 of this report the effect of the development on the character of the Lincolnshire Wolds AONB are temporary and can be mitigated by condition. Furthermore the exceptional circumstances to justify a route through part of the AONB are clear, as considered by Natural England a statutory consultee, who considers there is a clear need for the development and have not now raised an objection to the proposal. (see their final comments in background paper 4). On this basis there is not a strong case to oppose the proposed development and therefore the possibility that the appeal could be successful and may bring with it an award of costs in favour of the applicants as set out in paragraph 9."

- 5.37 The Planning Committee decided to adopt Option 2 and as such did not contest the grounds for refusal and did not be present any evidence at the Inquiry.
- 5.38 The planning inquiry was held from the 6th – 9th November 2018 at ELDC's offices in Louth. From the Viking Link Interconnector project team the Inspector heard from Mr Colin Goodrum BSc(Hons) DipLA FLI LDA Design on Landscape matters, Mr Graham Symons Senior Development Engineer, National Grid on engineering matters, David Royle BSc(Hons) of The Land Drainage Consultancy on soils and drainage matters and myself on planning matters. Interested parties who also attended and spoke included Mr David Douglas representing Langton (Spilsby) Farms, the Langton Estate, and Langton-by-Spilsby Parish Meeting, Mr Richard Langton representing The Langton Estate, Cllr Richard Moody representing West Keal & Keal Cotes Parish Council, Mr Stephen Jack of the Lincolnshire Wolds Countryside Service, Mrs Carolanne Syed representing Raithby-by-Spilsby Parish Meeting and Cllr William Grover ELDC member for Hagworthingham ward.
- 5.39 The appeal was allowed on the 12th December 2018.
- 5.40 The key findings from the Planning Inspector are set out in his report (CD Ref: C.7), principally paragraphs 71 through to 75. In respect of Viking Link Interconnector need he concluded that *'I find that the proposed development would help to meet an essential national need for additional electricity supply capacity.'*
- 5.41 In respect of compliance with the Development Plan and any conflict, *'The temporary adverse effect on the landscape would involve a degree of conflict with Policy SP23 of the ELCS. However, given its short-term nature, it seems to me that this conflict must carry significantly less weight than it would if the harm were permanent. On the other hand, the delivery of essential infrastructure, as now proposed, would clearly accord with the aims of ELCS Policies SP27 and SP28. To my mind, the combination of national and public interest, the lack of better alternatives, and the relative lack of harm, together are clearly sufficient to satisfy these policies' requirements as to exceptional circumstances and sustainable development. In addition, the development is also supported by relevant national policies, including paragraphs 148, 154, 170 and 172 of the NPPF, and by NPSs EN-1 and EN-5'.*

Mitigation

5.42 The mitigation secured by all the UK Onshore Scheme planning permissions can broadly be split into the following categories:

- Archaeology: a written scheme of archaeological investigation including an assessment of archaeological significance and a proposed mitigation strategy is required ;
- Construction Environmental Management Plan: requiring a detail on, but not exclusive to, public access, arrangements to minimise the impact of development on sensitive receptors, health and safety, soil management, site waste management, ecological and biodiversity plan and a communications plan;
- Construction Traffic Management Plan and Access Management Plan: to provide further detail following on from the respective outline documents that were submitted as part of the planning application;
- Landscape Restoration Scheme: obligates NGVL to confirm details of landscape protection, replacement, mitigation measures and a timetable for their implementation.

Conclusion on planning

5.43 As demonstrated above, the UK Onshore Scheme has been granted planning permission in accordance with extant and emerging planning policy at a local and national level. As such, there is no planning impediment to delivery of the UK Onshore Scheme.

6. OTHER CONSENTS

Introduction

- 6.1 This section of my proof details the need for other consents and permits to deliver the Viking Link Interconnector end to end and their status in order to demonstrate there remains no consenting or permitting impediment to the project.

The need for other consents

- 6.2 End to end, the Viking Link Interconnector crosses UK, Netherlands, German and Danish territorial waters by virtue of its submarine HVDC cables as well as comprising terrestrial components in the UK and Denmark with a converter station and HVAC cables required in either country.

Other consents granted

- 6.3 The primary consents required to deliver the Viking Link Interconnector have been obtained by NGVL and our project partner Energinet, these are;
- 6.3.1 Planning permission for the UK Onshore Scheme (four permissions in total granted in Q3 and 4 2018 as explained in section 5 above);
 - 6.3.2 Permission for the Denmark onshore scheme (February 2018);
 - 6.3.3 Offshore installation permit from the relevant Danish authorities for the installation of the submarine cables (February 2018);
 - 6.3.4 Permit from the relevant German authorities for the installation of submarine cables (December 2017 and March 2019);
 - 6.3.5 Permit from the relevant Dutch authorities for the installation of submarine cables (January 2018); and
 - 6.3.6 Marine licence from the Marine Management Organisation (MMO) for the installation of submarine cables in UK territorial waters (October 2018). (Note: NGVL is currently pursuing a variation to the Marine Licence in order to ensure that it's boundary aligns fully with the UK Onshore permission granted by ELDC, we are confident that this variation will be forthcoming.)

- 6.4 On the 26th of February 2019 an order was made by SHDC under section 257 of the Town and Country Planning Act 1990 to authorise the diversion of Footpath DONI/8/1, to enable the development authorised by Planning Permission Reference H04-0823-17 (referred to at paragraph 5.28 above) to be implemented. The objection period expired on the 22nd of April 2019. The order was confirmed as unopposed by the SHDC on 8 May 2019 (CD Ref: C16).
- 6.5 The Viking Link Interconnector was included in the EU List of 'Projects of Common Interest' (PCI) under the TEN-E Regulation PCIs on 18th November 2015 and it remains listed. The list was adopted by Commission Delegated Regulation (EU) 2016/89¹³ (CD Ref: A.10) which confirmed the Viking Link Interconnector as being a PCI due to it being a key energy infrastructure project delivering significant benefits for at least two European Member States which further supported market integration and competition, enhanced security of energy supply and contributed to reducing carbon dioxide (CO₂) emissions. The Viking Link Interconnector is one of the PCIs¹⁴ currently listed.
- 6.6 Designated PCIs are recognised as projects of "*overriding public interest*" as their need has already been examined as part of the PCI selection process and consequently they are to benefit from faster and more efficient permit granting procedures, and improved regulatory treatment. Under the TEN-E Regulation, Member States are required to designate a National Competent Authority who are responsible for co-ordinating the permitting process for PCIs. For the Viking Link Interconnector, the United Kingdom (UK) role has been delegated by the Secretary of State to the Marine Management Organisation ("MMO") whose role was to coordinate the decision making process with the four local planning authorities referred to in section 9.1 of this Statement, and the other relevant jurisdictions in order to reach a 'Comprehensive Decision'.
- 6.7 NGVL received the TEN-E Comprehensive Decision in respect of the consenting of the Viking Link Interconnector from the MMO on the 6th of February 2019.

Conclusion

- 6.8 Accordingly, NVGL has attained all the statutory consents required to install the Viking Link Interconnector under the UK consenting regime and as such there is no consenting-related impediment to its delivery and operation.

¹³ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0089&from=EN>

¹⁴ https://ec.europa.eu/energy/sites/ener/files/documents/annex_to_pci_list_final_2017_en.pdf

7. CONCLUSIONS

7.1 As my proof has demonstrated in the preceding chapters, no objections received have challenged the need for the UK Onshore Scheme or Viking Link Interconnector nor has it been suggested that there remains any consenting or permitting impediment to the project being realised.

7.2 In summary, there is:

- An urgent and compelling need for the scheme to secure benefits of additional interconnection and a continued transition to a low carbon economy;
- Planning permission in place for the UK Onshore Scheme;
- All other consents and permits for the affected Member States are in place in both the marine and terrestrial environments and there are no impediments to delivery of the UK Onshore Scheme or Viking Link Interconnector as a whole in accordance with suggested timetable;
- No reasonable alternatives have been put forward that the determining authorities in granting consent considered warranted further investigation and as such the benefits of the Viking Link Interconnector will be lost if the Order is not confirmed; and
- There are no primary consenting or permitting impediments to the Viking Link Interconnector being realised.

Date: 4 June 2019