# Gridline

The magazine for National Grid grantors Summer 09

national**grid** 

The power of action.

# Securing the future

Green light for planning reform

#### Water works

Accessing pylons by canal barge



Also in this issue: lands officer new starters, National Parks, project news, win a hotel break

# Contents



#### NEWS

04 Could Carbon Capture and Storage (CCS) help the UK meet emission targets?05 Up close and personal with the world's fastest animal

#### **FEATURES**

06-09 How the new
Planning Act will deliver key infrastructure projects on time
10-11 Linesmen take to canal barges in outer London
12-13 Project round-up
14-15 How National Grid works with the Campaign for National Parks

**16-17** Four new lands officers talk about their backgrounds in farming or land management



#### PROFILES

**18-19** Keeping memories of steam alive at the Foxfield Light Railway in Staffordshire

#### **COMPETITION PAGE**

**20** Enter the competitions to win a Sony Handycam or a weekend hotel break



#### NATIONAL GRID'S LAND AND DEVELOPMENT GROUP

is responsible for acquiring all rights and permissions from statutory authorities and landowners needed to install, operate and maintain National Grid's electricity and gas transmission networks. The Group acts as the main interface for landowners who have gas and electricity equipment installed on their land. Listed below are your local land and development team contacts.

#### ELECTRICITY AND GAS

North west and Scotland
 0161 776 0706
 South east 01268 642 091
 South west 01452 316 059

South west 01452 316 059
 East 0113 290 8235.

#### WAYLEAVE PAYMENTS

For information on wayleave payments, telephone the payments helpline on 0800 389 5113.

#### ELECTRICITY EMERGENCY

Emergency calls to report pylon damage to National Grid can be

made on 0800 404 090. Note the tower's number – found just below the property plate – to help crews locate it.

#### ELECTRIC AND MAGNETIC FIELDS

■ For information on electric and magnetic fields, call the EMF information line on 08457 023 270 (local call rate). Website: www.emfs.info. GAS EMERGENCY ■ 0800 111 999.



#### **DEVON DELIGHT**

Congratulations to farmer David Moore of Cleave Farm, near Bideford in North Devon, who is the winner of the Sony Handycam competition in the Spring issue of Gridline magazine.

David manages a dairy farm in partnership with his wife Liz, their daughter and son-in-law. Their farm also produces all the feed for the 500-strong herd of Holstein-Friesen heifers, and their progeny.

"At the moment we only have a small digital camera, so the handycam will be very useful for filming our grandchildren as they grow up," said David.

#### **GET IN TOUCH**

Please contact Gridline if: ■ You have any news which you think would be of interest to other grantors

 You think that your business or hobby would make a good article
 You have any suggestions for topics you would like to see covered in Gridline.

Gridline is produced by Summersault Communications, 23-25 Waterloo Place, Learnington Spa, Warwickshire CV32 5LA. To contact Gridline either phone 01926 654 948, email gridline@uk. ngrid.com or write to the above address.

# Welcome to **Gridline**

#### GOT A STORY?

CALL: 01926 654 958 or email gridline@uk.ngrid. com. Or write to Gridline, Summersault, 23-25 Waterloo Place, Warwick St, Leamington Spa, Warwickshire CV32 5LA.



Once again the land and development team are attending a full programme of county shows up and down the country this summer. We value this opportunity to say thank you to those grantors affected by essential works.

Our special feature on page 6 focuses on the 2008 Planning Act, which came into force in November. Described by some commentators as the most significant overhaul in the planning system in the last 50 years, the act is designed to enable nationally

*important infrastructure projects to come on stream more quickly. Hector Pearson, National Grid's land and development stakeholder and policy manager, explains why the Act is so important if the UK is to secure reliable energy supplies into the future and meet the nation's carbon reduction targets.* 

Liaising with grantors and other landowners when access is required for work on overhead power lines is an important part of the job of a National Grid lands officer. But most projects don't involve the challenges associated with an overhead line refurbishment in the Lea Valley, in outer London, where linesmen are working on pylons running alongside a canal. Turn to page 10 to find out more about this unusual project.

On page 14 we turn our attention to the National Parks which in 2009 celebrate the 60th anniversary of the landmark legislation that created them. National Grid is committed to caring for the environment in the rare event that it needs to carry out works in a National Park. We work closely with the Campaign for National Parks and are a member of its Corporate Forum. The regular Forum meetings provide a valuable opportunity for both parties to discuss any issues which arise at an early stage.

On page 16 we meet four lands officers with a background in farming or land management who have joined National Grid in recent months. They talk about their experiences working in a rural environment and the insights this has given them.

For our grantor profile on page 18 we visit the Foxfield Light Railway in Staffordshire, where dedicated volunteers enable visitors to step back in time to an age when steam engines powered the industrial revolution.

*Finally, don't forget to turn to the back page for our regular competitions to win a Sony Handycam and a fantastic weekend away courtesy of Britannia Hotels.* 

Clave white.

Editor, Gridline



#### Open Farm Sunday showcases farming

New research by Linking Environment and Farming (LEAF), supported by the University of Exeter, indicates that the UK public now has a much more positive image of farmers.

Compared with 2007, nearly 10 per cent of the survey respondents have visited a farm in the last 12 months. Only 12 per cent said that it didn't matter where their food came from. Some of this change is down to events like Open Farm Sunday, which encourages people to visit working farms. National Grid is a sponsor of the event, organised by LEAF.

"It is heartening to see the public are taking such an interest in their food and where it comes from," said Caroline Drummond, chief executive of LEAF.

"Open Farm Sunday is a great opportunity to meet farmers and to see for yourself the care that goes into both producing the food on your plate and the countryside around you."



BACKING FARMERS: (left to right) Professor Michael Winter (University of Exeter) and Caroline Drummond at an Open Farm Sunday media event

## New technology to slash emissions?

National Grid could play an important role in the drive to cut greenhouse gases by piping carbon dioxide emissions from UK power stations and heavy industry to storage sites beneath the North Sea.

In a Carbon Capture and Storage (CCS) system, carbon dioxide is captured and compressed, and then pumped via a network of pipelines to a well in an offshore site previously used for gas extraction.

National Grid has identified gas and coal-fired power stations in Humberside, the Thames Estuary and Scotland as being particularly suitable for CCS because they are close to the North Sea oil and gas fields. It is also examining how clusters of power stations adopting CCS could benefit by sharing the same pipeline infrastructure.

"The schemes being looked at could result in an emission reduction equivalent to taking nearly all of Britain's cars off the road," said Jim Ward, CCS project manager at National Grid.



## Safer sport for all

village sports field and play park in the Lincolnshire village of Bicker has been made more secure thanks to a new £50,000 fence paid for by National Grid.

The donation was part of a major project to build a new electricity substation at Bicker Fen, close to the village.

"This is a gesture of thanks to the residents of

Bicker for bearing with us while the substation was under construction, and as a socially responsible company, the opportunity to leave a lasting legacy for the local community," said Gary Walton, National Grid delivery engineer.

The sturdy six-foot-high fence will ensure stray footballs no longer land in the road or neighbouring gardens, and will help develop the venue for sports coaching.



GREEN AWARD: Overall 2008 winner Glasnant Morgan

## Sign up for best practice walks

Three award-winning Welsh farmers are hosting farm walks later this summer to demonstrate how successful commercial farming can be combined with sensitive environmental management.

The programme of walks, organised by the Farming & Wildlife Advisory Group (FWAG) Cymru, will involve Glasnant Morgan, the overall national winner of the FWAG Cymru-National Grid Silver Lapwing Farm Conservation Awards, and the regional winners Rob and Eleri Davies (South Wales) and Stuart Tavlor (North Wales).

#### DATES:

21 Aug – Glasnant Morgan, Pwllyrhwyaid Talybont on Usk, Brecon 8 Sept – Rob and Eleri Davies, Treginnis Uchaf, St David's, Pembrokeshire 17 Sept – Stuart Taylor, Argoed Farm, Main Road, New Brighton, Mold, Flintshire. Walks start at 2pm. To book please contact FWAG Cymru on 01341 421 456.



## Talon spotting in Lancashire

inesmen working on the Heysham Ring overhead line refurbishment project in West Lancashire have observed one of nature's wonders at close quarters.

Peregrine falcons are the fastest animals in the world, reaching a top speed of 200mph when they stoop or dive on their prey.

Ecological surveys had indicated the birds were a frequent visitor to some of the line's pylons running through the Lune Estuary. The birds prey on the large population of overwintering wildfowl in the area.

Before the breeding season in February, linesmen climbed towers thought to be

particularly vulnerable to nesting in order to net off access to the box sections of the pylon cross arms.

"Work was briefly suspended in March when a pair of falcons were spotted visiting one of the pylons," said Dave Allcock, project manager Electricity Alliance West. "We obtained a special Licence to Disturb from Natural England to enable the work to continue, but on inspection no eggs or nests were found."

Peregrines carry one of the highest standards of legal protection and if they are harmed, the perpetrators can face fines of up to  $\pounds$ 5,000 and even imprisonment.

#### Dates for the diary

The county show season kicked off in May with the Devon County Show. National Grid is again hosting a marquee at a number of events throughout the summer, offering hospitality to grantors affected by major projects. In addition, all grantors are welcome to drop by for a tea or coffee outside the busy lunch period. With the programme now at mid point, National Grid will be attending three more events: the Cotswold Show (4-5 July), the Great Yorkshire Show (14-16 July), and the Boyal Welsh Show (20-23 July).



# PLANNING THE FUTURE



The biggest shake-up in planning since the 1960s will enable major new infrastructure projects to come on stream more quickly. Hector Pearson, land and development stakeholder and policy manager, explores the implications of the new Planning Act

### **Q**WHAT DOES THE 2008 PLANNING ACT SET OUT TO ACHIEVE?

A The act creates a new integrated planning system for nationally significant infrastructure projects in areas such as energy, aviation, road and rail transport, as well as water and waste. The objective was to transform eight bureaucratic regimes into one streamlined system that will make decisions more quickly.

#### **Characteristic Process WORK?** There will be 12 national policy statements (NPS), set by government, which will

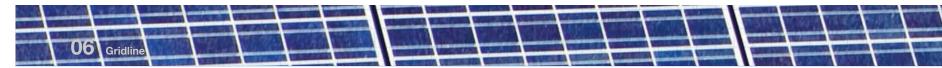
act as strategic blueprints for replacing aging and overloaded infrastructure. Six relate to energy; an overarching one on security of supply and climate change, and five on renewables, gas, coal, nuclear and electricity networks.

An independent infrastructure planning commission (IPC) will judge the detailed and technical merits of individual applications. Up to three experts – in more complex projects – will consider the promoter's scheme, and listen to objections and comment from stakeholders, including local authorities. In most cases a decision will be taken in around nine months.

#### **WHAT WAS THE SYSTEM BEFORE?** A Previously, decisions were made by the

A Previously, decisions were made by the Secretary of State, often after a time-consuming public inquiry and lengthy report. In the case of Terminal 5 at Heathrow airport, for example, the public inquiry lasted four years from 1995 to 1999 and planning permission was only granted in 2001. It was the longest planning inquiry ever held in the UK.

Effectively, the process has now been taken out of the political arena and, once the commissioner makes a decision, it is final with no right of appeal except by judicial review.





#### **Q** WHEN WILL THE IPC START MAKING DECISIONS?

**A** The draft NPS for the electricity networks will be out for public consultation in the summer, and it is anticipated that the IPC will be taking on cases in early 2010.

#### **Q** WHAT ISSUES WERE FACED BY NATIONAL GRID PREVIOUSLY?

**A** The issue in the past was that for a new overhead transmission power line, or gas pipeline, National Grid had to seek consent from the Department of Energy and Climate Change (DECC). But decisions for substations and above-ground installations were taken by each local council along the route. So having one key decision-making authority is a very positive step forward.

### **Q** WHAT HAS DRIVEN REFORM IN THE ENERGY SECTOR?

A The most important factors are climate change and security of energy supplies. In order to meet the goal of providing 20 per cent of its energy from renewable sources by 2020, the United Kingdom needs to replace its generation with a completely new mix of lower carbon fuels, including about 35 gigawatts (GW) of new wind power.

On top of that, the nation faces an energy shortfall as aging coal and nuclear stations are retired, creating an estimated 20GW shortfall over the next decade. And all this at a time when North Sea supplies of gas are running out and the United Kingdom is increasingly reliant on foreign imports. The previous planning regime acted as a barrier to connecting new sources of renewables in a timely manner.

#### FEATURE

#### WHAT IS NATIONAL GRID'S VIEW ON CLIMATE CHANGE?

A Our view is that these issues are not somebody else's problem, they're everybody's problem, and we're right in the mix to solve climate change and secure future energy supplies. Steve Holliday, National Grid's chief executive, has repeatedly stressed that climate change is high on the company's agenda and stringent internal controls are in place to ensure our carbon footprint is reduced by 80 per cent by 2050.

#### Q WHAT IS THE CHALLENGE FOR THE ELECTRICITY NETWORK?

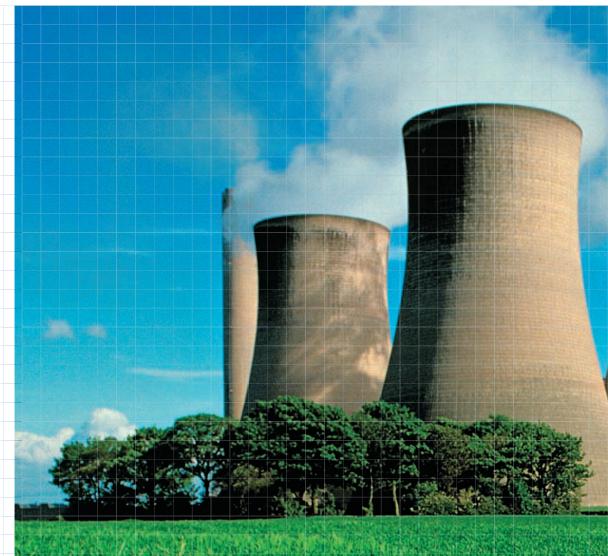
A The geographical configuration of the energy network is a result of the historical legacy of power stations originally being sited near coalfields. However, offshore wind farms and the new nuclear power stations, which will be necessary, are located in coastal areas. Given that 20 per cent of the nation's demand is within the M25, it is clear that somehow the electricitytransmission networks have to connect up to these new sources of renewable energy.

#### Q WHAT ARE THE SORT OF AREAS THE IPC WILL LOOK AT?

A We think the IPC will be looking closely at whether the quality of the local environment outweighs the need for a project. It might decide that a project is being proposed in the wrong place, if, for example, it's in a National Park. But hopefully this won't arise very often because we wouldn't propose a project in such an area unless completely unavoidable.



LOGJAM: Heathrow's Terminal 5 took six years to get planning permission



#### WHAT OTHER RESPONSIBILITIES ARE THERE ON PROMOTERS?

A We are obliged to do more work upfront in terms of consultation and public involvement. We also have to produce a report on the outcome of the consultation and the IPC can decline development consent if it believes it has not been adequate.

Where there are different options for a gas pipeline or transmission overhead line, there is likely to be more opportunity for landowners and the public to have a say in how the options are explored. We will also be consulting with stakeholders such as Natural England or the RSPB, for example, at an even earlier stage.

#### Q WHAT IS NATIONAL GRID'S APPROACH TO CONSULTATION?

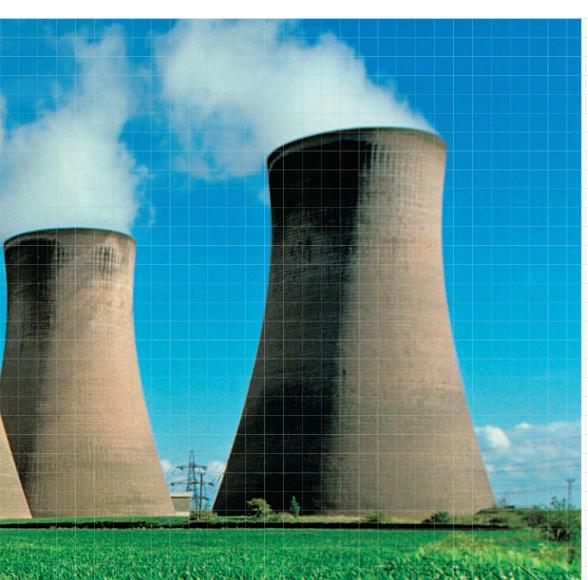
A Our aim is to set the standard in community consultation. National Grid's long-term success depends on having a constructive relationship with landowners and communities, and our objective is to exceed any strict legal responsibilities we may have. We will be benchmarking ourselves against big organisations such as Network Rail and POWERING UP: The UK faces an energy shortfall as aging coal and nuclear stations are retired.

the British Airports Authority, and we are determined to be a leader in best practice.

#### **Q** DOES THE ACT IN ANY WAY DIMINISH LOCAL DEMOCRACY?

A We believe the public has more opportunity to comment than before. Most of the proposals would have been considered by a government department anyway, so the main change is that the final decision is not made by an elected minister, but by an independent commissioner.

There are a number of stages of consultation. People will be able to express an opinion about the draft NPS, when they come out later this summer. They will be able to comment on the





proposals during our consultation, then at the public examination stage of each project and, finally, they can make representations directly to the IPC itself. Previously, a government department took the decision on a gas pipeline environmental statement, and so there was no opportunity or forum for the public to have a say.

#### Q HAS NATIONAL GRID INTRODUCED ANY NEW GUIDELINES?

A Schedule 9 obligations place a statutory duty on us under the Electricity Act 1989 to pay proper regard to the environment when we undertake any project. There's no equivalent act relating to gas, but since we deal with the same stakeholders, it makes sense for us to have the same commitment. We have reviewed our Schedule 9 statement, and renewed our commitment to communities and stakeholders about how we will involve them in projects. We believe the 10 commitments that form our guiding principles demonstrate an even stronger undertaking to do things in the right way.

#### QWILL YOU BE RECRUITING MORE LANDS OFFICERS?

A We are increasing our resources and recruiting more lands officers but this is more a consequence of the volume of new projects coming on stream.

#### QHOW WILL GRANTORS BE AFFECTED?

A There won't be any major change in the way we interact with grantors. We will continue to notify and involve landowners when we need to do something on their land.

#### **Q**ARE THERE ANY OTHER BARRIERS TO NEW CONNECTIONS?

A Currently, National Grid has a statutory duty to connect new generation schemes on a first come first served basis and until now we have



DIGGING DEEP: Electricity cable tunnels being constructed for the 2012 Olympics

had a situation where some schemes, which have planning permission, are further back in the queue than some which do not have approval.

So we are talking to energy regulators Ofgem about changing the rules to make it easier for renewables to be connected faster. That involves National Grid having the ability to undertake strategic investments before the generation arrives – a mechanism, in other words, to obtain consents earlier in the process.

#### QISN'T THE ANSWER MORE MICROGENERATION?

A Microgeneration and local grids will have a significant role to play. But the fact remains that in the forseeable future a lot of generation will continue to come from coastal areas in the shape of offshore renewables and nuclear, and so new connections will be necessary.

#### Q ARE THERE ANY SHORTCOMINGS IN THE PROVISIONS OF THE ACT?

A One potential difficulty is that the act relates to England but not Wales and Scotland. The NPS covers the entire United Kingdom but a proposal on an overhead line in Wales, for example, would be heard by the IPC, while planning permission for a substation would still be decided by the Welsh local planning authority. So there are some issues where projects cross borders.

#### QWHAT IS NATIONAL GRID'S OVERALL VIEW OF THE ACT?

A You can always say that certain aspects could be better, but we think there is a good balance between public involvement in decision-making on new infrastructure and our ability to get things through the system. It should enable us to accelerate the process of meeting the nation's future energy needs.



# Water way to travel

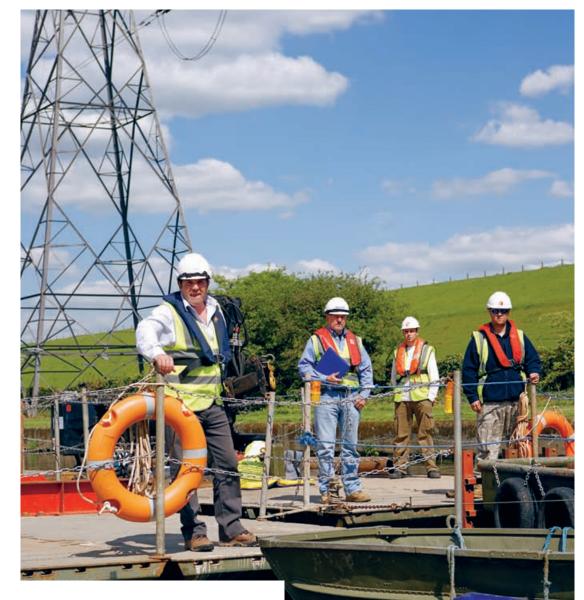
Linesmen are used to working at great heights, but a canalside project in Greater London has posed some unusual access challenges

lectricity Alliance East operatives have taken to the water in barges and pontoons during a fittingsonly refurbishment of 85 towers on twin 275kV overhead power lines running parallel to each other for 13km along the Lea Navigational Canal.

The project, between Waltham Cross and Tottenham substations, began in March and is scheduled to end in September 2009. It involves the replacement of insulators and fittings nearing the end of their working life, as well as steelwork reinforcement and repainting.

The overhead power lines track the canal through a section of the Lea Valley Regional Park – a corridor of urban green space and nature reserves from Ware, in Hertfordshire, through parts of Essex, to India Quay Docks on the River Thames.

Phil Burgess, National Grid's lands officer, began approaching grantors and other stakeholders for access consents nearly a year ago. Since February, the day-to-day contact on the project has been maintained by Electricity Alliance East wayleaves officers Mike Fearn and Eugene Biggins.



"The project has involved talking to mostly large organisations, such as British Waterways, Thames Water (which owns two large reservoirs on the route), the Environment Agency, local councils and the Lea Valley Regional Park Authority," said Phil.

Simon Chandler is National Grid's project engineer. "From the outset, it was clear we needed to use the waterways to transport equipment and material to many of the pylons on the route," he said.

"Eight of the pylons are located on small islands in a network of flooded gravel pits within the Lea Valley Country Park, a Site of Special Scientific Interest (SSSI). We used sheet piling and tons of stone to construct a launch point from which barges and pontoons – floating work decks – can depart to the landing points on the islands," Simon added.

Further downstream another 22 towers are situated close to the canal, and barges are again being used to access the towpath. Many of the structures are hemmed in by the canal on one side, and a flood channel and reservoir on the other. In some cases scaffolding is being used to provide access to the base. ON BOARD: (Left to right) Phil Burgess and Mike Fearn with operatives from contractors Red7Marine.



Additional safety rules for working near water have been introduced, including the mandatory wearing of life jackets. A special water-based paint is also being used on the pylons to avoid any possibility of contamination to the canal from the solvents found in oil-based paint.

Around 5km of the towpath will be closed at various times during the project. "We have liaised with British Waterways to find suitable diversions," said Phil. "We've also consulted with Sustrans, the sustainable transport charity, which is responsible for a major cycle route into the capital which shares the towpath."

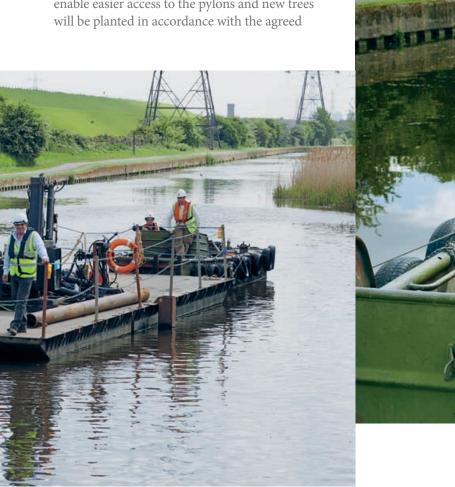
Permanent stone roadways have been constructed in several places - including one inside the reservoir perimeter, which accesses several pylons. Plastic trackway was used where the ground required additional protection, such as in a golf course owned by the Lea Valley Regional Authority and in the park area at Enfield Island Village, a large housing estate built on land formerly occupied by the Royal Small Arms Factory.

"Some vegetation has been removed to enable easier access to the pylons and new trees reinstatement provision," said Phil. "As part of our environmental mitigation measures, we've also erected screening near one of the pylons to ensure that nesting ringed plovers are not subjected to any disturbance."

A number of roads, footpaths and park areas have been closed within Enfield Island Village. The project's community relations team held a drop-in session in February to make residents aware of these temporary measures, project leaflets have been distributed and an 0800 information helpline is available.

"The management company that administers the estate has gone out of its way to thank us for our considerate approach to the work, which has resulted in little or no impact on the surrounding parkland," said Phil. "Most people realise that these essential works are necessary to ensure the future reliability of energy supplies into London."









# Gearing up the grid

An estimated investment of around  $\pounds4.7$  billion is needed by 2020 to ensure the electricity transmission network is prepared for new renewable and nuclear infrastructure

#### WALPOLE SUBSTATION

When: May 2009-October 2010.
 Why: Electricity Alliance Central is upgrading essential equipment at Walpole substation in Norfolk, as well as creating new installations to enable connections from planned offshore wind farms in the Greater Wash estuary.

>> What: An existing 132kV substation at the site, dating from the 1960s, is nearing the end of its working life and is being demolished. It will be replaced by a more compact Gas Insulated Switchgear (GIS) indoor substation offering an enhanced electricity capacity. Installation of the new equipment is scheduled for around June next year.

The 400kV substation at the site is being extended to step up the power from the export voltage of the wind farms for onward transmission. The civil works and equipment installation should complete in October 2010.

Centrica Energy is developing three offshore wind farms in the Wash to help meet the government target of generating 33GW of offshore wind generation by 2020. **>> Lie of the land:** "Along the perimeter of the 400kV substation, earth mounds have



been created and trees planted to screen views of the extension from residents to the south," explained Guy Morton, project manager Electricity Alliance Central. "There is also an archaeological dig underway on what is believed to be the remains of a medieval salt works within the new compound."

#### THAMES CROSSING REFURBISHMENT

>> When: Jan-April and July-Oct 2009.
 >> Why: Steelwork strengthening is underway on two 650ft-high towers, which carry 400kV power lines across the Thames between West Thurrock, Essex, and Swanscombe, Kent. Steelwork on one pylon has suffered corrosion at its upper reaches from soot residues emitted by West Thurrock power station (closed in 1993).
 >> What: Specialist Mast Climbing Work Platform (MCWP) equipment is enabling the teams to more easily access the upper reaches of the towers – the tallest pylons in





#### INDIAN QUEENS TO ALVERDISCOTT OVERHEAD LINE REFURBISHMENT

#### >> When: July-October 2009.

**>> Why:** A fittings-only refurbishment is necessary on the 287 towers of the 98km overhead power line between Alverdiscott substation, near Bideford, North Devon, and Indian Queens substation, Newquay, Cornwall. >> What: Ceramic insulators are being replaced by composite polymeric insulators, which are lighter and more durable, and particularly suitable for coastal areas because of their resistance to salt degradation. Although extensively trialled, this is the first time they have been fitted by National Grid to an overhead line. Originally planned as a two-year project, the work will be undertaken in just three months using a large team of more than 100 operatives. >> Lie of the land: "The route includes crossings of a railway line, two major roads and the River Camel," said Carl Davies, project manager Electricity Alliance West. "The route crosses one SSSI at Tregoss Moor and ecological mitigation measures are being taken for protected species such as dormice, water voles and badgers."

the UK. The platform is constructed within the pylon itself and is driven by an electric motor, and it enables men and materials to be transported efficiently and safely to a height of 400ft. >> Lie of the land: "Winds of up to 45mph, snow and temperatures dropping as low as -4°C hampered progress early in the project," said Peter Bullen, project engineer Electricity Alliance East. "The use of the MCWP is a first on a National Grid project and has been a great success. Operatives have also been trained in abseiling techniques to enable them to access the exterior face of the pylon legs more easily."

#### STAYTHORPE TO GRENDON OVERHEAD LINE REFURBISHMENT

>> When: March 2009-Sept 2010. >> Why: Refurbishment is taking place on the 400kV overhead line between substations at Staythorpe, Nottinghamshire, and Grendon, Northamptonshire. The load-carrying capacity of the line is also being upgraded to meet the requirements of RWE npower's new 1700GW Combined Cycle Gas Turbine power station at Staybridge, near Newark, which comes online in October 2010.

>> What: Conductors, insulators and some steelwork is being replaced, as well as pylon foundation strengthening. There are 303 pylons on the 101km route, which passes through three counties. The project will take place in two phases – from Staythorpe to Tilton on the Hill in Leicestershire (March-Oct 2009) and from Tilton to Grendon (March-Sept 2010).

Where necessary, local electricity distribution power lines that cross the 400kV line will be under-grounded to ensure safe working conditions. The route crosses four railways, 17 dual carriageways/trunk roads, and 13 rivers and canals (including the River Trent).

>> Lie of the land: "Full ecological surveys will take place prior to working on three towers in the Upper Nene Valley Gravel Pits SSSI next year," said Mark Brennan, project engineer Electricity Alliance East. The 35km chain of active and disused gravel pits is a nationally important site for more than 20,000 water birds belonging to over 40 species.

### FEATURE

# Jewels of the countryside

How National Grid is working with the Campaign for National Parks to safeguard precious landscapes, while meeting Britain's changing energy demands

t the close of World War II, Britain emerged into a rapidly modernising world in which many of the things taken for granted today – such as electric power at the flick of a switch and open access to the countryside – became a reality.

The nationalisation of the electricity industry in 1948 paved the way for an extension of mains electricity to many rural households for the first time. A high-pressure gas grid followed in the 1960s with the discovery of North Sea gas.

Just a year later in 1949 an Act of Parliament was passed that led to some of the UK's most beautiful and unique landscapes being designated National Parks as a gift to returning servicemen and women, and future generations.

#### **IT'S A FACT**

Three Parks cover 20% of the land area in Wales
About 7% of England and Scotland is composed of National Parks
The Broads is the smallest at just 117 square miles
The Cairngorms is the largest at 1,467 square miles
More than 430,000 people live in the Parks
About 140 million people visit the Parks each year .

"Both developments were part of a massive social reconstruction programme, which energised the country," said Ruth Chambers, policy director of the Campaign for National Parks (CNP), a national charity and voice for nearly 40 environmental and amenity groups on National Park issues across England and Wales.

The CNP's aim is to protect and promote the National Parks for the benefit and quiet enjoyment of all, including the communities that live within them. Earlier in 2009, 60 years on from the landmark legislation, the government announced its intention that the South Downs will become the UK's 15<sup>th</sup> National Park.

National Grid is a founder member of the Corporate Forum for National Parks. It brings together companies that recognise the unique value of National Parks for conservation and recreation, and agree to uphold these values in the development and application of their policies.

"The Forum provides a platform for an open and constructive exchange of views, as well as an opportunity for all parties to feed into policy at an early stage of development," said Ruth.

A small but not insignificant element of National Grid's network lies within the Parks – 196km of overhead line and underground cable, as well as 207km of gas pipeline.

In its National Parks Commitments document, the company promises to consult with the National Park Authorities on plans that could affect them at an early stage, to avoid major new developments unless there is no reasonably SHARING VIEWS: (above) National Grid hosted a recent Corporate Forum for National Parks meeting at the Woodhead Tunnel in Derbyshire (below) Ruth Chambers (third from left) with Corporate Forum members





practicable alternative, and to minimise the impact of its works on the Parks.

The relationship established between CNP and National Grid will be vital as the UK faces the challenge of connecting new sources of low carbon electricity at a time of declining North Sea gas supplies and predicted energy shortfalls.

In March, the Electricity Networks Strategy Group said that a £4.7 billion investment in the electricity transmission system would be needed to link up new sources of green energy.

As part of an alliance of countryside groups, the CNP is arguing against a major expansion of the network on the grounds of environmental impact and visual intrusion, particularly in National Parks.

Instead, CNP is calling for locally generated electricity using microgeneration (small-scale generation ie solar panels, wind turbines, etc) and smart meters in the home. Actively managing demand, it argues, reduces the overall need for new generating capacity and the need for electricity to be transported over many miles of open countryside.

While National Grid agrees that local generation and demand management have an important role to play, it maintains there will continue to be a need to connect often remote

#### NATIONAL GRID GOES THE EXTRA MILE IN THE BRECON BEACONS

Minimising and mitigating the environmental impact of unavoidable works is another key ingredient of National Grid's approach.

National Grid consulted closely with the Brecon Beacons National Park Authority on the route for its new 320km gas pipeline from Milford Haven to Gloucestershire. As a result of these discussions, it was agreed to route part of the pipeline around the northern edge of the Park to avoid environmentally sensitive areas.

The company has also taken a variety of environmental improvement actions in mitigation for the works. These include the creation of 1,200 metres of new hedgerows to improve dormouse habitats, and the planting of 6,000 deciduous trees to replace conifers removed during construction work on Forestry Commission land. It also committed to a 10-year aftercare programme to ensure the landscape above the gas pipeline is fully restored.



large generators to the electricity transmission system into the foreseeable future.

"There is potential for conflict between the statutory duty of the National Park Authorities to conserve the natural beauty within its boundaries and National Grid's duty to meet the future energy needs of the nation," agreed Ruth.

"That's why there's never been a more crucial time for both parties to work together."

#### FIND OUT MORE ABOUT CNP

For more information about the work of CNP or to learn about how to become a Friend of CNP visit www.cnp.org.uk or contact CNP on 020 7924 4077.



# Roots in the ano

Four lands officers who have joined National Grid recently explain how their previous experience as farmers or land managers helps them in their job

ational Grid's land and development group has welcomed a number of new lands officers in the past 12 months to handle the extra workload associated with an accelerated programme of gas and electricity transmission projects.

Some of the new recruits have a background in farming or land management. "Their experience and insights add to the mix of skills we have in the regional teams and is a resource which other colleagues can draw on," said operations team manager Joe Boucher.

National Grid has also developed a lands officer diploma qualification in association with Harper Adams University College in Shropshire, which gives an insight into farming best practice and the kind of issues that landowners face. It covers a range of topics including understanding agriculture, land ownership and rights, soil management, ecology and protected species.

#### NATURAL ABILITY



Simon Leigh-Hunt joined National Grid's land and development east team in March after more than eight

years working in the rural and environmental conservation sectors.

He has a Postgraduate Diploma in Surveying from the College of Estate Management in Reading and is working towards professional membership of the Royal Institute of Chartered Surveyors (RICS). As well as experience with a firm of land agents, Simon also spent five and a half years with the Yorkshire Wildlife Trust.

"I was part of a team looking after 20 nature reserves of varying sizes, including areas let out to farmers," said Simon. "It gave me a good grounding in the issues associated with the management of a variety of habitats and landscapes, including grassland, woodland, heathland and urban fringe.

"National Grid is committed to a long-term relationship with its grantors and any successful relationship has to be based on treating people with integrity and fairness."





Suspicions that Peter Mitchell might have played a bit of rugby in his time are reinforced by the warm but vice-like handshake. The latest recruit to National Grid's land and development team in the south-west region is a former Under-19 England international who went on to play professional rugby for Worcester. Besides his day job, Peter helps his father manage the family's 100-hectare farm near Tewkesbury, Gloucestershire. The farm focuses on purebred Texel sheep and a herd of pedigree Longhorn cattle, which, according to Michelinstarred chef Heston Blumenthal, produce the best-tasting beef you can buy. Last year, Peter won the Longhorn Breeders Association newcomer of the year award. A fully qualified member of RICS, he worked for a firm of chartered surveyors

in Gloucestershire before joining National Grid earlier this summer. "As a farmer myself I have a good insight into the issues that other farmers and landowners face," Peter said. "When works are programmed I know what's going to be affected on a farm, and any implications in terms of crop loss or reinstatement."

> One of the attractions of the job, he said, is that every person you meet and every situation is different. "I suppose I'm also quite nosey," he said. "I genuinely enjoy visiting farms and learning about how other people approach their business."

#### **FARMER'S SON**



James Dean, a trainee lands officer in the north-west and Scotland region, joined National Grid in April and is

currently working to gain a lands officer diploma qualification.

When time permits, he helps out on his family's 130-acre sheep farm in Chipping, near Preston, shepherding, and lending a hand at lambing and harvest time.

Before joining National Grid, James worked for a land agent dealing with easement valuations and reinstatement issues associated with gas pipelines in the north of England.

"People outside farming don't always realise the bond that farmers have with their land, and the efforts, hours and pride that go into managing the landscape," said James.

"It's important to take the time to understand grantor's concerns – to put yourself in their shoes. I also believe landowners relate to me more when they find out I'm a farmer's son."

#### **PROFESSIONAL APPROACH**



David Harker, a member of RICS, worked for a firm of chartered surveyors before joining National Grid's

north-west and Scotland region in April 2008. He lives at his parents' 500-hectare farm near Kendal, Cumbria, where the family keep prize-winning pedigree Limousin cattle and Swaledale sheep.

"Being a chartered surveyor and having a good knowledge of agriculture is useful when it comes to land valuations," admitted David. "To judge crop loss cases, for example, requires a familiarity with the agricultural calendar, the varying capabilities of different land types, as well as the potential yields and margins available.

"But equally important aspects of the job include the ability to communicate well, to be approachable and to make yourself available when grantors have a concern," he added.



# All aboard for a trip back in time

Visitors to the Foxfield Light Railway are transported back to a day when coal and steam ruled the world



team engines once powered the industrial revolution. These mechanical dinosaurs no longer work the mainline railway, but locomotives can still be seen on the country's many heritage railways.

One such line is the Foxfield Light Railway (a National Grid electricity grantor) near Stoke-on-Trent, Staffordshire, where dedicated volunteers operate a weekly train timetable for visitors from Easter through to December.

"The county of Staffordshire is famous for its pottery industry, but it was the local availability of coal to fire the kilns that made it all possible," said Ron Whalley, a volunteer train driver and the operations director at Foxfield.

The line was constructed in 1894 to transport coal from Foxfield Colliery in the Cheadle coalfield to the mainline railway at Blythe Bridge. To keep costs down, rather than go through hills with tunnels or cuttings, the mine owners adopted a circuitous route that includes a 1 in 19 climb from the colliery. Happily for today's passengers this has resulted in an attractive landscape of rolling hills, woods and farmland during the 5.5-mile round trip.

At present, the service terminates at Dilhorne Park station, in a pleasant wooded location, but the final section of track to the colliery is being restored and will soon be open.

The mine closed in 1964 as part of a wave of coalfield rationalisations. Fortunately, some of the directors of the consortium which bought the site (and track) were railway enthusiasts and decided to form the Foxfield Railway Society in 1967. "For about three years we operated almost as a private club steaming once a month, but then the decision was made to open as a public attraction with weekly services," said Ron. "At the time there were only three or four heritage railways in the UK."

Since 1981, the railway has operated from Caverswall Road, near Blythe Bridge, where as well as an authentic replica of an Edwardian station, there are workshops, a museum, shop, and even a real ale bar. 3.5 miles of hedgerows and fences, redecorating coaches and station buildings, maintaining track and restoring locomotives is never-ending work.

All of the 20 or so steam and diesel locomotives at Foxfield have an industrial pedigree, having worked in shipyards, power stations, steelworks and the mining industries. Bellaphoron was built in 1874 at Haydock, Lancashire, but is still steaming 135 years later, while one of the diesel locomotives took part in the Normandy landings.

"After 10 years, a working loco has to be pulled



A part of the colliery site has also been purchased, including the original winding house and headsticks over the old shafts. These are now being restored with the help of a Heritage Lottery Grant, and will form part of a mining museum.

The busiest time of the year is December when the Santa trains run, while January to April sees the major maintenance work take place on the track, coaches and locomotives.

Apart from the regular Sunday timetable, there are also special promotions – including real ale trips, steam galas and driving experience trains where you can spend a day on the footplate. School visits are also hosted, with opportunities to study a range of topics relevant to the curriculum.

There's always plenty of work for the volunteers to do, and new members are welcome whatever their background or experience. Looking after completely apart for a complete overhaul of its boiler," said Ron. "This can cost up to £40,000 for an industrial locomotive and more than £200,000 for a mainline locomotive."

Heritage railways are also expensive to operate. "A round-trip costs £40 in coal and our annual insurance bill is £16,000 – equivalent to £400 for every day we're open to the public," said Ron.

"It takes a lot of hard work to keep the railway running but the volunteers here are dedicated to preserving this historic reminder of our industrial heritage for future generations to enjoy."

VISIT THE FOXFIELD LIGHT RAILWAY The railway is open to visitors every Sunday from Easter to December, including bank holidays. For more details visit www. foxfieldrailway.co.uk/ or call 01782 259 667.

#### To contact Gridline :

LAST WORD

#### PICTURE PERFECT

of Lickford, West Sussex, the winner of Gridline's last photo competition on the theme of 'spring' who took this delightful close-up of a bluebell flower head.

#### WIN A SONY CAMCORDER

Ever wish you had a record of those happy family occasions, or that memorable holiday? Here's your chance to win a fabulous Sony Handycam.

The Sony DCR-HC51E Mini DV Handycam has a 40x optical zoom, 2000x digital zoom and 2.5-inch touch screen LCD. Super SteadyShot image stabilisation ensures that captured images are extra sharp. With a 14hour battery life it also has a DV connection for video editing with a connected PC, AC adaptor/cable and rechargeable battery pack.

To be in with a chance of winning this Sony Handycam, simply answer the following question:

#### **Q** What is the battery life of the Handycam?

Send your answer to Gridline Handycam competition, 23-25 Waterloo Place, Warwick Street, Leamington Spa, Warwickshire CV32 5LA. Please note you must be a National Grid grantor to enter this competition. Entry closing date: 20 August 2009.



the of spring who too this delightful close-up head.

## Win a luxury weekend stay

Enter this competition to win a Britannia Hotels weekend break

The prize for Gridline's next photo competition is a relaxing weekend break for two\*, courtesy of Britannia Hotels.

The lucky winner will be able to choose where to spend their two-night stay from 33 hotels in locations across the UK, from Aberdeen to Bournemouth.

The theme of this issue's photo competition is 'past times' – how you interpret the theme is up to you. All you have to do is send in your selected photograph for a chance to win this great prize of a weekend hotel break.

Send your images to Gridline

photo competition, 23-25 Waterloo Place, Warwick Street, Leamington Spa, Warwickshire CV32 5LA. Or email images to gridline@uk.ngrid.com. Closing date is 20 August 2009.

Please note, only National Grid grantors are eligible to enter this competition and regrettably, prints cannot be returned. \*Subject to availability.

#### SCHOOL HOLIDAY GETAWAY?

Britannia Hotels has some great-value offers, everything from a weekend at the seaside in Blackpool to city breaks in London. To check the full range of offers or to book visit www.britanniahotels.com or call 0871 222 0100.

Plassetites (\*\* testatt . partertifer