

# westernlink news



# Introduction

National Grid and SP Transmission have come together in a joint venture to build the Western Link, a project designed to help increase the amount of power that can be generated by renewable energy in the UK.

We have appointed Siemens/Prysmian as the main contractor for the project. This newsletter is one in a series that we will produce periodically to let you know what is happening on the Wirral peninsula as the project progresses.

## The energy challenge

The UK faces a major challenge over the coming years, as we look to tackle climate change and reduce carbon emissions. One way of helping to meet this challenge is to increase the amount of energy generated by renewable sources such as wind and water.

The amount of renewable energy generated in Scotland is increasing rapidly. At present the Scottish transmission system is linked to the system in England and Wales by two overhead electricity transmission lines, which are running at full capacity.

To enable the new sources of renewable energy to connect into the electricity transmission system, an additional link with Scotland is needed. Summer newsletter 2012

# The Western Link project

The best way to provide this link is to construct a new high voltage direct current cable.

Elsewhere in the UK, electricity is transmitted by alternating current. The Western Link project therefore incorporates a converter station at each end of the link to change the electricity from direct current to alternating current to enable it to be used within the existing national grid transmission system.

Our project can be divided into four sections:

- A converter station at Hunterston, North Ayrshire and approximately 4km of high voltage direct current cable to a 'landfall', where the subsea cable comes ashore, at Ardneil Bay.
- A subsea marine cable approximately 385km long from Ardneil Bay to Leasowe on the Wirral peninsula.
- An underground high voltage direct current cable of approximately 33km through the Wirral peninsula.

Hunterston

Deeside

• A converter station and an alternating current cable connecting it to the substation currently being constructed on National Grid's site in Deeside, Flintshire.

## The Wirral cable

In planning, designing and constructing the Western Link we aim to minimise disturbance to communities and the environment.

One of our initial ideas was to route the cable through the Dee Estuary as it is the most direct route, but this was not feasible. The movement of the sand on the bed of the river and the use of the estuary by shipping increased the possibility that the cable would not work properly or would be damaged. Also, the Dee Estuary is classed as an area of high environmental importance.

In February 2011 we published our preferred route corridor, which was quite wide at this stage, and we held a number of public information events to obtain feedback from the local community.

Since this time, the feedback received from public consultation and statutory consultees, further investigations into the technical feasibility of construction and discussions with landowners have helped to develop a detailed cable route. This is shown on pages 4 and 5.

Discussions with landowners and other interested parties are continuing, and some very minor revisions of the route may result from these.



In February 2011 we

2011 we published our preferred route corridor **)** 



# Selecting our route – planning and environment

Our technical and environmental studies started very early in the project. These have looked at how and where we will land the cable and how it will be installed along the Wirral peninsula.

The cable will be laid mainly in agricultural fields. Routeing this kind of cable through roads is difficult because of the presence of other services such as gas, water and electricity, and it causes temporary, but significant, disruption to communities and road users.

We have avoided routeing the cable where there are environmental designations such as Special Protection Areas and Sites of Special Scientific Interest. Where sensitive areas of woodland cannot be avoided, we are using a method of construction, horizontal directional drilling, to go underneath and so avoid any impact.

We will ensure that any sections of hedgerow removed to install the cable are replaced. This may provide some enhancement where existing hedgerows have gaps. We will also plant trees to replace those we need to remove.



 More detail is available on our website www.westernhvdclink.co.uk

See our new contact details on the back page



# Surveys

During the spring and early summer we have been carrying out initial habitat surveys along the cable route. These help identify areas where we will need to undertake detailed surveys for protected species such as bats, badgers and reptiles.

Throughout the spring we have been carrying out surveys of ponds and ditches along the cable corridor to identify where Great Crested Newts, a European protected species, are present.

All the surveys undertaken help us to develop appropriate mitigation measures and make licence applications, where necessary.







Where the cables come ashore and cross the River Dee they are widely separated and so are shown as two lines on the map.

# Overview of a subsea high voltage direct current system



### Selecting our route - consultation and further studies

We have been consulting with local authorities, statutory consultees such as Natural England and the Environment Agency and other key stakeholders such as MPs. We also held public exhibitions in Moreton and Neston in February 2011 to explain our plans at that stage and listen to what is important to you.

The most important part of our consultation is the feedback we receive. This has helped us develop our plans and make changes in a number of important areas.

The consultation feedback report is on our website **www.westernhvdclink.co.uk/content/library.** 

#### Wirral landfall - Leasowe

At our exhibitions in February 2011 we showed two possible 'landfall' locations, where the cable comes ashore, one at Dove Point, Meols, and another at Leasowe.

Your feedback included a number of responses relating to the landfall options.

We carried out further studies into the onshore and offshore environmental disturbance and technical feasibility. Taking into account the results of these studies and the responses to our consultation, landfall to the west of Leasowe is the best route.

#### Puddington

Known archaeological sites were identified along the length of the cable route from a number of sources, including the Historic Environment Record, and through feedback from local consultation. We have carried out surveys near Puddington to establish more detail on the archaeological site and we have routed the cable in this area to avoid significantly affecting the archaeology.

Before we start work in the area we will develop a method of working to ensure that we do not impact on the archaeological site. We will follow guidance from the Institute for Archaeologists and work in close consultation with Cheshire West and Chester Council.

More detail is available on our website **www.westernhvdclink.co.uk** 

#### Arrowe Park Golf Course

At our exhibitions in February 2011 we showed two possible routes, one along Thingwall Road East and one through Arrowe Park Golf Course.

Since then we have carried out further detailed technical studies into the feasibility of both options, as well as the level of disturbance that they would cause.

The studies showed that because of the presence of other services such as gas, water and electricity within Thingwall Road East, this route was not technically feasible without re-routeing the existing services and so causing a significant level of disturbance.

The route through the golf course is being designed to minimise the effect on the environment and the users of the course. We have held a meeting with golf club representatives to explain our plans in more detail and will continue to update them as the project progresses.

> The most important part of our consultation is the feedback we receive. **?**

# What constructing the cable means to you

Our priority is to minimise disruption to the communities where we are constructing this cable and to the land through which it passes.

Before we start construction, we will discuss with the local authorities a traffic management plan and an environmental management plan, which will set out how we will control the effects of construction with regards to traffic movements, noise, dust, waste and pollution.





## Temporary working corridor

We will establish a temporary working corridor, around 20m wide in agricultural land, but less where the cable needs to cross or travel along roads. The temporary corridor will be fenced off while it is being used.

Within this corridor we will install two cables in a single trench approximately 1.5m deep and 1m wide. The cables will be laid in sections of approximately 500-800m, with joints where the sections meet. A number of teams will start from different points on the route to install the cable. We are still finalising our construction plan and will be able to provide more details nearer to the start of construction.

The corridor will also be used to store material excavated from the trench dug for the cable and to install drainage and a temporary road for the delivery of the cable, which arrives on large drums.

## Traffic management

Where we are installing the cable in roads we will minimise disruption as much as possible.

We will do what we can to keep local roads open, but we may need some short-term road closures where the cable crosses or runs within minor roads. Where this is the case we will work closely with the local authorities to ensure that the road is closed for as short a time as possible and that appropriate traffic management is in place. We will keep local residents informed.

Our work will affect some footpaths and bridleways, which may need to be closed temporarily, but we will make diversions available where possible. We are working with our contractor to develop the construction programme and will provide this level of detail later in the project, but before construction begins.

When the cable has been laid, we will return the land to its previous condition, as a minimum.



# About National Grid

National Grid is an international electricity and gas company and one of the largest investorowned energy companies in the world. We play a vital role in delivering gas and electricity to millions of people across Great Britain in an efficient, reliable and safe manner.

National Grid owns and operates the high voltage electricity transmission network in England and Wales; balancing supply and demand, minute-by-minute, every day of the year.

# About SP Transmission

SP Transmission is part of SP Energy Networks, which owns and operates the network of cables and power lines that transports electricity to around 3.5m homes in the south of Scotland, Cheshire, Merseyside, north Shropshire and North Wales. SP Transmission manages 3,653km of overhead power lines and 288km of underground cable.





## Next steps

We are working with our contractor to develop the programme for construction. Some initial work to prepare for the main construction of the cable is likely to begin later this year. Main construction is planned to start in early 2013 and be complete by the end of 2015.

Before we start construction we will hold a series of public information events to let you know the details of what is planned in your area. We will write to you and advertise these nearer the time that construction starts.

# Contact us

If you would like more information or have any queries about the project, please contact our community relations team by:



Calling us on 0800 021 7878



Emailing us at westernlink@communityrelations.co.uk



Writing to us at FREEPOST WESTERN LINK

If you, or someone you know, would like the information in Braille, audio, large print or another language, please call us on the freephone number above.

Additional information, including a more detailed map, is available on our website **www.westernhvdclink.co.uk.** 

**C** We will hold a series of public information events **>>** 



# national**grid**