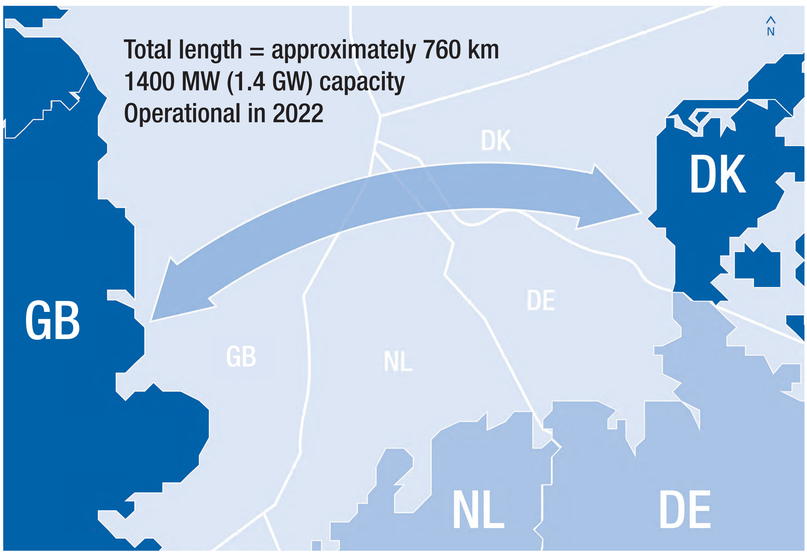
# Welcome to Viking Link

Viking Link is a proposed 1400 MW high voltage direct current (DC) electricity link between the British and Danish transmission systems connecting at Bicker Fen substation in Lincolnshire and Revsing in southern Jutland, Denmark.

Viking Link will allow electricity to be exchanged between Great Britain and Denmark.




The project is being jointly developed between National Grid Viking Link Limited and Energinet.dk.

National Grid Viking Link Limited (NGVL) is a wholly owned subsidiary of National Grid Group and is legally separate from National Grid Electricity Transmission Plc (NGET) which has the licence to own and operate the high voltage electricity transmission system in England and Wales.

Energinet.dk is an independent public enterprise owned by the Danish state as represented by the Ministry of Energy, Utilities and Climate. It owns, operates and develops the Danish electricity and gas transmission systems.

**CONTACT US**

**e** vikinglink@communityrelations.co.uk
**t** 0800 731 0561
**w** www.viking-link.com

# Why we are here

Thank you for coming to this public consultation event about our proposals for Viking Link. The project is at an early stage and the impact of any proposals on local people and the environment will be carefully considered as we develop our project.

We intend to apply for planning permission for the British onshore works through the local planning process and we will consult and listen carefully to local communities as we develop our plans.

Today we would like to introduce the project and explain what we want to build. We will show you the work we have done so far to identify potential site options, and seek your views on the site options we have identified for a landfall site and for a converter station.

Your feedback is important to us and it will help us decide which site options to take forward.

Members of the project team are here today and are happy to discuss any queries or comments you may have.

Once we have confirmed our preferred landfall site and converter station location, we will start to identify where the underground cables may be routed.

If you would like to be kept updated on the progress of our proposals, please leave your contact details at the sign-in desk. You can leave your views on our proposals and the site options we are consulting on by completing a feedback form which are available here today. Please speak to a member of the team to make sure you receive your form.

**Our partners, Energinet.dk, will hold similar consultation events in Denmark to identify feedback on the Danish onshore infrastructure.**

**Together, we are consulting with Dutch and German authorities about our submarine cable route as well as other offshore stakeholders with an interest in the project.**

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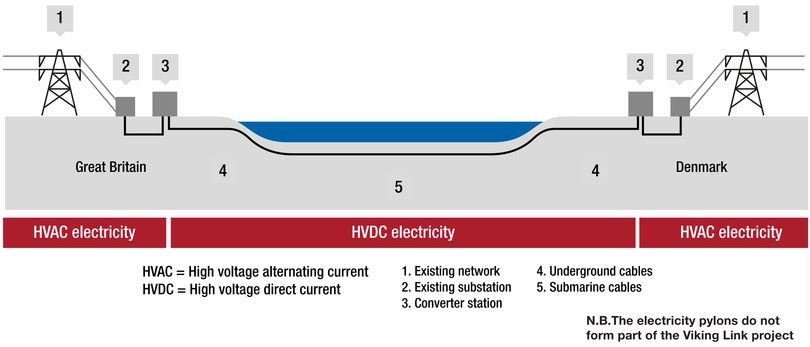
**t** 0800 731 0561
**w** www.viking-link.com

# What is Viking Link?

Viking Link will involve the construction of a converter station in each country and the installation of submarine and underground cables between each converter station and underground cables between the converter station and substation in each country.

The cables will run for approximately 760 km between Great Britain and Denmark and will require the use of high voltage direct current (DC) technology. The electricity networks in Great Britain and Denmark both use high voltage alternating current (AC). Viking Link will use DC technology because it is more effective at transmitting large volumes of electricity over longer distances and provides more control over the power flow.

The diagram below shows the different parts of an interconnector:




The converter station in each country will change the electricity between DC and AC, which is what we use in our homes.

Each end of the link will be connected to an existing substation which will need to be developed to accommodate the new connection. In Great Britain, Viking Link will connect to the existing NGET 400 kV substation at Bicker Fen, Lincolnshire. Connecting to the substations will enable the electricity to be delivered to homes and businesses.

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**e** vikinglink@communityrelations.co.uk
**t** 0800 731 0561
**w** www.viking-link.com

# Getting more connected

## Interconnectors bring benefits to both consumers and producers.

Great Britain faces a major challenge in how it continues to meet the country's increasing energy needs and in addressing the problem of climate change.

Interconnectors like Viking Link can help address these challenges and can bring many benefits, including:

- Improving diversity and security of energy supply by enabling the import of electricity generated from neighbouring interconnected markets.
- Helping the Government meet its carbon reduction commitments by providing access to a well-developed, low cost renewable energy market.
- Lowering the cost of electricity through cross-border trade in electricity and shared use of the cheapest generation sources. This can help consumers in an expensive market to benefit from cheaper imports.
- Increasing market for producers, such as wind power generators – interconnectors increase opportunities to sell electricity, reducing surplus and adding value.
- Facilitating competition in the European market and the optimal use of resources across European Union (EU) Member States.


**The European Commission has identified Viking Link as a Project of Common Interest (PCI). This means it should deliver significant benefits for at least two European Member States, further support market integration and competition, enhance security of energy supply and contribute to reducing $CO_2$ emissions.**

**PCIs are governed under Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure, referred to as the TEN-E Regulations.**

In Great Britain there are four operational interconnectors which together total 4 GW - around 5% of existing electricity generation capacity.

National Grid has two further projects under construction.

Nine more interconnectors are being developed.

For every 1 GW of new interconnector capacity it is estimated Britain's wholesale power prices could reduce by 1-2%.

4-5 GW of new links to Europe could unlock up to £1 billion per year of benefits to energy consumers.

# Connecting to the network

Bicker Fen substation

National Grid Viking Link (NGVL), the company developing Viking Link, applied to National Grid Electricity Transmission (NGET) for a connection to the national electricity transmission network. NGET undertook a study of possible connection points and a number of different options were considered along the east of England. NGET, together with NGVL, identified Bicker Fen substation as the most appropriate connection point.

Details of all the options identified and the assessments are included in a Connection Point Selection Report provided by NGET and a Strategic Options Report produced by NGVL. Copies of these reports can be viewed here today and are available on the Viking Link website.

This information is provided as background and does not form part of the consultation.

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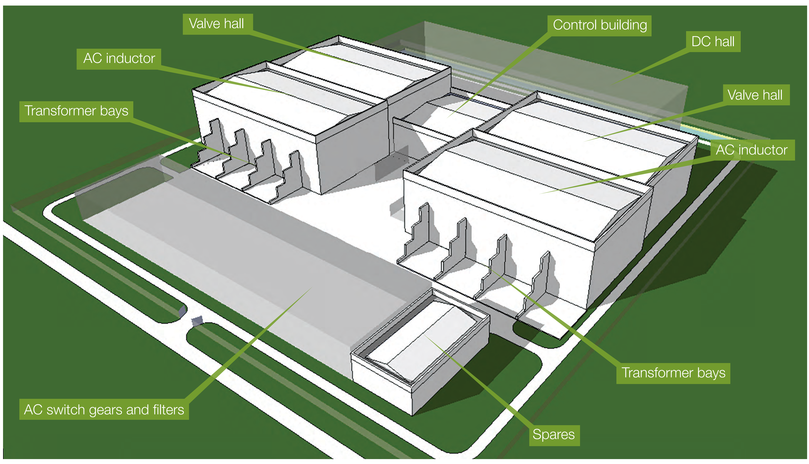
**e** vikinglink@communityrelations.co.uk
**t** 0800 731 0561
**w** www.viking-link.com

# What is a converter station?

A converter station converts electricity between AC, which we use in our homes, and DC which is used for transporting the electricity between Great Britain and Denmark.

We need to transport the electricity as DC because it is more efficient over very long distances. Using DC will mean we only need two cables.




This diagram is not a proposed design but illustrates the main elements of a converter station, which could be arranged differently.

## Typical layout of a converter station

A typical converter station includes a range of specialist equipment, some of which must be located indoors in a series of large buildings, potentially up to 24m tall. A typical converter station includes a control room, transformers, equipment similar to a typical substation, and technology to convert between DC and AC electricity.

We need to find a suitable site to build a converter station. We expect to need about four hectares of land for the operational area.

Please see the available comparable elevation diagram.

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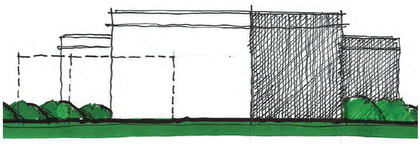
# Converter station design

The main visual impact will be from the converter station. It will be made up of various pieces of electrical equipment, housed in buildings. Some parts of the converter station can either be installed within a building or located outside.

We can design the converter station to help it fit into the landscape by using appropriate architectural treatment. We can use different claddings or finishings for the exterior of buildings to reflect existing structures in the area.

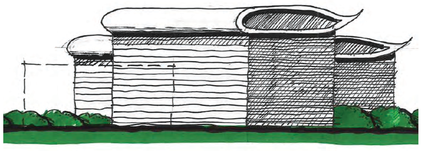
The designs below show some examples of design options and we welcome any thoughts on what you think might work best in your local area.

Any landscaping and screening will vary depending on which location is chosen. We would like to understand what you think is appropriate for the different site options.



Functional

Conceptual



Landmark

We will take on board your comments to help us identify a preferred converter station site. In the summer we will hold a further consultation to provide more information on what the converter station might look like and to seek your views on further design options.

**We understand that your landscape is important to you and we will carry out an assessment of the landscape and visual impact of our proposals.**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**t** 0800 731 0561

**w** www.viking-link.com

# Our approach to converter station site selection

## We carried out a three-stage assessment to help us identify potential converter station sites.

This approach took into account the following:

- Environmental considerations
- Impact on communities
- Planning constraints
- Technical and engineering feasibility
- Safety

The steps we took as part of our three-stage assessment approach are given below.

### STAGE 1

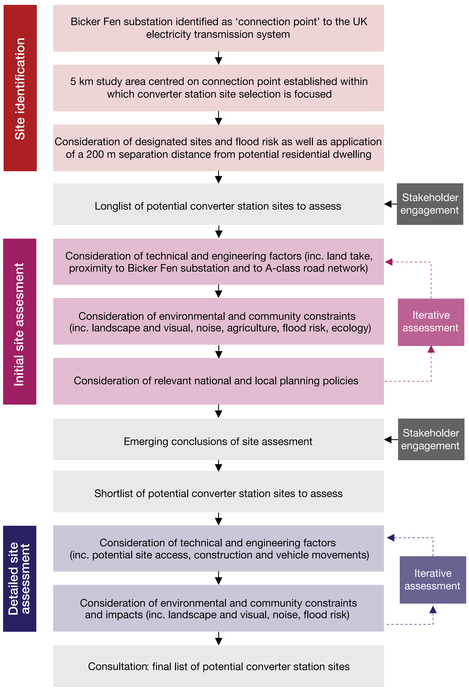
**Site identification:** identifying potential converter station sites by mapping environmental and community factors such as areas with environmental designations, flood risk and proximity to residential properties.

### STAGE 2

**Initial site assessment:** assessments and analysis of environmental and community constraints and impacts, plus basic technical and engineering factors.

### STAGE 3

**Detailed site assessment:** further assessments of key environmental and community factors, in particular, visual, noise and traffic impacts, plus more detailed design options, including possible site layouts.

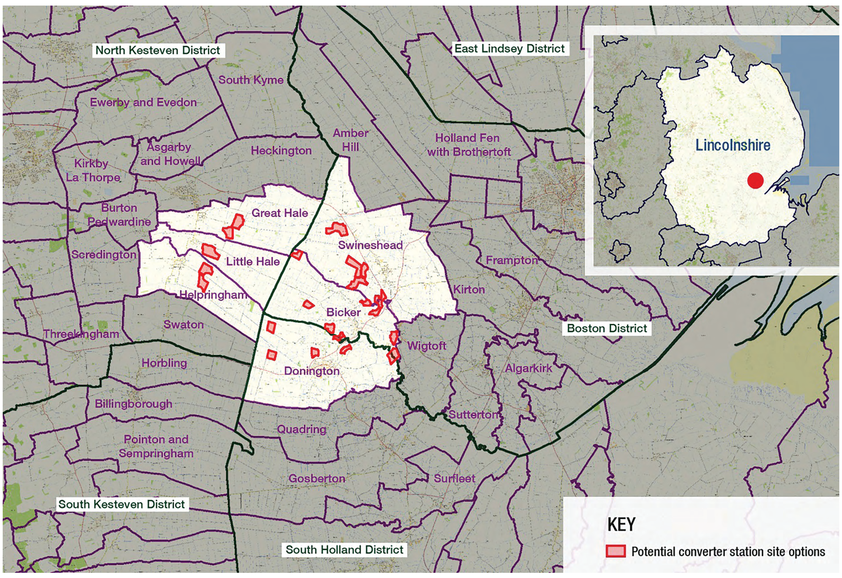



## We limited our search area for potential converter station sites to 5 km from Bicker Fen substation for two key reasons:

- Size of converter station – 5 km is the limit that minimises the equipment required and, consequently, the land needed for the converter station.
- Impact of AC cables - we need to install six cables between the converter station and Bicker Fen substation. Minimising distance helps reduce disruption and land take.

We discussed our approach and findings with local authorities and other stakeholder groups to help us identify our four shortlisted converter station sites. More information on the discounted sites and the four sites taken forward for public consultation is available in the 'Landfall and Converter Station Site Selection Report'.

# Shortlisting our converter station sites




## We identified 21 potential converter station sites within 5 km of Bicker Fen substation.

We discussed these with local authorities and statutory stakeholders, such as the Environment Agency and Natural England, to find out what they felt we should consider and any reasons why a particular site might not be suitable.

We also met with parish councils and local residents in the areas identified to find out what's important to the local community.

Following these discussions, further site visits and desktop assessments as part of stages one and two of our approach, we identified eight potential converter station sites.

Our detailed assessment of these eight sites during stage three did not result in a clear preference for one particular site option compared to the others.

We considered technical and engineering issues alongside potential impacts on the environment and the local community and four options (CS1, CS3, CS5 and CS9) emerged as more preferable. These four sites have been shortlisted for public consultation.

The other four options (CS4, CS6, CS10 and CS17) are technically feasible but are either more constrained or have the potential for greater impact on the local community or landscape.

More details on the criteria we used to assess these sites and our site selection process are set out in our 'Landfall and Converter Station Site Selection Report'.

## We do not have any preference between our four shortlisted options at this stage.

# Discounted converter station site options

## We discounted 13 sites and the key reasons are given below:

| Site | Key reasons to discount option |
|---|---|
| CS2 | ■ High risk of flooding<br>■ Challenges arising from proximity to railway line |
| CS7 | ■ Limited accessibility requiring significant improvement work<br>■ Potential for disturbance to larger number of people<br>■ Distance from Bicker Fen substation meaning longer AC cable route |
| CS8 | ■ Limited accessibility requiring significant improvement work<br>■ Potential for disturbance to larger number of people<br>■ Distance from Bicker Fen substation meaning longer AC cable route |
| CS11, CS12, CS13 | ■ Existing utilities significantly constrain the amount of land available, not possible to develop site |
| CS14 | ■ Existing utilities significantly constrain the amount of land available, not possible to develop site<br>■ Potential for disturbance to larger number of people |
| CS15 | ■ Limited accessibility requiring significant improvement work<br>■ Potential for disturbance to larger number of people<br>■ Distance from Bicker Fen substation meaning longer AC cable route |
| CS16 | ■ Greater environmental impact than alternative sites<br>■ Distance from Bicker Fen substation requires longer DC and AC cable routes |
| CS18 | ■ Limited accessibility requiring significant improvement work<br>■ Potential for disturbance to larger number of people<br>■ Distance from Bicker Fen substation meaning longer AC cable route |
| CS19 | ■ Limited accessibility requiring significant improvement work<br>■ Potential for disturbance to larger number of people<br>■ Distance from Bicker Fen substation meaning longer AC cable route |
| CS20 | ■ Potential for disturbance to larger number of people |
| CS21 | ■ Land available for development is more constrained reducing flexibility for design |

**Please let us know if you think there is anything else we should consider.**

# Converter station site option – CS1

**CS1 is located 1.3 km to the south-southwest of Bicker Fen substation, within the parish of Donington, in South Holland District.**


Our assessment has identified the following important considerations:

## Technical and engineering

### LAND
- 15.08 hectare (ha) plot consists of one flat, low lying arable field with no open drainage ditches
- No constraints
- Space for potential landscaping options and appropriate drainage

### ACCESS
- 1.84 km from the A52 at the nearest point
- Direct access to a local public road (North Ing Drove)
- Potential route to A52 using existing roads is long (approx. 4 km) and includes quiet, narrow rural roads, bends, junctions and bridges could hinder heavy goods vehicles
- Improvements needed on local roads, including widening and some surface repairs. Bridges need to be checked for suitability
- Potential access route passes residential properties in Northorpe Village
- Could construct a new access road (approx. 2.2 km long) rather than use existing local road network

### CABLE CONNECTIONS
- Location of CS1 to south-southwest of Bicker Fen substation would result in longer DC cable route
- AC cable route would be approx. 1.7 km
- AC cable route would need to avoid existing electricity infrastructure associated with Bicker Fen wind farm and substation
- AC cables would need to cross Vicarage Drove before entering substation

## Environmental and community considerations

### NOISE
- Noise impact not regarded as major constraint
- Potential requirement for noise mitigation measures
- Within 0.5 km of some properties and 2.5 km of Donington

### GEOLOGY
- Ground conditions not considered a major constraint

### HYDROLOGY
- A proportion of CS1 is within medium to high flood risk zones, South Forty Foot Drain is main cause of flooding
- Locating converter station within the eastern part of the site would reduce flood risk
- Requirement to install flood protection measures such as raising some electrical equipment

### AGRICULTURE
- Agricultural land classed as 'very good'
- AC cable route (approx. 1.7 km) is shorter than other options, reducing potential for temporary disturbance to agricultural land
- Requirement for new access road (approx. 2.2 km) increases potential for permanent land take and loss of agricultural land

### LANDSCAPE AND VISUAL
- Landscape is open and flat, meaning a converter station would stand out
- Existing large structures in the area (wind turbines and substation)
- Relatively distant from main settlements, but some individual properties within 0.5 km
- Potential to reduce visual impact through design and screening

### ECOLOGY
- AC cable route could impact priority woodland habitat

### HERITAGE
- Over 1 km from any designated heritage sites
- Potential to find archaeological assets during construction, but impact could be mitigated
- Short length of AC cable reduces likelihood of impact on archaeological assets

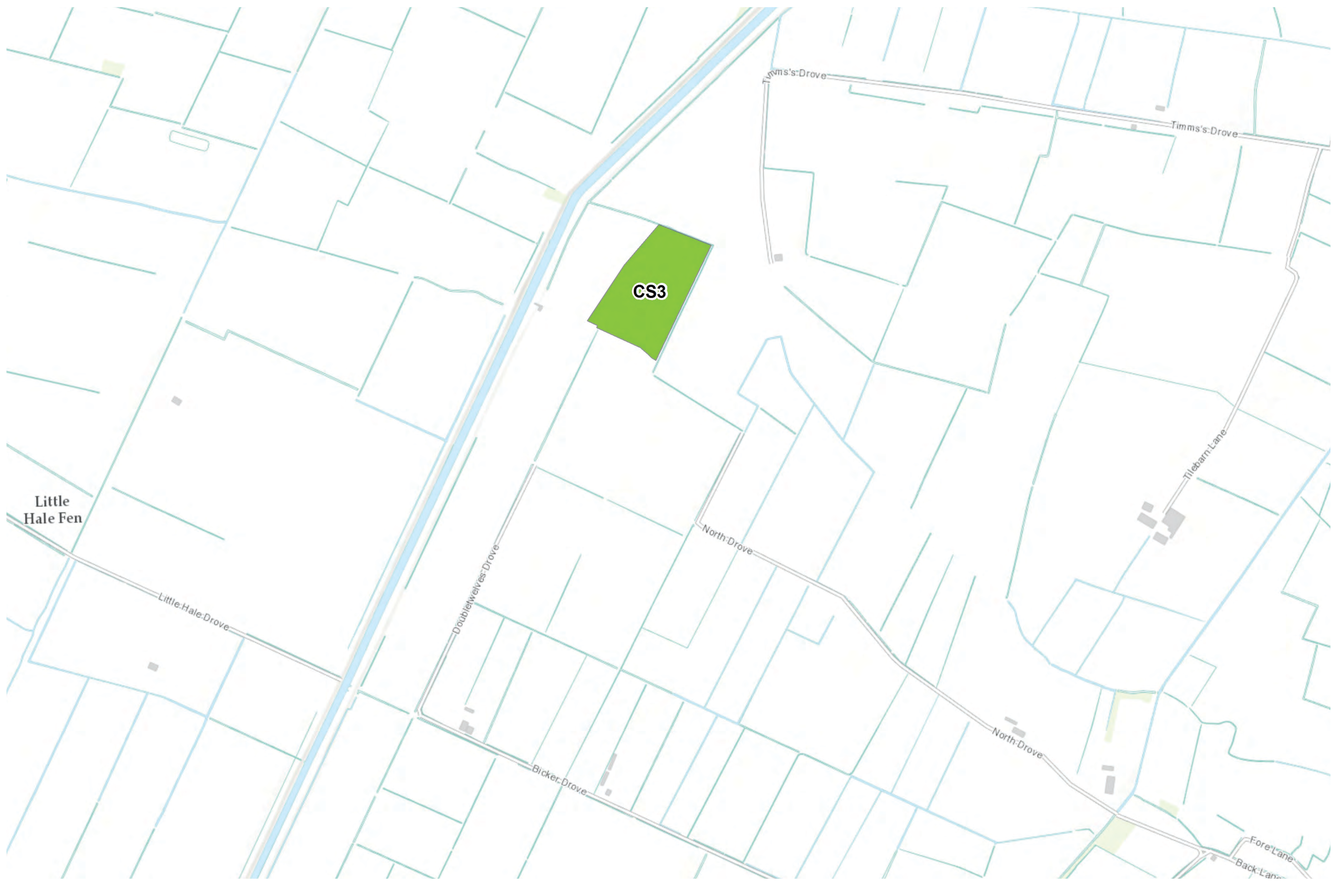
**THE REASONS WE HAVE SHORTLISTED THIS SITE ARE:**

- No constraints on orientation or layout
- Remote from larger settlements and communities reducing potential disturbance
- Proximity to existing development in area allows for better landscape 'fit'
- Closeness to Bicker Fen substation reduces length of AC cable needed - reducing impact on archaeology, ecology and agriculture
- Permanent land take for all infrastructure could be contained in one field
- No significant environmental constraints aside from flood risk
- Potential to develop a new access road to avoid use of local roads through Northorpe village

## Is there anything else you think we should take into consideration when identifying our preferred site?

# Converter station site option – CS3

**CS3 is located 2 km to the north of Bicker Fen substation, within the parish of Bicker, in Boston Borough.**




Our assessment has identified the following important considerations:

## Technical and engineering

**LAND**
- 11.68 ha plot consists of flat, low lying arable land within two fields. No open drainage ditches
- Electricity infrastructure for other proposed developments may run through western part of site
- Reduced site area to 8.84 ha to avoid other potential developments
- Reduced plot area can accommodate converter station with limited flexibility for layout and orientation
- Space for potential landscaping options and appropriate drainage

**ACCESS**
- 2.6 km from A17 at nearest point
- No existing public road access
- Timm's Drove is closest local public road, approx. 600m to north east
- New access road needed from Timm's Drove
- Potential route to A17 using existing local roads is long (approx. 3 km)
- Route passes residential properties
- Improvements needed on local roads, including widening and some surface repairs. Bridges need to be checked for suitability
- Could construct a new access road (approx. 3.3 km long) rather than using local road network

**CABLE CONNECTIONS**
- Shortest DC cable route compared to sites further south
- AC cable route would be approx. 2.48 km long
- AC cables would need to cross Double Twelves Drove/North Drove and Bicker Drove
- AC Cable route would need to avoid existing electricity infrastructure associated with Bicker Fen wind farm and substation

## Environmental and community considerations

**NOISE**
- Not close to large settlements but individual properties located within 2 km
- Possible cumulative effect with Bicker Fen wind farm and associated substation
- Potential requirement for noise mitigation measures

**GEOLOGY**
- Possible presence of peat may limit ground improvement options

**HYDROLOGY**
- Located within areas of medium and low flood risk
- Proximity to South Forty Foot Drain will influence design

**AGRICULTURE**
- Agricultural land classed as 'very good'
- Longer AC cable route (approx. 2.48 km) increases potential for temporary disturbance to agricultural land
- Requirement for new access road (approx. 3.3 km) increases potential for permanent land take and loss of agricultural land

**LANDSCAPE AND VISUAL**
- Landscape is open and flat meaning a converter station would stand out
- South Forty Foot Drain embankment provides some screening to west
- Distant from main settlements, and individual properties greater than 0.5 km from the site
- Potential to reduce visual impact through design and screening
- Proximity to existing and proposed infrastructure means site would be seen within context of similar developments which influence landscape character

**ECOLOGY**
- South Forty Foot Drain is designated Local Wildlife Site
- Priority habitats next to site and along potential AC cable route

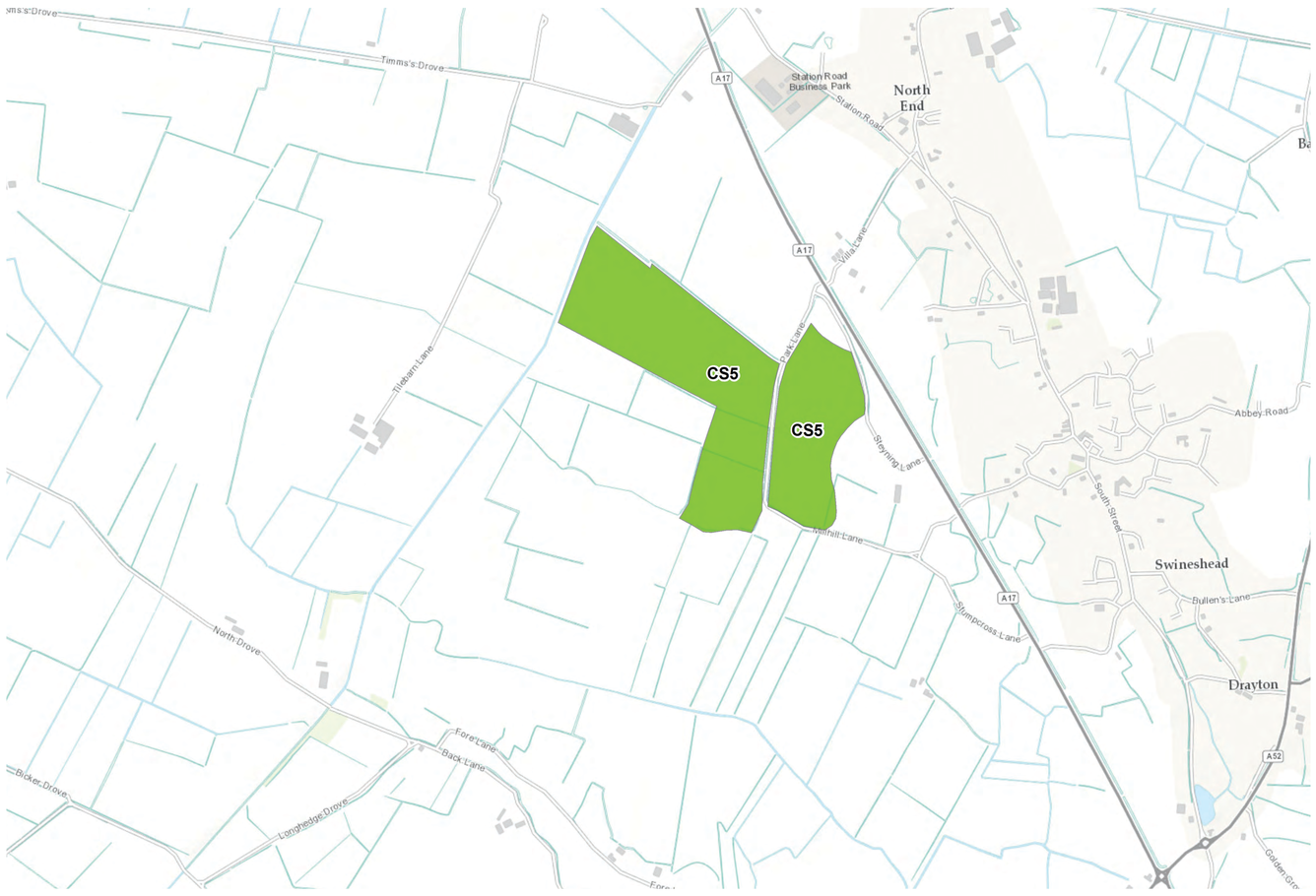
**HERITAGE**
- Located over 2.5 km from any designated heritage sites
- Potential to find archaeological assets during construction, but impact could be mitigated
- Short length of AC cable reduces likelihood of impact archaeological assets

**THE REASONS WE HAVE SHORTLISTED THIS SITE ARE:**
- CS3 is large enough and allows for some flexibility of layout and orientation
- Additional suitable land is available next to the site, if required for landscape screening or construction purposes
- Closeness to Bicker Fen substation reduces length of AC cable needed - reducing impact on archaeology, ecology and agriculture
- Proximity to existing and proposed infrastructure development allows for better character 'fit'
- Remote from larger settlements and individual properties, reducing potential disturbance
- Permanent land take for all infrastructure could be contained in two fields
- No significant environmental constraints within the site
- Potential to develop a new access road to avoid use of local roads and bridges

## Is there anything else you think we should take into consideration when identifying our preferred site?

# Converter station site option – CS5

**CS5 is located 2.9 km to the northeast of Bicker Fen substation, within the parish of Swineshead, in Boston Borough.**




Our assessment has identified the following important considerations:

## Technical and engineering

**LAND**
- 47.16 ha plot consists of flat, low lying arable land and is split in two by Park Lane
- Western plot is 32.06 ha and forms L-shape across two whole fields and part of another
- Eastern plot is 15.1 ha and includes parts of five fields
- Small section of drain in far south east corner
- Accommodates converter station footprint with minimal constraints to layout or orientation
- Space for potential landscaping options and appropriate drainage
- Temporary construction compound could fit within plot

**ACCESS**
- 0.04 km from A17 at nearest point
- Direct access to Park Lane, a local public road
- Short route to main road network using existing public road network (320 m)
- Access to main road network without passing residential properties
- Improvements would be needed on Park Lane, include widening and some surface repairs
- Could construct a new access road (approx. 0.5 km long) directly from the A17

**CABLE CONNECTIONS**
- Shorter DC cable route compared to sites further south
- AC cable route would be approx. 3.7 km long (measured from the centre of both sites)
- AC cables would need to cross drains, including Hammond Beck
- AC cables would need to cross North Drove and Bicker Drove and existing gas pipeline
- AC cables would need to avoid existing electricity infrastructure associated with Bicker Fen wind farm and substation

## Environmental and community considerations

**NOISE**
- Low background noise despite closeness to A17
- Closer to larger settlement than other options (Swineshead), as well as individual properties within 0.5 km
- Potential requirement for noise mitigation measures

**GEOLOGY**
- Possible presence of peat may limit ground improvement options
- Ground conditions present a potential constraint which may affect site design and construction methods

**HYDROLOGY**
- Located mostly outside of flood risk areas
- Small areas of western part of site within low-medium flood risk area - coincides with Hammond Beck and drains within site
- Drains need to be carefully considered during design

**AGRICULTURE**
- Agricultural land classed as 'excellent'
- Longer AC cable route (approx. 3.7 km) increases potential for temporary disturbance to agricultural land
- Closeness to A17 reduces the potential permanent land take for new access roads

**LANDSCAPE AND VISUAL**
- Landscape is open and flat meaning a converter station would stand out
- Closeness to Swineshead to east and individual properties within 0.5km
- Potential to reduce visual impact through design and screening
- Potentially visual impact to largest number of properties

**ECOLOGY**
- Badgers may be present, but potential impacts can be mitigated
- AC cable route could impact priority woodland habitat

**HERITAGE**
- No designated heritage assets within site, but closer than other options to Grade I listed church, two scheduled monuments and several Grade II listed buildings
- Could require design measures to prevent and/or reduce impacts on these assets
- Potential to find archaeological assets during construction, but impact could be mitigated
- Longer AC cable route increases the likelihood of impact on archaeological assets

**THE REASONS WE HAVE SHORTLISTED THIS SITE ARE:**
- CS5 is large enough and allows for flexibility of layout and orientation
- Additional suitable land available next to site, if required for construction purposes
- Close to A17 with direct public road access avoiding residential properties
- Potential to build new access road to A17 if required
- No significant environmental constraints within site

## Is there anything else you think we should take into consideration when identifying our preferred site?

# Converter station site option – CS9

**CS9 is located 0.07 km to the east of Bicker Fen substation, within the parish of Bicker, in Boston Borough.**


Our assessment has identified the following important considerations:

## Technical and engineering

### LAND
- 11.03 ha plot consists of flat, low lying arable land within one field. No open drainage ditches within site, although bordered by hedges and drains open field
- Accommodates converter station footprint with no constraints to layout or orientation
- Space for potential landscaping options and appropriate drainage
- Space for temporary construction compound

### ACCESS
- 2.34 km from A17 at nearest point
- Direct access to Vicarage Drove, a local public road
- Long potential access route from CS9 to A17 using existing roads (approx. 5 km)
- Access route would use quiet, narrow rural roads and could include the provision of new roads
- Improvements needed on local roads, including widening and some surface repairs
- Existing access options via public roads through Bicker are unsuitable
- Could make use of an existing haul road from the A52 to avoid local roads through Bicker village
- Option to construct a new access/haul road approx. 1.4 km long to avoid the use of Cowbridge Road past residential properties

### CABLE CONNECTIONS
- Shorter DC cable route compared to site further south
- Very short AC cable route approx. 0.4 km long
- AC cables would need to cross Vicarage Drove and a drain

## Environmental and community considerations

### NOISE
- Not close to large settlements but individual properties located within 2 km
- Closest individual property is 0.37 km to east
- Possible cumulative effect with Bicker Fen wind farm and associated substation, as well as existing Bicker Fen substation
- Potential requirement for noise mitigation measures

### GEOLOGY
- Minimal ground improvement work likely

### HYDROLOGY
- Located within areas of medium to low flood risk
- Flood protection measures to be incorporated into design
- Bordered by drains on all sides including Hammond Beck

### AGRICULTURE
- Agricultural land classed as 'very good'
- Very short AC cable route reduces potential temporary disturbance to agricultural land
- Access could make use of existing haul road and public roads, however, option to extend haul road would increase land take and potential loss of agricultural land

### LANDSCAPE AND VISUAL
- Landscape is open and flat but close to existing developments similar in character - easier to blend converter station in to surroundings
- Distant from main settlements, but some individual properties are within 0.5 km
- Existing screening around Bicker Fen substation would reduce visual impact from west
- Potential to reduce visual impact through design and screening

### ECOLOGY
- Partly located within area of medium value for wintering birds
- No species of concern identified
- AC cable route could impact priority woodland habitat

### HERITAGE
- No designated heritage sites close to site
- Archaeological investigation to west found little of significance
- Low potential to find archaeological assets during construction, impact could be mitigated
- Short length of AC cables reduces likelihood of impact on archaeological assets

**THE REASONS WE HAVE SHORTLISTED THIS SITE ARE:**

- CS9 is large enough and allows for flexibility of layout and orientation
- Enough space to allow for potential landscape and drainage requirements as well as temporary construction facilities
- Closeness to Bicker Fen substation reduces length of AC cable route needed - reducing impact on archaeology, ecology and agriculture
- Proximity to existing electricity infrastructure allows for better landscape 'fit'
- Remote from larger settlements and individual properties, reducing potential for disturbance
- No significant environmental constraints within the site

# Is there anything else you think we should take into consideration when identifying our preferred site?

# Approach to cable routeing

All our cables will be buried underground and when our construction work is completed, they will not be visible.

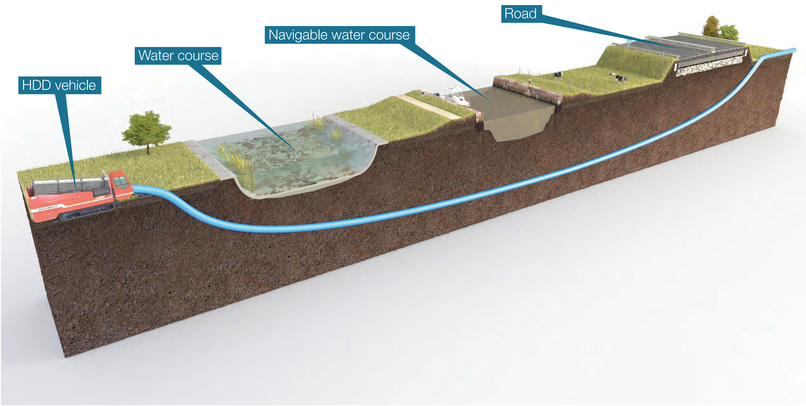
We need to route two underground DC cables for approximately 50 km between the landfall site and converter station. Typically, the cables will be buried in a trench to a depth of approximately 1.5 m depending on ground conditions and activities.

We will also need to identify a suitable route for six underground high voltage AC cables between the converter station and Bicker Fen substation.

We will need to carry out a range of surveys and assessments and hold detailed discussions with local authorities, statutory organisations, landowners and other stakeholders. There are many factors which need to be taken into account, including:

- Impact on local communities
- Land usage and drainage
- Environmental constraints
- Ecology
- Archaeology and cultural heritage
- Impact on transport routes
- Accessibility
- Potential cumulative impacts with other projects in the region
- Constructability

**When we have more information, we will consult with parish councils and local residents to identify the most appropriate route corridor for the cables.**




This diagram shows the horizontal directional drilling (HDD) technique crossing under a road and water courses.

**CONTACT US**

**e** vikinglink@communityrelations.co.uk
**t** 0800 731 0561
**w** www.viking-link.com

# Options for a landfall site

We are also consulting on the site options we have identified for where we might bring the submarine cables onto the Lincolnshire coast and connect them to the onshore underground cables.

We carried out a two-stage assessment approach to help us identify potential landfall sites:

Stage 1 - potential site identification: based on mapping of environmental constraints, settlements and residential properties as well as proximity to road network

Stage 2 - site assessment: consideration of a range of potential impacts on the environment, local community and tourism as well as basic technical and engineering factors

Across the two stages of assessment, we identified six potential landfall site options. We discussed our approach and findings with local authorities and other stakeholder groups. After further assessment and careful consideration of factors such as environmental, engineering and access constraints, and closeness to residential properties, we have **shortlisted three potential sites**.

Each landfall site has its own merits and we do not have any preference at this stage.

Further information on our assessment is set out in our Landfall and Converter Station Site Selection Report.

If you would like to take part in our consultation on these shortlisted landfall sites, you can find out more on our website or by coming along to one of our landfall site public exhibitions.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# Working in the local community

We are committed to being good neighbours and we want to work with you as we develop our proposals.

We are at an early stage of our design work and we aim to minimise any disruption during our survey and exploratory work as well as during the construction work.

We will carry out a full Environmental Impact Assessment (EIA) to understand any potential impacts of our proposals. The report from this assessment, called an Environmental Statement, will be submitted as part of our planning application. We will also submit a Construction Management Plan which will set out how we manage and mitigate impacts during construction.

### Submarine cabling

Submarine cables are installed using large specialist vessels which are able to transport and lay long sections of cables (up to 100 km in length). The cables will be buried in the seabed. Some cable joints will need to be made at sea during the installation process.

### Onshore cabling

The DC and AC underground cables will be installed using a variety of methods including open cut installation and trenchless techniques, which could include horizontal directional drilling (HDD) depending upon the ground conditions and obstacles along the cable routes. Cable joints will need to be made at sections along the route during installation. These will not be visible once the work is completed.

### Converter station

Construction of the converter station will depend on the final design and technology used. The site preparation, ground works and construction of buildings will be followed by the installation of electrical equipment.

## We are here to help

If you have any questions or concerns, we are here to help.
Please do get in touch.

Tel: 0800 731 0561
Email: vikinglink@communityrelations.co.uk
Write: FREEPOST VIKING LINK

Our telephone service is available between 9am and 5.30pm (Mon – Fri). Outside of these hours an answerphone is in operation and messages will be picked up during the next working day.

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**w** www.viking-link.com

VikingLink

nationalgrid

# Project timeline

## We aim to be operational by 2022

**2014**

- Cooperation agreement between National Grid and Energinet.dk
- NGVL granted interconnector licence

**2015**

- Ofgem 'cap and floor' regulatory regime confirmed
- PCI status confirmation

**2016**

Spring
- First stage consultation
- Marine surveys start

Summer
- Energinet.dk hold similar consultation events in Denmark
- Second stage consultation
- Environmental surveys start

**2017**

Consent applications
- Onshore elements of project to Local Planning Authorities
- Marine elements to Marine Management Organisation
- Danish offshore and onshore work
- Netherlands and Germany permits for offshore route through territorial water

**2018**

- Financial Investment Decision
- Construction Contracts Awarded

**2019**

- DC cable manufacture and installation
- Commence construction

**2022**

- Testing, commissioning and operating


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# Next steps

We would like to hear your views on our assessments of the landfall site options and converter station site options, and if there is anything else you think we should take into consideration when identifying our preferred sites.

We would also be interested if you have any views on how the converter station should look.

Feedback forms are available here for you to complete today or you can post them back to us using our freepost address.

The closing date for consultation feedback is Friday 20 May 2016.

All your consultation responses will be considered and we will report back when we confirm our preferred landfall site and converter station site.

We will hold a further consultation in the summer on the design of the converter station and to discuss how we will route the underground cables.

Thank you for taking the time to attend today's consultation event.

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