

PROJECT

**NATIONAL GRID VIKING LINK LIMITED (VIKING LINK INTERCONNECTOR)
COMPULSORY PURCHASE ORDER 2019**

PROOF OF EVIDENCE

**ANDREW MCINTOSH
PROJECT DEVELOPMENT DIRECTOR
NATIONAL GRID VIKING LINK LIMITED**

1. **QUALIFICATIONS AND EXPERIENCE**

- 1.1 I am Andrew McIntosh, Project Development Director for the Viking Link Interconnector.
- 1.2 I have over 40 years' experience in the UK Electricity Industry with National Grid and its predecessor, the Central Electricity Generating Board. I have undertaken numerous senior management roles within National Grid over a period of 25 years' including Project Management, Interconnector Operations, Business Development, Procurement, European Energy Legislation Development and Commercial & Regulatory roles.
- 1.3 Prior to my role as Project Director responsible for the joint development of the Viking Link Interconnector with partners Energinet, the Danish Transmission System Operator ("TSO"), I undertook the same role as Project Director for the joint development of the NEMO Interconnector (a High Voltage Direct Current ("HVDC") subsea link connecting the UK to Belgium) with project partners Elia, the Belgian TSO. In both projects my role was to lead the joint development team through the feasibility, design, engineering, planning, consents and business case preparations to secure a Financial Investment Decision ("FID") and conclude all major commercial and supply chain agreements. At time of writing, I am managing the process of 'handover' to the team responsible for the construction phase of the project.
- 1.4 Previous experience includes 6 years as the Operations Manager for the existing Interconnexion France-Angleterre ("IFA"), a 2GW HVDC Interconnector between the UK and France. I also undertook a Policy development role representing National Grid's input to the 3rd European Electricity Directive and Regulations ("3rd Package") and was member of the Project Steering group for the establishment of the European Network of Transmission System Operators for Electricity ("ENTSO-E") chairing working groups developing codes for cross border electricity trading and operations.

2. **INTRODUCTION AND SCOPE OF EVIDENCE**

- 2.1 I have prepared this proof of evidence in support of the National Grid Viking Link Limited (Viking Link Interconnector) Compulsory Purchase Order 2019 ("the Order") that has been made by National Grid Viking Link Limited ("NGVL") to enable the construction of a high voltage direct current electrical interconnector to facilitate the transfer of electrical power between the United Kingdom and Denmark.
- 2.2 The overriding test with which the Secretary of State must be satisfied in order to confirm the Order is whether there is a compelling case in the public interest to justify the proposed interference with the private rights of those who have interests in the land affected ("the Order Land") (paragraph 12 of the Ministry of Housing, Communities and Local Government's *Guidance on Compulsory purchase process and The Crichel Down Rules* (Updated February 2018) ("the CPO Guidance") (CD Ref: A.12). There are also a number of general considerations set out in the CPO Guidance (CD Ref: A.12) that need to be demonstrated to the satisfaction of the Secretary of State.
- 2.3 In my proof of evidence I will:
- 2.3.1 explain that NGVL has a clear idea of how it intends to use the land and new rights over land which it is proposing to acquire (paragraph 13 of the CPO Guidance) (CD Ref: A.12). This is addressed in section 5 of this proof of evidence and in section 4 of the proof of evidence of Mr Oliver Heselton, who provides evidence on land and negotiations.
 - 2.3.2 explain that the Viking Link Interconnector is unlikely to be blocked by any physical or legal impediments to implementation, such as the need for planning permission or other consents or licences (paragraph 15 of the CPO Guidance) (CD Ref: A.12). This is addressed in section 7 of this proof of evidence and in sections 5 and 6 of the proof of evidence of Ms Liz Wells, who provides evidence on planning and other consents.
 - 2.3.3 show that all the necessary resources are likely to be available within a reasonable time-scale, in particular that funding is available now or will be available early in the process for both acquiring the necessary land/rights over land and implementing the Viking Link Interconnector (paragraphs 13 and 14 of the CPO Guidance) (CD Ref: A.12). This is addressed in section 7 of this proof of evidence.
 - 2.3.4 explain that the purposes for which the Order is made justify interfering with the human rights of those with an interest in the Order Land (paragraph 12 of the CPO Guidance) (CD Ref: A.12). This is addressed in section 9 below of this proof of evidence.
 - 2.3.5 show that NGVL has taken reasonable steps to acquire all of the land and rights included in the Order by agreement (paragraph 2 of the CPO

Guidance) (CD Ref: A.12). This is addressed in section 6 below of this proof of evidence and in section 6 of the proof of evidence of Mr Oliver Heselton.

2.4 I will conclude that, taking account of the above considerations set out in the CPO Guidance, there is a compelling case in the public interest for the confirmation of the Order.

2.5 My proof of evidence is set out as follows:

2.5.1 **Section 1**- Outlines my qualifications and experience.

2.5.2 **Section 2**- Introduces my proof of evidence.

2.5.3 **Section 3**- Describes the Viking Link Interconnector.

2.5.4 **Section 4**- Explains the need for the Viking Link Interconnector.

2.5.5 **Section 5**- Describes the land and rights required for the UK Onshore Scheme.

2.5.6 **Section 6**- Explains NGVL's acquisition strategy and the status of negotiations at the time of writing this proof.

2.5.7 **Section 7**- Explains how the Viking Link Interconnector will be delivered by NGVL and its joint venture partner Energinet.

2.5.8 **Section 8**- Identifies the power under which the order is made and explains NGVL's decision to make the Order to facilitate the proposals.

2.5.9 **Section 9**- Explains the careful consideration given by NGVL to the requirements of the Human Rights Act in promoting the Order.

2.5.10 **Section 10**- Confirms NGVL and Energinet's commitment to building and operating the Viking Link Interconnectors notwithstanding Brexit.

2.5.11 **Section 11**- Contains responses to the main objections to the Order.

2.5.12 **Section 12** - Contains my conclusions.

2.5.13 **Section 13**- Contains my declaration.

3. **THE VIKING LINK INTERCONNECTOR**

UK Onshore Scheme

- 3.1 As explained in section 3 of the proof of evidence of Mr Graham Symons (NGVL/GS/1), the Viking Link Interconnector is a proposed 1400 megawatt, 760km long High Voltage Direct Current (“HVDC”) electricity interconnector between the British and Danish electricity transmission systems, which will connect at the National Grid Electricity Transmission plc Substation at Bicker Fen in Lincolnshire and Revising in south Jutland, Denmark. The Order has been made to acquire the land and new rights required for that part of the Viking Link Interconnector comprising the ‘UK Onshore Scheme’, the key components of which are described in section 3 of Mr Symons proof of evidence.
- 3.2 National Grid has already developed the following interconnectors jointly with European partners:
- IFA (Interconnexion France Angleterre) between the UK and France;
 - BritNed between the UK and the Netherlands; and
 - Nemo Link® between the UK and Belgium.
- 3.3 National Grid has made a clear commitment to helping deliver more interconnection for the UK and has a strong track record of developing interconnector projects. Two new interconnector projects have secured regulatory approval and private sector investment, these are the North Sea Link to Norway and IFA2 to France, which are currently in the construction phase.
- 3.4 The Viking Link Interconnector is therefore part of National Grid’s investment strategy in interconnector projects.

4. THE NEED FOR THE PROJECT

4.1 As explained in paragraphs 3.21 and 3.22 of the proof of evidence of Ms Liz Wells, 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 Ref: 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."*

4.2 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."*
- 4.3 As detailed in paragraphs 3.33 to 3.42 of Ms Wells proof of evidence (NGVL/LW/1), 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.
- 4.4 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.
- 4.5 The National Policy Statement for Electricity Networks Infrastructure (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."*
- 4.6 Paragraph 3.7.3 of The Overarching National Policy Statement for Energy (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."*
- 4.7 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).
- 4.8 Indeed, paragraph 3.3.31 of EN-1 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).

- 4.9 The UK currently has 5GW of installed interconnector capacity through the following interconnectors which are in operation, representing only 5% of the existing energy generated in the UK¹. These comprise:
- 4.10 an interconnector to France known as IFA;
- 4.11 an interconnector to the Netherlands known as BritNed;
- 4.12 an interconnector to Northern Ireland known as Moyle;
- 4.13 an interconnector to the Republic of Ireland known as East West; and
- 4.14 an interconnector to Belgium known as Nemo Link.
- 4.15 As noted at paragraph 3.2 above, National Grid has already delivered three of these existing interconnectors (IFA, BritNed and Nemo Link) through subsidiaries similar to NGVL.
- 4.16 In March 2016 the National Infrastructure Commission issued a report titled '*Smart power*'² (CD Ref: A.27) 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.
- 4.17 The Government response to this report was issued in April 2016, in which 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."*
- 4.18 Indeed, in the National Grid Network Options Assessment 2017/18 (CD Ref: E.6), it sets out that "*analysis suggests a total capacity of 17.4GW between GB and European markets by 2030 would provide optimal benefit*".

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/510525/2904569_NIDP_2016-2021_updated.pdf

² <https://www.gov.uk/government/publications/smart-power-a-national-infrastructure-commission-report>

- 4.19 The Viking Link Interconnector (which will have a capacity of 1400MW and, once constructed, will represent a near 30% increase in interconnector capacity in the UK, providing power for over 1 million homes) will, in combination with the other interconnectors proposed, help the UK to meet this target and realise the subsequent energy benefits.

Conclusion on the need for the Project

- 4.20 As explained in paragraphs 3.33 to 3.57 of the proof of evidence of Ms Liz Wells, 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 the energy supply and meeting climate change obligations.
- 4.21 The Viking Link Interconnector is 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.

5. THE LAND AND RIGHTS REQUIRED FOR THE UK ONSHORE SCHEME

- 5.1 The Order Land comprises all of the land required for the construction, operation, repair, maintenance and decommissioning of the UK Onshore Scheme.
- 5.2 Section 4 of Mr Symons's proof explains the factors that governed the widths of the HVAC and HVDC construction corridors, and will govern the final alignment and widths of the HVAC and HVDC operation and maintenance corridors, over which rights for those purposes need to be acquired. Section 4 of Mr Symons's proof also explains how the land to be acquired for the converter station site and its access road will be utilised and the need for rights over land to create temporary construction compounds and working areas; to obtain access to the construction corridors; and to carry out land drainage works. The paper comprising Appendix 7 to Mr Symons proof (NGVL/GS/3) explains the extent of land over which rights are needed to enable access to be taken from the public highway to the land in which the infrastructure will be installed for the purpose of construction, maintenance and decommissioning, including rights to carry out minor works to facilitate such access.
- 5.3 Sections 5 and 6 of the proof of evidence of Mr David Royle (NGVL/DR/1), who provides evidence on land drainage impacts and mitigation, describes the land drainage works that are required to facilitate the construction of, and to mitigate the impacts of, the UK Onshore Scheme on existing land drainage systems.
- 5.4 As explained in section 4 of the proof of evidence of Mr Oliver Heselton (NGVL/OH/1), the rights which are sought in the Order have been grouped into distinct packages based on their purpose and applied to specific plots, as appropriate. Some of the rights are only required for temporary purposes, such as the creation of construction compounds, and will only be exercised during the construction phase. Other rights will be permanent in nature, such as the right to keep installed, operate, maintain and decommission the cables. Others, such as the right to access the land for the purpose of maintaining the cables, whilst permanent in nature, will in practice only be exercised intermittently.

Conclusion on land and rights required

- 5.5 As explained in section 4 of Mr Heselton's proof of evidence, all of the rights and interests in land proposed to be acquired under the Order are required for the purpose of constructing, operating and maintaining the Viking Link Interconnector and are reasonable and proportionate. Importantly, NGVL is taking a proportionate approach to compulsory purchase, in line with policy and guidance, and does not propose to acquire any land or rights beyond those that are reasonably required.
- 5.6 NGVL therefore has a clear idea of how it intends to use the land and rights over land that it is proposing to acquire as required by paragraph 13 of the CPO Guidance (CD Ref: A.12)).

6. ACQUISITION STRATEGY AND STATUS OF NEGOTIATIONS

- 6.1 As explained in section 4 of Mr Heselton's proof of evidence, NGVL is taking a proportionate approach to compulsory purchase and, rather than seeking to acquire the freehold title to all of the Order Land, is seeking to acquire a combination of freehold title (for the convertor station and the permanent access road thereto, to ensure safety and security) and permanent rights (such as the rights to install and maintain the cables and rights of access).
- 6.2 NGVL has, through its own personnel and its appointed land agents, Dalcour Maclaren, endeavoured to acquire the rights and interests in land which are required to deliver the UK Onshore Scheme through private treaty negotiation. Details of the negotiations are set out in sections 6 and 7 of Mr Heselton's proof of evidence.
- 6.3 Notwithstanding the substantial efforts made to acquire interests in the land by way of voluntary agreement, at the date of making the Order, NGVL had been unable to secure all those interests by negotiation. It was therefore necessary for NGVL to seek a range of compulsory powers, to enable delivery of the UK Onshore Scheme and thus the Viking Link Interconnector. Land that was subject to an agreement, was retained as part of the Order Land to enable NGVL (and its successors) to acquire rights in respect of any third party interests that may subsist in the land which might otherwise delay, impede or prevent the implementation or operation of the Viking Link Interconnector. This is the approach recommended in the General Overview at paragraph 2 of the CPO Guidance (CD Ref: A.12).
- 6.4 As can be seen from Mr Heselton's evidence, however, very good progress has continued to be made with acquisition by voluntary agreement. At paragraph 6.4.2 of his proof of evidence Mr Heselton confirms that, at the time of writing, Heads of Terms had been agreed for 98.8% of the HVDC route, and 100% of the HVAC route. At paragraph 6.4.3 of his proof of evidence Mr Heselton advises that negotiations for Heads of Terms for the converter station site and access road thereto were at an advanced stage. The strategy employed by NGVL has led to their being no outstanding objections from private landowners.

Conclusion on acquisition strategy and negotiations

- 6.5 NGVL has made determined and persistent efforts to engage and negotiate with landowners and has made very good progress in agreeing Heads of Terms for agreements. I therefore consider that NGVL has demonstrated compliance with paragraph 2 of the CPO Guidance (CD Ref: A.12).

7. SCHEME DELIVERY AND FUNDING

Delivery- Joint venture

- 7.1 The Viking Link Interconnector is being jointly developed and financed by NGVL and Energinet (an independent public enterprise owned by the Danish state as represented by the Ministry of Energy, Utilities and Climate, which owns, operates and develops the Danish electricity and gas transmission systems) on equal terms (i.e. on a 50:50 basis) in a business arrangement termed an '*Unincorporated Joint Venture*'.
- 7.2 NGVL is responsible for developing, constructing and financing the UK Onshore Scheme. Energinet is responsible for developing, constructing, and financing the equivalent Danish onshore scheme. NGVL and Energinet will have joint responsibility for delivery of the offshore works associated with the submarine cables.

Delivery Programme

- 7.3 The following provides a high level overview of the delivery programme:
- 7.3.1 **Danish Onshore Scheme** - Contractor to mobilise and conduct detailed design and pre-commencement activities Q3 2019 onwards. Construction activities due to commence in Q3 2020 and will be predominantly complete by Q3 2022.
- 7.3.2 **UK Onshore Scheme** - Contractor to mobilise and conduct detailed design activities with pre-commencement works from Q3 2019 onwards. Construction activities due to commence in Q2 2020 and will be complete by Q4 2023.
- 7.3.3 **Offshore Scheme** - Contractor mobilisation and pre-commencement work to be undertaken from Q3 2019. Construction activities for the Offshore Scheme due to start in Q2 2021 with completion being targeted for Q2 2023.
- 7.3.4 Testing and commissioning of the Viking Link Interconnector will take place during Q3/Q4 2023 with operation anticipated to begin Q4 2023.
- 7.4 Each part of the Viking Link Interconnector (the Danish Onshore Scheme, the UK Onshore Scheme and the Offshore Scheme) will be closely monitored by NGVL and Energinet to ensure a coordinated approach.
- 7.5 Accordingly, it is important that NGVL has the certainty that it will be able to access and acquire rights to all of the land comprising the UK Onshore Scheme at the earliest possible opportunity, otherwise the carefully programmed construction timetable will be put at risk and the benefits of the project delayed.

Planning Permission

- 7.6 As explained in section 5 the proof of evidence of Ms Liz Wells, NGVL submitted four planning applications for the UK Onshore Scheme- one to each of the local

planning authorities through which the UK Onshore Scheme runs. Planning permission was granted by Boston Borough Council on the 12th of September 2018 with further correspondence on the 28th September relating to approved plans. Planning permission was issued by North Kesteven District Council on the 18th of September 2018 and by South Holland District Council on the 8th of October 2018. East Lindsey District Council ("ELDC") refused planning permission for the section of the UK Onshore Scheme within its jurisdiction.

7.7 NGVL submitted an appeal against the refusal by ELDC on 27th July 2018. On the 12th December 2018 the Planning Inspectorate advised that the appeal was allowed and planning permission had been granted.

7.8 Accordingly, NVGL has planning permission for all elements of the UK Onshore Scheme and as such there is no planning-related impediment to delivery of that scheme.

Other consents

7.9 Section 6 of Ms Wells's proof of evidence (NGVL/LW/1) confirms that all the primary consents required to deliver the Viking Link Interconnector have been obtained by NGVL.

7.10 As detailed in section 3 of Ms Wells's proof of evidence, the European Commission has developed guidelines to assist in the development of energy networks within Europe which will play an important role in ensuring an efficient energy market within Europe and the security and diversification of energy supply. This is known as 'the TEN-E Regulation'³ (CD Ref: A.8). The Viking Link Interconnector was included in the EU List of 'Projects of Common Interest' (PCI) under the TEN-E Regulation on 18th November 2015 and has remained listed.

7.11 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 7.6 of this proof, and the other relevant jurisdictions in order to reach a 'Comprehensive Decision'.

7.12 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.

³ EU Regulation 347/2013 on guidelines for trans-European energy infrastructure (TEN-E Regulation) came into force on 17th April 2013. The TEN-E Regulation helps build and finance the EU's priority energy infrastructure projects in order to connect EU countries currently isolated from European energy markets, strengthen existing cross border interconnections, and help integrate renewable energy supply.

- 7.13 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.

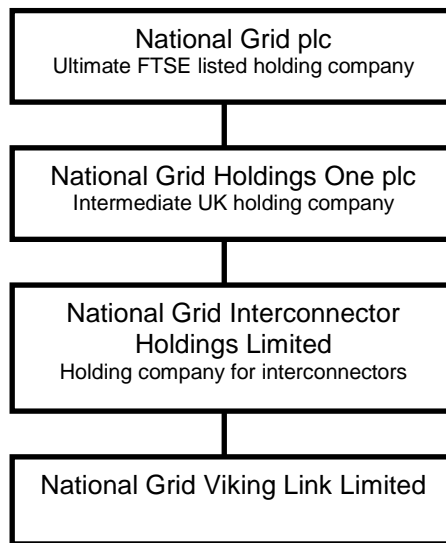
Funding

Track record

- 7.14 As explained in paragraph 7.1 above, the Viking Link Interconnector is being jointly developed and financed by NGVL and Energinet on equal terms.
- 7.15 NGVL is part of the National Grid group of companies ("National Grid") but is separate from the National Grid systems operator which operates the high voltage transmission network in Great Britain and owns the high voltage transmission network in England and Wales.
- 7.16 NGVL, through its parent company National Grid, has a superb track record in delivering major infrastructure projects, including interconnectors. It also has an excellent financial standing as explained below.
- 7.17 Energinet, is an independent public enterprise owned by the Danish state as represented by the Ministry of Energy, Utilities and Climate, which owns, operates and develops the Danish electricity and gas transmission systems. Alike NGVL, it has the track record and financial approvals in place to deliver its parts of the Viking Link Interconnector.

NGVL resources

- 7.18 As noted above, NGVL is part of National Grid. The ultimate parent and controlling company of National Grid is National Grid plc which has a primary listing on the London Stock Exchange and a secondary listing on the New York Stock Exchange. National Grid plc is a constituent of the Financial Times Stock Exchange (FTSE) 100 Index.
- 7.19 National Grid plc is an internationally recognised leader in the safe development and operation of large capacity, multi-user, energy transmission systems. National Grid plc owns and operates the electricity and gas transmission infrastructure at the centre of Britain's energy system.
- 7.20 National Grid Holdings One plc (NGH1) operates as a subsidiary of National Grid plc. NGH1 holds investments in, and provides finance to, fellow subsidiary companies, such as National Grid Interconnector Holdings Limited ("NGIH"), which in turn provides finance to project specific subsidiaries, such as NGVL. The diagram below shows the relationship between National Grid plc, NGH1, NGIH and NGVL:



Decision to fund the UK Onshore Scheme and make the Order

- 7.21 NGVL has assessed the costs of implementing the UK Onshore Scheme and acquiring the necessary land and rights over land needed to facilitate it.
- 7.22 On 26th September 2018, the National Grid plc board made a commitment (a positive Financial Investment Decision) to fund the Viking Link Interconnector from its operational revenues, including the costs of acquiring the necessary land and rights over land needed for the UK Onshore Scheme, whether such land/rights are acquired by agreement or purchased compulsorily. The following is an extract from an NGVL announcement regarding this decision:

"On the 8th November, National Grid confirmed £850 million investment in the Viking Link interconnector. The project will be a 50/50 joint venture between National Grid and Energinet, who approved their share of the investment in 2017."

- 7.23 As explained in section 8 below of this proof of evidence, following the Final Investment Decision, and having taken in to account the fundamental principles set out in the CPO Guidance (CD Ref: A.8), the NGVL Board took the decision to make the Order.

Funding the UK Onshore Scheme

- 7.24 Funding for the UK Onshore Scheme, including the acquisition of land and new rights and the implementation of the scheme, will be managed from within the National Grid's own resources, credit facilities, and routine debt financing. The scheme is not dependant on grants or financial contributions from third parties

or other bodies. Rather, National Grid plc manages its funding strategy from a Group perspective and on average expects to issue £2-3 billion of long-term debt each year, to fund capital expenditure and to refinance maturing debt across the Group. The Group also has access to short-term debt instruments.

- 7.25 External debt is raised across a number of entities in the Group (regulated operating companies, intermediate holding companies and National Grid plc). As a result, it benefits from flexibility, with access to the best value funding available.
- 7.26 National Grid plc is rated at the same level by Standard & Poor's (S&P)⁴, Moody's⁵ and Fitch⁶ (BBB+/Baa1/BBB+ respectively) and remains on Stable outlook for all three agencies. NGH1 (which holds investments in, and provides finance to, fellow subsidiary companies, such as NGIH, which in turn provides finance to project specific subsidiaries, such as NGVL) is rated by S&P and is currently rated A- (in line with National Grid plc's Corporate Rating).
- 7.27 As per other operating companies, NGVL will have access to an inter-company facility it can draw on to cover operational expenditure (OPEX) and capital expenditure (CAPEX), allowing it to borrow from National Grid plc (its ultimate parent).
- 7.28 The requisite funding will therefore be available to meet both the construction and land acquisition/compulsory purchase compensation costs associated with the UK Onshore Scheme as and when required (including any advance payments of compensation and blight claims).

Funding for the Danish Onshore Scheme

- 7.29 The Danish Minister for Energy, Utility and Climate approved the Viking Link investment on 25th October 2017. The following is an extract from an Energinet press release at the time:

"The Viking Link to Great Britain and an upgrade of the power grid in western Jutland will contribute to Energinet's ability to adapt to the growing amount of wind energy, while maintaining the high security of supply at the same time. The two projects will yield significant socio-economic benefits in Denmark as well as in Great Britain and other neighbouring countries and make green transition more effective. These are the words by Energinet's CTO, Torben Glar Nielsen, as a reaction to the approval by the Danish Minister for Energy, Utilities and Climate, which enables Energinet to invest a total of approximately 11 billion Danish kroner in an interconnector to Great Britain and an upgrade of the power grid between the city of Holstebro and the Danish-German border."

⁴ Standard & Poor's Financial Services LLC.

⁵ Moody's Investors Service.

⁶ Fitch Ratings.

Conclusion on funding and delivery

- 7.30 Planning permission has been granted for the entirety of the UK Onshore Scheme. All other necessary consents have been obtained and 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.
- 7.31 I am therefore confident that the Viking Link Interconnector is unlikely to be blocked by any physical or legal impediments to implementation as required by paragraph 15 of the CPO Guidance (CD Ref: A.12)).
- 7.32 NGVL has assessed the costs of implementing the Viking Link Interconnector (of which the UK Onshore Scheme forms part), and the costs of acquiring the necessary land and rights over land required for the UK Onshore Scheme.
- 7.33 On the 26th of September 2018 the National Grid plc board made a commitment to fund the Viking Link Interconnector project from its operational revenues, including the costs of acquiring the necessary land and rights over land needed for the UK Onshore Scheme.
- 7.34 NGVL will have access to an inter-company facility, allowing it to draw funds from National Grid plc (its ultimate parent) which has a strong credit rating and available liquidity.
- 7.35 I am therefore satisfied that the requisite funding is available to meet the construction and land acquisition/compulsory purchase compensation costs associated with the UK Onshore Scheme as and when required (including any advance payments and blight claims) in accordance with paragraphs 13 and 14 of the CPO Guidance.

8. POWER UNDER WHICH THE ORDER IS MADE AND DECISION TO MAKE THE ORDER

- 8.1 As the holder of an Electricity Interconnector Licence (dated 12th November 2014 ("Licence") (CD Ref: E.1)) NGVL may, by virtue of section 10 of and schedule 3 to the Electricity Act 1989 ("1989 Act"), be authorised to purchase compulsorily land and/or rights required to enable NGVL to carry on the activities authorised by its Licence, and in particular to purchase the land and rights required to enable it to construct or extend the Viking Link Interconnector or for activities connected with the Viking Link Interconnector's construction, extension or operation. As explained in section 5 above, all of the land and rights in land proposed to be acquired under the Order are needed for these purposes.
- 8.2 Following the Final Investment Decision, and having satisfied themselves that the principles set out in the CPO Guidance (CD Ref: A.12) were satisfied, the NGVL Board took the decision to make the Order in reliance on the powers in section 10 of and schedule 3 to the 1989 Act (CD Ref: A.1), and on the 15th of January 2019 the Order (CD Ref: D.1) was made.

9. HUMAN RIGHTS

Consideration of Human Rights

- 9.1 Careful consideration has been given by NGVL to the interference with the individual rights of those directly affected by the Order that are protected by the Human Rights Act 1998 (CD Ref: A.2), which will result from the exercise of the compulsory purchase powers.
- 9.2 Section 6 of the Human Rights Act 1998 (CD Ref: A.2) prohibits public authorities from acting in a way which is incompatible with rights protected by the European Convention on Human Rights ("the Convention"). The position is summarised in paragraph 12 of the CPO Guidance (CD Ref: A.12), which states that a compulsory purchase order should only be made where there is "*a compelling case in the public interest*". The CPO Guidance (CD Ref: A.12) makes it clear that an acquiring authority should be sure that the purposes for which it is seeking compulsory purchase powers sufficiently justify interfering with the human rights of those with an interest in the land affected. In making this assessment, an acquiring authority should have regard, in particular, to the provisions of Article 1 of the First Protocol to the Convention, and in the case of dwellings, Article 8.
- 9.3 Article 1 of the First Protocol states that:
- "...Every natural or legal person is entitled to peaceful enjoyment of his possessions" and "no one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by the law and by the general principles of international law..."*
- 9.4 Whilst owners and occupiers of the Order Land may be deprived of their property/interest in property if the Order is confirmed, this will be done in accordance with the law. NGVL is only seeking to purchase the freehold title to the Order Land in two specific circumstances, i.e. for the convertor station and the permanent access road to ensure safety and security. The majority of the Order Land is proposed to be affected by new rights only. The Order is being promoted in the public interest as required by Article 1 of the First Protocol and the public benefits have been set out in detail earlier in this Statement. I therefore consider that the Order will strike the right balance between the public interest in the implementation of the Viking Link Interconnector and those private rights that will be affected by the Order.
- 9.5 Article 6 of the Convention provides that:
- "In determining his civil rights and obligations... everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law."*
- 9.6 The Viking Link Interconnector has been extensively publicised and consultation has taken place with the community and key stakeholders in the region. All

those affected by the Order have been notified, and have had the opportunity to submit objections. Those whose objections have not been withdrawn have the right to be heard at the forthcoming inquiry. It has been held that these statutory processes are in compliance with Article 6 of the Convention.

9.7 Those whose interests are acquired under the Order will also be entitled to compensation which will be payable in accordance with the Compulsory Purchase Compensation Code. The Compensation Code has been held to be compliant with Article 8 and Article 1 of the First Protocol to the Convention.

9.8 NGVL has sought to keep any interference with the rights of those with interests in the Order Land to a minimum. The land within the Order has been limited to the minimum required for the Viking Link Interconnector infrastructure to be installed, operated and maintained. Furthermore, the route of the underground cables and associated infrastructure has been selected so as to minimise the impact on settlement and land use as far as possible.

Other assistance and commitments provided to affected persons

9.9 NGVL recognises that the compulsory purchase process can cause anxiety, inconvenience and worry for those affected, and can be a daunting or difficult process for those who are not familiar with it. NGVL also appreciates that some issues and concerns can be addressed or resolved outside of the formal process. NGVL has therefore taken other steps to try to help owners and occupiers affected by the Order.

9.10 NGVL have set out their commitments to landowners and/or occupiers in a Code of Practice (CD Ref: E.4) which provides information on the working practices of NGVL and their contractors, and describes the key mitigation measures relating to land drainage, farming operations and disturbance, which are key concerns of the majority of those non-statutory owners/occupiers affected.

9.11 In summary, the Code of Practice (CD Ref: E.4):

9.11.1 describes the preparatory work that will need to be undertaken by NGVL/its contractors (such as the carrying out of surveys, land condition assessments, and the erection of fencing);

9.11.2 explains what land NGVL will need to use during construction and the precautionary/preventative measures that will be put in place by NGVL/its contractors to ensure, for example, that services and water supplies are maintained wherever possible or reinstated where disruption is unavoidable, and that pests and diseases are not spread etc.;

9.11.3 describes the installation methods that NGVL/its contractors will use (trenched and trenchless) and the steps that will be taken by NGVL (following consultation with landowners) to mitigate impacts on land drainage systems;

- 9.11.4 explains the restoration works that will be undertaken by NGVL/its contractors following installation of the cables and the basis on which compensation may be claimed by landowners and/or occupiers (i.e. for crop loss, damage and disturbance arising from the construction works and the loss of land management payments where land is taken out of production); and
- 9.11.5 advises that an Agricultural Liaison Officer will be appointed by NGVL to provide a point of contact for landowners and occupiers during construction.
- 9.12 In recognition of that fact that a key concern of landowners and occupiers is the impact of cable installation on agricultural land drainage and soils, at an early stage, land drainage questionnaires were sent to all landowners and Land Drainage Consultancy Limited ("LDC") were employed to carry out land drainage system and soil surveys to assess these where access had been granted along the route proposed. Pre and post construction conceptual drainage designs were then produced and all landowners were offered consultation and meetings to seek to ensure that the proposals provide a workable drainage solution to be installed both during construction and as part of the land reinstatement upon completion of the construction phase of the project.
- 9.13 Further drainage investigations are required prior to construction to inform and revise the conceptual pre and post construction land drainage designs. This is an iterative process of design review and there will be continuing dialogue with landowners as construction detail develops. Proposed changes will be discussed and agreed with the land owner in advance of the start of construction work.
- 9.14 Land drainage systems impacted by cable installation will be intercepted by a carefully designed pre-construction land drainage scheme. This will pick up existing drains on either one or both sides of the construction areas, divert clean drainage water from the construction area to a new outfall; maintain existing water flows from adjacent land and mitigate the risk of waterlogging in the construction area and off site.
- 9.15 A post construction land drainage scheme has been designed and will be installed and will be supported by an appropriate SHSP (CD Ref: C.10) to facilitate soil structural recovery. This will return affected land to its full agricultural potential as soon as reasonably practicable after disturbance.
- 9.16 Accordingly I consider NGVL to have taken particular care to minimise the impact of the Order on persons affected by it.

Equality Act

- 9.17 In accordance with s149(1) of the Equality Act 2010 ("equality Act") (CD Ref: A.3), NGVL has, in promoting the Order, undertaken an extensive community consultation and landowner engagement exercise.
- 9.18 NGVL is aware of the potential for adverse health impacts during construction on two residents with learning difficulties (one a minor); both living not far from

where the HVDC cables will be installed. One of the properties is near a Temporary Working Area (TWA) and the other is close to a Temporary Construction Compound (TCC). Following consultation with the families, NGVL has been able to identify a package of 'assistance' measures, which are primarily focussed upon providing advance notice of works and any road closures, and ensuring that there is particularly close liaison with the families, so as to avoid any distressing 'unexpected' activity in the vicinity of the family homes. Contact details have been provided to the families so they are able to speak directly to a member of the NGVL team if they have any questions or concerns. In view of the measures proposed, I am satisfied that the UK Onshore Scheme will not give rise to any unacceptable effects on these young people, and NGVL has been given no indication that this view is not one shared by their families.

- 9.19 Save as explained above, I do not consider that the UK Onshore Scheme will give rise to any impacts or differential impacts on persons who share a relevant protected characteristic as defined in the Equality Act, or upon persons who do not share such relevant protected characteristic.

Conclusion on human right and equalities

- 9.20 The requirements of the Human Rights Act 1998 and the Convention, particularly the rights of property owners, have been fully taken into account. There is a compelling case in the public interest for the Order to be made and confirmed, and interference with the private rights of those with an interest in the land affected would be the inevitable result of the exercise of compulsory purchase powers conferred by the Order and would be lawful, justified and proportionate.
- 9.21 NGVL has taken particular care to minimise the impact of the Order on those affected by it.
- 9.22 Save as noted in paragraph 9.19 above, I do not consider that the UK Onshore Scheme will give rise to any impacts or differential impacts on persons who share a relevant protected characteristic as defined in the Equality Act, or upon persons who do not share such relevant protected characteristic.

10. **BREXIT**

- 10.1 The outcome of the referendum on the UK's membership of the European Union (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. 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.
- 10.2 The Joint Development Agreement between NGVL and Energinet 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 Great Britain and Danish perspective. Based on this commercial nature of the project, 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.
- 10.3 The above is confirmed by the White Paper on *The Future Relationship Between The United Kingdom And The European Union* (July 2018) (CD Ref: A.14), 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."*

11. **RESPONSE TO OBJECTIONS**

11.1 A number of objections were made to the Order. Those made by Witham Fourth Internal Drainage Board (OBJ7), Black Sluice Internal Drainage Board (OBJ8), Lindsay Marsh Drainage Board (OBJ9), Mr and Ms Stanley (OBJ11), and P&N Benjamin (OBJ12), have since been withdrawn. The table at Appendix 1 of my proof of evidence details the remaining objectors, summarises their grounds of objection, and either summaries NGVL's response or confirms which of the other proofs of evidence submitted to the inquiry by NGVL addresses a particular ground of objection.

12. **CONCLUSIONS**

- 12.1 The need for and benefits of the Viking Link Interconnector are clearly set out in section 4 above and in section 3 of the proof of evidence of Ms Liz Wells (NGVL/LW/1), and as a 'Project of Common Interest' the Viking Link Interconnector has been specifically identified as being of "*overriding public interest*".
- 12.2 As described in section 6, NGVL has made determined and persistent efforts to engage and negotiate with landowners and very good progress has been made in securing the necessary land and rights over land. However, without the confirmation of the Order it is unlikely that all the land and rights needed for the Viking Link Interconnector, which is of national and European importance, could be secured.
- 12.3 As set out in section 7 above, NGVL and Energinet have the experience, resources and commitment to deliver the Viking Link Interconnector.
- 12.4 Following a positive Financial Investment Decision, the NGVL Board considered whether the principles set out in the CPO Guidance (CD Ref: A.12) are satisfied, and having concluded that they are, took the decision to make the Order in reliance on the powers in section 10 of and schedule 3 to the 1989 Act.
- 12.5 The requirements of the Human Rights Act 1998 and the Convention, particularly the rights of property owners, have been fully taken into account. There is a compelling case in the public interest for the Order to be made and confirmed, and interference with the private rights of those with an interest in the land affected would be the inevitable result of the exercise of compulsory purchase powers conferred by the Order and would be lawful, justified and proportionate.
- 12.6 NGVL and Energinet remain fully committed to building and operating the Viking Link interconnector between the UK and Denmark. This commitment is not dependent on UK's membership of the EU.
- 12.7 For the reasons set out in this proof of evidence, I consider that the criteria in the CPO Guidance (CD Ref: A.12) have been satisfied and I am convinced that there is a compelling case in the public interest for the confirmation of the Order.

13. **Declaration**

I believe that the facts stated in this proof of evidence are true.

A.S. McIntosh

Mr Andrew McIntosh

Dated: 4 June 2019