spring 07













gas

and

electricity



nationalgrid

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. We act as the main interface for

landowners who have our gas and electricity equipment installed on their land. Listed below are your local land and development team contacts.

North West and Scotland: 0161 776 0706

South East: 01268 642091 South West: 01452 316059 East: 0113 290 8235

Wayleave payments

• For information on wayleave payments telephone the

payments helpline on 0800 389 5113.

Emergencies

• Emergency calls to report pylon damage to National Grid can be made on 0800 404090. 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, ring the EMF information line 08457 023270 (local call rate). Website: www.emfs.info

Gas emergency 0800 111999

Commanding view



To contact Gridline write to Pages Creative, Stirling House, College Road, Cheltenham GL53 7HY or email john@pagescreative.co.uk



Awards in safe hands

NATIONAL GRID is again sponsoring the award scheme that recognises outstanding contributions to environmentally sensitive farming in Wales.

Nearly £8,000 is up for grabs in the scheme run jointly by the Countryside Council for Wales (CCW) and the Royal Welsh Agricultural Society with support from the Young Farmers Club.

The future of the agrienvironment awards looked bleak last year until National Grid stepped in and agreed to sponsor the scheme — which has been running for about six vears — until 2008.

Group corporate responsibility director Gareth



Llewellyn said National Grid was delighted to support the awards again.

"We operate the country's essential electricity and gas transmission lines, so we already work closely with many farmers and landowners in Wales. We always aim to protect and enhance the environment when we work on the land — the agrienvironment awards support this principle." he said.

Cash prizes of £2,000 each will be awarded to the winning farmer, voung farmer and supplier or contractor who make an outstanding contribution to environmentallysensitive farming in Wales. Another £300 will be awarded to two runners-up in each class.

CCW chairman John Lloyd Jones said: "The agrienvironment award gives recognition to some of those people who make an outstanding contribution to the success of agri-environment practices in Wales."

The prizes will be presented at the Royal Welsh Show one of the biggest events on the Welsh calendar — which runs from July 23 to 26.

Gridlines

Top performer

National Grid has been ranked as top performer in the 2006 Business in the Community (BiTC) Corporate Responsibility Index.

Companies from the FTSE 100, FTSE 250, Dow Jones Sustainability Index Sector leaders and larger BiTC members participated in the index, with each company benchmarked against its sector peers and all participants.

The BiTC ranking comes hard on the heels of the company earning a top slot among the world's most sustainable businesses — it was ranked number one in the multi-utilities sector of the Dow Jones 2006 Sustainability World Index which lists just 250 companies. National Grid is also in the US Department of Energy's Top Ten ranking of its US renewable energy programme, Green-Up.

Good practice

National Grid has relaunched its Code of Practice for gas customers.

The code is available electronically on National Grid's website www.nationalgrid.com/uk/ gas/About/codeofpractice. Printed copies can be ordered from Astroweb at www.astron-online.com/ astroweb.

System change

Changes to National Grid's Environmental Management System (EMS) are set to deliver world-class environmental management standards. Much of the improvement will come from simplifying procedures from about 70 to a suite of 18.

Shows are on the road

NATIONAL GRID IS set to clock up thousands of miles over the coming months as its annual tour of the agricultural shows gets under way.

We plan to visit seven shows around the UK — our agricultural relations programme kicked off in May at the Devon County Show near Exeter, the perfect place to experience rural life.

"We will be visiting more shows this year than in 2006 as a demonstration of our commitment to the farming communities we work with." said Hector Pearson, National Grid's land and development stakeholder and policy manager.

"The shows highlight the passion and commitment that are so alive and vibrant in our rural communities.

"That's why we really look forward to welcoming our electricity and gas grantors to these events — they are a welcome opportunity to show our appreciation for the valued support and co-operation they give us as we carry out essential work across the country.

"With an increased capital programme, we will be undertaking a lot more work, both gas and electricity, in England and Wales in the coming vears, so we are keen to explain our plans and address any concerns.

"As usual, we'll be inviting some

many as we would like as space is limited. We try to invite those directly affected by major works.

hospitality — feedback from the 2006 show season was very gratifying, with virtually 100 per cent of our quests describing the experience as either excellent or good.

"When we asked how we could improve things, many grantors said we couldn't improve on perfect, which was good to hear!

"Even if grantors don't have an invite to lunch, we hope Grantor Club members will still come along to our hospitality facility and enjoy free morning or afternoon refreshments as usual. You will be asked to show your membership badge or proof that you are a grantor.

"We are delighted once again to sponsor the agri-environment award scheme* that pays tribute to those farmers, young farmers and suppliers or contractors, who have make an outstanding contribution to environmentally sensitive farming in Wales.

"We look forward to the awards ceremony at the Royal Welsh Show on July 23."

awards scheme see Page 3.

grantors for lunch, although not as

"Hopefully, they will enjoy our

* For more about the

nationalgrid

Come and meet us at...

- Three Counties Show, Malvern: June 15-17
- Lincolnshire Show, Lincoln: June 20 and 21
- Royal Lancashire Agricultural Show, Ribchester: July 20-22
- Royal Welsh Show, Builth Wells: July 23-26
- Pembrokeshire Show, Haverfordwest: August 14-16



Welcome addition to tour

National Grid visited the Cambridgeshire County Show for the first time this year.

Organised by local Young Farmers and their supporters. it's a small but very traditional show with its roots firmly in agriculture and the rural community.

The 2007 show was the ninth to be held at Wimpole Home Farm near Royston — a National Trust property — and will feature a host of attractions. including traditional crafts. livestock, food hall, rural crafts and displays, vintage tractors. fairground, children's corner and ring events.

Show director and former Young Farmer Richard Burton of Lodge Farm, Easton — a National Grid grantor explained that the show has four main aims.

"We aim to create a traditional county show — how they used to be," he said.

"We also want to promote British food and farming, provide the local Young Farmers with a display area for their annual competitions and create a real family day out, with something for everyone.

"The show evolved from the Young Farmer Rally, and has grown steadily over the years thanks to wonderful support from the local community and businesses.

"We were delighted to welcome National Grid for the first time and hope the company's grantors visiting its stand enjoyed being part of this celebration of the Cambridgeshire countryside." Visit www.cambscountyshow

.co.uk for more information.

A little boy from a North **London school visiting Barleylands Farm** Centre near Billericay in Essex, spotted a cow among the farm animals - and thought it was a horse.

Which just goes to show how some of today's voungsters have become dissociated from country life. **Barleylands Farm Centre and Craft Village** is owned by National **Grid grantor Peter** Philpot and his family who, with vision and foresight, are doing their bit to teach young people about farming and the environment and the part it plays in our lives.

Their diversification venture has grown from humble beginnings over 20 years ago to the provision of a farmbased educational programme in Essex. And thanks to new developments, it will soon boast the largest dedicated craft village in the UK. The farm centre welcomes about 30,000 visitors each vear, and countless others visit the craft village to watch artisans at work, from pottery painters and wood turners, to candlemakers and metalworkers...

essons down on the farm

LIKE TOPSY, Barleylands "just growed".

It has "growed" thanks to the enthusiasm and imagination of the Philpots and in more recent years, support from various funding sources, including £800,000 from the Department for the Environment, Food and Rural Affairs (Defra).

"Defra's support has been fantastic — but then Defra thinks we are fantastic, because in return, we will soon provide 100 full-time jobs for local people," said Chris Philpot — one of Peter's three sons — who manages the farm centre.

Peter and his father Harold bought the 700-acre Barleylands dairy farm in 1967. They turned it into an arable farm and 10 years later opened a farm shop and Pick Your Own business.

"This business grew rapidly; 400 cars in the car park wasn't unusual during the strawberry season," said Chris. "But by the end of the 1980s, the business waned as supermarkets took over."



Chris and Louise at Barleylands

Early in the 1980s, Peter had bought an ancient tractor from a local farmer. "By 1984, his agricultural collection had grown to over 1.000 items," said Chris. "He decided to show his collection to others, opening the first Barleylands Farm Centre museum. We had about 1,000 visitors a year."

Farm animals were introduced and education days offered to schools. Then local craftspeople looking for workshops approached the family. The Philpots adapted the old dairy buildings into eight workshops in 1991, and in 1995, a purpose-built glassworks with viewing gallery was built.

Taking the countryside to schools

Barleylands will be involved in the Year of Food and Farming that starts in September.

How food is produced, sourced and the impact on our health and the environment will form the basis of the Year and it aims to involve all schools in England. Around the country there will be "Countryside in the Park" events, to be organised by Business in the Community and held in inner-city parks.

Visit www.defra.gov.uk/schools/yff.htm for more information



The Foot and Mouth outbreak in 2001 hit the farm centre badly. It closed for nearly nine months and everyone working there was made redundant. "We had a choice: stay closed or ask Defra for help to put in more craft workshops to give us the income to provide further educational facilities," said Chris. "Between 2002 and 2004, we reopened the farm centre and 17 more workshops, providing fulltime work for 30 people."

Further funding has allowed the construction of a new building to house 24 craft studios, a 150seater restaurant that will serve 60 per cent local produce and an education room.

Dr Louise Bishop, who formerly worked with children at the Natural History Museum, was appointed the farm centre's education officer last year and is developing the old museum into a farming discovery centre that will open this summer. "It will be a hands-on, interactive operation," said Louise.

"It has five sections. In Our Food, you can find out where our food comes from, the types of food British farms grow and the varieties of food produced by Barleylands in the past. In Our Work, visitors can discover more about the people who worked on the farm and the kind of tasks they used to do.

"Another section explains why our countryside looks the way it does and Our Future explores issues such as climate change. sustainability and genetically modified (GM) farming."

Chris is enthusiastic about developments at Barleylands.

"I have three young children of my own and I'm passionate about educating the next generation about food and farmina.

"My generation was completely ignorant so it's important that we educate today's young people about the role of farmers in providing food and caring for the landscape."



Painting ceramics in Hazle's Pottery Barn

FACTFILE

Barleylands is a National Association of Farms for Schools approved site. Farms for Schools (FFS) aims to ensure that school trips to farms are safe, enjoyable and educationally worthwhile. For more information, visit www.farmsforschools.org.uk It has also been inspected and approved by the Visitor Attraction Quality Assurance Service awarded by the Tourist Board • Children can get up close and friendly with a variety of farm animals and the cute and cuddlies in the Pets Corner There's a miniature railway around the site, playgrounds, play facilities and a Dinocars race track. Special occasion events are available — including birthday parties, a Teddy Bears Picnic and Halloween "Spooky Night" For more information, visit www.barleylands.co.uk or email education officer Louise Bishop at louise@barleylands.co.uk

or tel: 01268 290213.

Alliance's six appeal

SIX CONSORTIA HAVE joined forces with National Grid to form electricity alliances.

These alliances will deliver £2.5 billion of capital programme work during the next five years to upgrade and extend the electricity transmission network in England and Wales, and contribute to the wider issue of security of supply.

The company's new partners have signed five-year contracts — among the largest ever awarded by National Grid — which include work on high voltage overhead lines and underground electricity cables as well as substation development and construction.

There is the option for a second five-year term.

"The aim of these contracts is to establish long-term relationships and a 'one-team' approach with shared risk and reward," says Rowan Sharples, National Grid's director of UK construction.

The works are required to connect new infrastructure such as wind farms and new generation plant to the network.

They will also cover the



Joining forces... Rowan Sharples, National Grid's UK construction director, far left, and Nick Winser, executive director transmission, front left, sign the agreement with representatives from AMEC, Babcock, Mott MacDonald and Balfour Beatty enhancement and replacement of existing assets to ensure the continued safe and reliable operation of the high voltage electricity network.

The long-term contracts are split on a geographic basis to improve planning with distribution network operators. The companies and consortia are:

Overhead line and cable alliances

- East Alliance Balfour Beatty
 Group
- West Alliance AMEC, Babcock and Mott MacDonald

Substation alliances

- South East AREVA, Skanska and Mott MacDonald
- South Wales and West Jacobs, Morrison Utility Services and Mitsubishi Electric
- Central ABB, Morgan Est and Atkins
- North Siemens, J Murphy and Sons Ltd and PB Power.

Rowan said: "This integrated approach with world-class suppliers and other transmission directorates is much more efficient for the development and programming of smart solutions within the existing operating constraints of the network.

"The alliances provide greater opportunities to share knowledge and to learn from each others' experiences and methodologies to optimise programme delivery.

"Our partners share our vision and I am sure will help us deliver improved safety, reliability and efficiency by design. The alliances will form single multi-skilled teams combining expertise from National Grid and our external partners. Our people, while remaining National Grid employees, will benefit from broader career development opportunities, with the chance to undertake some operations traditionally done by suppliers."



Supporting roles for liaison officers

Four alliance liaison officers have been appointed to act as single points of contact between the new alliances and National Grid's Land and Development Group.

They will be providing support at the initial scheme development phase, advising on planning and consents issues, land acquisitions, wayleaves and rights.

But for all our grantors, it will be business as usual — they will continue to deal with their relevant field wayleave officers, who will in future be called lands officers.

The new alliance liaison officers are:

Mike Hudson — alliance liaison officer (overhead lines and cables, West)

Mike, formerly a land and development surveyor with the gas side of the business, is

continued on page 10

delighted with his new appointment.

"We have a huge challenge to re-wire the National Grid network in the coming years, and it means coming back to what I know best and where I hope my knowledge and experiences will be put to good use," he explained.

Mike has spent over 25 years in the electricity/energy industry, most of them in wayleaves. He joined the former Central Electricity Generating Board in his home town of Harrogate in 1978 as an administrative trainee straight out of school, but quickly moved into the Estates and Wayleave Group.

He was appointed a wayleave officer in Nottingham in 1985 and worked on a number of major refurbishment projects in the East Midlands.

The formation of the National Grid Company in 1990 saw him back in Harrogate, assigned to the Northern Construction Division, and involved in the early stages of the Second Yorkshire Line project.

Following a company reorganisation, Mike moved to the North East Power Services Division and — in his own time embarked on studies for a BA (Hons) in business administration. He graduated in 1997.

Between 1998 and 2003, he worked on the Second Yorkshire Line project, initially assigned to the underground cable sub project and latterly to a section of the overhead line construction. Following further home study, he qualified as a chartered surveyor in 2004.

His most recent role as a land and development surveyor in the gas business involved managing a small team dealing with historic

crop and drainage claims associated with gas transmission pipelines.

Mike and his wife Terina have three sons, and he enjoys cycling. skiing and supporting his sons' sporting activities.

Hilary Landers - alliance liaison officer (substations South East and South West)

Hilary joined the former CEGB in 1981 as a qualified chartered surveyor, and has spent most of her subsequent career in a "lands" role. Most recently she has been involved in gas transmission work across the South West and South Wales.

Hilary comes from the South West and for much of her working life has been based in this area. although travelling around the whole country as part of the job. She joined the company in Bristol and on privatisation was relocated to Aztec West with Project Management Division. dealing with projects from the estates and wayleaves point of

For four years in the late 1990s, Hilary was seconded to a team in the Midlands developing an IT project, the company's Wayleave Information Management System.

On returning to lands work, Hilary was part of the land and development policy team before moving to the easements and acquisition team undertaking valuations associated with the company's assets.

Hilary also represents utilities on the RICS Rural Faculty Board, part of the governing structure of the Institution.

Hilary enjoys travelling — "just as well in this job!" she said and "is looking forward to the challenges ahead."

Robin O'Brien - alliance liaison officer (overhead lines and cables, East)

Robin's "patch" keeps him close to familiar territory.

He was brought up in Newark and has been a field wayleave officer based in the East Midlands for 16 years. His work has taken him from the Scottish border in the North East down to the edge of London, so he has worked in a good proportion of his new area in the Overhead Lines East Alliance.

He has worked on a number of important projects over the vears, including the building of a new connection to Spalding

Power Station and the refurbishments of the West Burton to Walpole and Walpole to Burwell lines. working alongside Balfour Beatty Power networks who are the alliance partners for the new East Overhead Lines area.

Robin trained as an agricultural chartered surveyor and then had a varied career before joining the CEGB as a fitter's mate at Staythorpe substation in 1986. In 1991, there was an opening

for a wayleave officer based at Stavthorpe, and Robin was quick to grab the opportunity to land his "ideal" job. "A great job, which would allow me to stav in the industry and use my experience as an agricultural surveyor." he said.

"I have dealt with all types of overhead line work in my time as a wayleave officer and I have enjoyed meeting all the grantors of my East Midlands patch and around the country. I am really looking forward to my new role as an alliance liaison officer, using my experience of lines work to co-ordinate the land and development staff in delivering all the main overhead line projects in the East of the UK, from conception to completion."

Robin has been married to Anne for 28 years, and the couple have a son and daughter. When time allows, he enjoys dog-walking and keeping fit.

Aileen Smith - alliance liaison officer (Central and Northern substations)

Former land and development officer Aileen has moved into more of a "hands-on" role as one of the four alliance liaison officers.

And it is a challenge she is

The Cheshire-born geography graduate of Hull University, Aileen joined the former CEGB in 1988 as a graduate trainee in the company secretary's department in London.

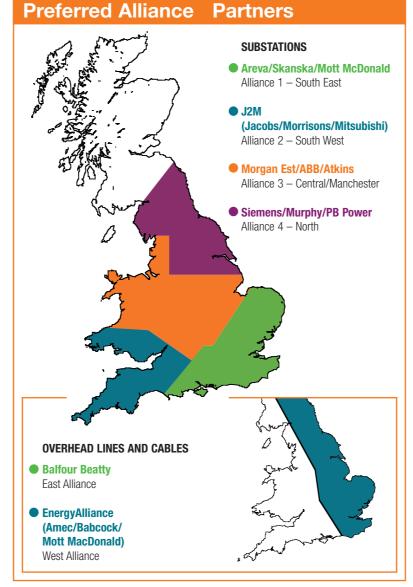
For the past 15 years, she has worked in the land and development policy area, providing advice and guidance on planning and environmental matters.

"As an alliance liaison officer, I will be ensuring that the alliances fully understand the importance of planning our works to minimise inconvenience to grantors and local communities."

Aileen enjoys walking in her leisure time.



As an alliance liaison officer, I will be ensuring that the alliances fully understand the importance of planning our works to minimise inconvenience to grantors and local communities





National Grid network in the coming years, and it means coming back to what I know best and where I hope my knowledge and experiences will be put to good use

Mike Hudson



Aileen Smith

What have the James **Bond films** GoldenEye and Octopussy got in common with TV drama productions including London's **Burning, Casualty,** Jim'll Fix It and Band of Brothers? The answer? **National Grid grantor,** the Nene Valley Railway (NVR) in Cambridgeshire, which since 1978 has provided a filming location for over 150 films, adverts, pop videos and television episodes.

The NVR - a registered charity which celebrates its 30th anniversary in June - offers visitors a 15-mile round trip along a standard gauge railway line and an opportunity to travel behind classic diesel and vintage steam locomotives. It's also home to Thomas. the tank engine much loved







Railway children... Octopussy starring Roger Moore, left, Dirty Dozen -The Next Mission starring Lee Marvin, and GoldenEye with Pierce Brosnan all featured scenes shot at the Nene Valley Railway

Railway on right track

WHEN HE WAS a little boy, Cris Rees wanted to be a train driver.

"In fact, I still do!" said Cris, now NVR's general manager.

He hasn't made it as yet — but he is in the driving seat of a railway company that is keeping alive the memories of yesteryear, and offering an important tourist attraction and educational experience in the Nene Vallev.

FACTFILE

• Thomas and his friends on the fictitious island of Sodor were created by the Rev Wilbert Awdry who lived near the NVR. NVR had an engine like Thomas, painted it as the character and invited Rev Awdry to visit and officially name him • An Irish navvy is reputed to haunt NVR's Yarwell Tunnel at Wansford — apparently, he was killed in a drunken fight with other navvies when the line was being built in the 1800s and was bricked up in the tunnel to conceal his murder • The section of line beyond Sutton Cross is rich in history. To the archaeologist, the area is of great importance for it is the site of Durobrivae, centre of the Roman pottery industry • For more information about the NVR, visit www.nvr.org.uk or call the Railway Office on 01780 784444. Email nvrorg@nvr.org.uk

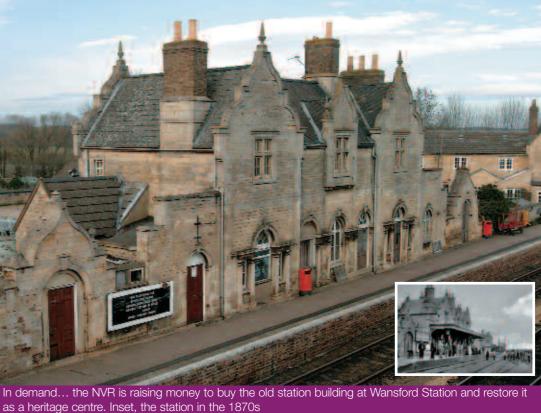
Cris, who joined NVR last year, heads a 14-strong team of paid employees, including a health and safety officer, accountant and catering staff, and he also co-ordinates the efforts of 200 volunteers who give their time and energy to keep NVR on track.

"Without them, we just couldn't operate," said Cris. "Our volunteers, aged from 16 to 80-plus, work as our operating crews — as signalmen, train drivers, firemen, quards and ticket inspectors.

"But many do the less glamorous but essential jobs such as cleaning carriage windows, working on the engines or weeding the station gardens.

The seven-and-a-half mile railway trip takes passengers through Nene Park, from the eastern terminus at Peterborough, past Orton Mere, Ferry Meadows and Wansford Station - the NVR HQ - and finally to Yarwell Junction where a new station recently opened.

The very first passenger train along the Nene Valley left



Peterborough on June 2, 1845 the NVR of today is the eastern section of this line which was closed in 1972.

In 1968, a Rev Richard Paten bought a locomotive for £3,000, intending to display it outside the local technical college, but because it was in such good condition, it was decided to restore it. Local locomotive fans formed the Peterborough Locomotive Society, later to become the Peterborough Railway Society (PRS) which was responsible for launching the idea of the NVR in 1971.

"Peterborough had been designated a new town a few years earlier and was keen to attract people to the area," Cris explained. "It developed Ferry Meadows which provided many opportunities for leisure activities.

"So, with a railway line in existence skirting the park, but without a train, and the PRS with locomotives and rolling stock but no railway line, the NVR suddenly had a real future! The line was upgraded and officially opened on June 12, 1977,"

Last year, NVR welcomed

60,000 passengers. The peak season is between Easter and October, with trains running about 200 days of the year.

"A very large part of our income comes from special events," said Cris, "These include corporate events, weddings, conferences and curriculumrelated educational visits. Our Santa Specials which run throughout December are extremely popular and provide



about a third of our revenue. It may not be a staggeringly beautiful railway line, but it offers many features which provide a host of opportunities for film companies.

"It runs alongside a river, over meadowland, beside urban areas and an industrial complex — so there's lots of potential for filming. And, as we are the only UK standard gauge railway which runs both British and Continental carriages, we are also useful for scenes set in other countries."

The most recent filming was at Warnford Station for scenes for the BBC One series Jekyll, starring James Nesbitt, which was screened in May.

The NVR's current challenge, says Cris, is to raise money to buy the old station building at Wansford. The Nene Valley Railway Heritage Centre Group aims to raise £160,000 to buy and restore it as a heritage centre.

• The Nene Valley Railway is crossed by the Cottam-Eaton Socon 1 and Cottam-Eaton Socon-Wymondley 400kV overhead lines.

bv

generations of

children...

National Grid supports six environmental education centres around the country centres of excellence that have been developed in partnership with local authorities and environmental charities.

The centres highlight

how industry and the

environment can coexist for the benefit of all, and they help to meet National Grid's commitment to operate as a socially and environmentally responsible business. Earlier this year, two of the centres -Penwortham in **Preston and Skelton** Grange in Leeds were each able to welcome four new volunteers thanks to funding from the volunteering charity v, which aims to involve at least one million more 16-25 vear olds in volunteering and community action by

The centres used generous funding from National Grid to obtain matched 14 funding from v...

The green volunteers

A BRILLIANT OPPORTUNITY for voung people to experience working in the "green" industry and a great chance to benefit from their skills and energy.

That sums up the feelings of the centre heads who were delighted to welcome the eight new pairs of helping hands.

"This is a major boost for us it means we will be able to expand our programme of activities for schools and book the centre to capacity all year round," said Penwortham's centre managers Gill Otterburn and Julie Norman.

"We are now also able to deliver outreach programmes to groups that can't get to the centre. As for the volunteers, the placement could be the first step on the career ladder in the 'green' industry."

Penwortham's new volunteers are graduates Zoe Garland, 21, from Bolton; Lorna Fisher, 24, from

Fab four... the Penwortham volunteers, left to right, Lorna Fisher, Danielle Barrett, Sarah Rimmer and Zoe Garland

Euxton: Sarah Rimmer, 22, from New Longton and Danielle Barrett. 25, from Portsmouth.

After graduating in art practice and theory from Lancaster University, Zoe helped run a weekly workshop for children in an art gallery.

"I really enjoyed this and realised I wanted to use my skills and artist background to teach," she said. "Having always been interested in the environment, the placement at Penwortham is the perfect direction for me to follow."

Caroline Crosslev, Skelton Grange's manager, said she is pleased her centre is able to provide such a good-quality volunteering opportunity. "Because they receive £60 a week towards their living costs and travel expenses, the placements have the stability and security to take time out to do some full-time volunteerina.

"In return, we benefit from their enthusiasm, energy and skills."

Caroline's new volunteers are Francine Kershaw, 22, a former zoology student from Leeds; Jamie Giannakis, 24, who worked as a science administrator: Lewis McNeil. 25. a former technician from Hull, and Susanna Wallis, 21. from Aberdeen, who studied meteorology.

Francine said: "The v placement at Skelton Grange will enable me to get lots of practical experience and responsibility working with children in outdoor and environmental education much more than I would have been able to do by volunteering occasionally."

The v funding will allow both centres to recruit 16 volunteers for six month-placements over two vears.



Mettle shown in steel city

National Grid staff and contractors pulled out all the stops to keep the power on for residents and businesses in Sheffield city centre during a challenging electricity cable diversion project.

The project, completed in just five months, paved the way for a multi-million pound regeneration scheme and the development of the city's New Retail Quarter (NRQ).

The NRQ will provide 860,000 square feet of prime retail accommodation, including a new 260,000 sq ft John Lewis department store.

National Grid project manager Richard Murphy had the unenviable job of managing the project, something of a logistical nightmare.

"Only about 500 to 600 metres of cable were involved — but doing a job like this right in the busy centre of Sheffield was a very complex business, involving working with a myriad of different utilities and contractors." he explained.

"The biggest challenge was traffic management — we had to pre-programme the work to comply with the Sheffield City Traffic Management Plan, ensuring traffic kept moving throughout the project.

"Security was another problem. Because we were working in such a busy and crowded area we had to make sure that vandals didn't damage the cables which would have set us back many months.

"Our contractors were working at all sorts of hours in a bid to keep disruption to the minimum. On one occasion, we arranged to finish work before football fans hit the streets after a match. But there was a riot in the street before the match so, on police advice, we had to quickly fence off the site and get the contractors out of the way for their own safety.

"It was certainly a very challenging project — but delivering it on time and with an exemplary safety record was a credit to all involved." said Richard.

2010.

North Sea gas reserves are declining and the UK will become increasingly dependent upon imported gas. Two new liquefied natural gas (LNG) import terminals being built at Milford Haven should be up and running by October and they will provide around 20 per cent of the UK's gas requirements.

The liquefied gas will be converted back to its gaseous form and it is National Grid's duty to connect this supply to the national gas transmission system and ensure it is safely and economically delivered to homes and businesses across the UK. But it is a complex job, involving a host of issues. Some £750 million is being spent on transmission reinforcements including a new 306km, 48-inch diameter underground pipeline

to bring the gas from the new terminals to Tirley in Gloucestershire.

It is the biggest gas project undertaken 16 by National Grid...



Gas going underground



Sections of pipe made ready for burial in the trench

BALANCING THE country's energy needs with so many other considerations is no easy

That's why planning a gas pipeline route is such a lengthy and complex process.

As far as possible, areas of population are avoided, and National Grid has to take into account environmental. geological and archaeological features as well as construction and health and safety consider-

Long before any spade hit the ground in March 2006, the company embarked on a series of consultations about the pipeline route.

They involved the Brecon Beacons National Park. Countryside Council for Wales, Blaenavon World Heritage Site partnership organisations, National Assembly for Wales, English Nature, Department for Trade and Industry and the Environment Agency.

There were also early talks with the National Farmers' Union, the Farmers' Union of Wales, and the Country Land and Business Association (CLA).

National Grid's Paul Swinbourne, lands officer, and consents manager Steve Knight-Gregson, have been deeply involved in the project. Paul has dealt with landowners. managers, land agents and solicitors to secure the necessary easements, while Steve has liaised with local authorities and the Department of Trade and Industry (DTI) to gain consent for above ground installations.



Velders join sections of the pipes





"An area covering 5,300 sq km was reviewed to identify the pipeline corridor options," said Paul. "This area included a number of restraints — the Brecon Beacons National Park, for example, and the Blaenavon World Heritage Site and Sennybridge Military Training

"The route was planned in three stages: Milford Haven to Aberdulais; Felindre, near Swansea, to Brecon; and Brecon to Tirley in Gloucestershire. For the Felindre to Tirley stages, we came up with 16 corridor alternatives. The route we chose was modified to follow a longer route around the northern edge of the Brecon Beacons National Park after consultations with the park and others."

The company's preferred route supported by a detailed environmental impact assessment (EIA) — was approved by the DTI, and work began on the first section of pipeline in March last year. Work is on-going on this section from Milford Haven to Aberdulais, while construction started this March on the final sections.

"As we considered the corridor options, we had discussions with around 2,500 landowner/occupier grantors," said Paul. "We are now dealing with 832 of them, from the Duchy of Cornwall and the Brecon Beacon National Park to hill farmers and householders.



The River Towy, one of 27 river crossings undertaken as part of the pipeline



FACTFILE

• An area of about 5,300 sq km was reviewed to identify pipeline corridor options • The two main contractors for the pipeline are Nacap Land & Marine Joint Venture and Murphy Pipelines Limited. Both companies have extensive experience of large linear construction projects • About 612 km of fencing has been erected to enclose the 44-metres-wide working area along the entire pipeline length • As well as the new sections of pipeline, a number of above ground installations (AGIs) are being built to accommodate valves and other plant and equipment. A new compressor station is also needed • At present the UK has more than 21 million

gas customers and this number is rising daily . National Grid is currently investing around £2.5 billion on high-pressure pipeline projects, including the Milford Haven-Tirley pipeline.



Paul Swinbourne



officers who work of with the grantors

"We have 12 agricultural liaison officers who work closely with the grantors, sometimes daily, to ensure they know what is happening and to deal with any issues arising from the work."

The project team has had to consider traffic management, health and safety issues, waste generated by the activities, and protection of the environment.

An archaeologist is in the team to identify and monitor any archaeological remains encountered during excavations (as reported in a previous Gridline) and an environmentalist ensures that measures outlined in the EIA and more detailed environmental management plan are complied with.

"Gas should be flowing by the end of October, but our job doesn't end there." said Paul. "Work will continue for some time as we ensure that land drainage is reinstated, all hedges replanted and grantors' land returned to its original condition as far as possible. We replace vegetation with locallygathered seed and species often the habitats are improved by our reinstatement efforts.

"We could be working in the Brecon Beacons National Park for the next seven to 10 years to ensure the land is as good as it was before we started."



Part of the 120km Milford Haven to Aberdulais natural gas pipline under construction in Carmarthenshire. Due for commissioning in autumn 2007, over 95 per cent of the project is now complete and the land reinstated to its former use

Schools kept in the shade

GENERATIONS OF CHILDREN

at three Worcestershire schools will enjoy welcome shaded areas in their school grounds, courtesy of National Grid.

The schools' sports days last year were all seriously affected by the heatwave and lack of shade.

Offenham Church of England School had to cancel its event, Gorse Hill Community Primary was forced to postpone theirs while the heat and lack of shade caused problems at Bretforton First School's sports day.

In a bid to solve the problem, National Grid stepped in with funds from its Shade Trees Fund developed with the help of The Tree Council which it has supported since 1990 — to provide shaded areas at the schools. The company's Shade Trees Fund was launched to support its staff in raising funds for tree planting projects.



The fund aims to support the planting of 10.000 shade trees for schools and community groups over the next four years. That's one tree for every National Grid employee in the UK.

The first planting took place at Gorse Hill Community Primary School in Worcester where the team of 10 planters from National Grid was led by Land and Development South West regional lands officer Richard Biggs.

"It's good to know that our hard work will have a great benefit for many years to come," said Richard. The team planted 80 trees, including willow, cherry, silver birch and hawthorn around the perimeter of the plaving field.

Some weeks later, BBC TV was at Offenham school to film the tree planting for their *Trees* That Made Britain series, featuring Tony Kirkham and Jon Hammerton, both experienced arboriculturalists from Kew Gardens.

The two men met up with Jon Stokes. The Tree Council's director of rural programmes, Miriam Tilt, the Tree Warden for nearby Grafton and Flyford, and head teacher Denise Oates.

A 12-strong team from National Grid's Distribution Commercial department planted 120 trees as part of a teambuilding project. A further 30 trees

were planted a few days later at Bretforton First School by six staff from the company's Procurement department.

On hand were local MP Peter Luff, National Grid's external communications manager Julian Buttery, Jon Richards of Group Public Affairs and local tree champion Colin Payne, South Littleton's Tree Warden.

 National Grid's Shade Trees Fund is part of the company's commitment to protecting the environment and reducing the impact of its work. The preservation of ancient woodland is a priority when the routes of new gas pipelines and electricity cables are being planned. Where their removal is unavoidable, four new trees are planted for every mature one removed.



It's good to know that our hard work will have a great benefit for many years to come

Richard Biggs



FACTFILE A tree can: • reduce heating and cooling costs both indoors and out • drop the summer temperatures under its canopy by up to 10 degrees • help reduce the incidence of skin cancer • reduce heat reflected from paved areas attract and sustain Spade work... National Grid volunteers at Bretforton First School with local MP Peter Luff, centre of back row

Climate change in the spotlight

THE CHALLENGE OF climate change — an important issue for National Grid — was highlighted by a number of speakers at a House of Commons reception.

And a key message was that trees and Tree Wardens have an increasingly important role to play as that challenge is faced.

The event, hosted by Tree Council vice-president Brian Donohoe MP. honoured 14 local authorities and a housing association that had achieved 10 years of Tree Wardening. They all co-ordinate local networks on behalf of The Tree Council's National Grid-sponsored Tree Warden Scheme.

Guest speaker, Communities and Local Government Minister Baroness Andrews, said: "Trees bring life and energy as well as rest and resilience to ourselves and our communities. But they have subtle and silent talents too.

"Their roots can remediate soil contamination: their leaves can



Tree-mendous... Tree Council chairman Sue Roe, front left, vice-president Brian Donohoe MP and Isobel Hoseason of National Grid with representatives of the award-winning organisations

filter air pollution. And that has never been more important as we face the unparalleled challenge of climate change, and search for solutions and sustainability."

Tree Council chairman Sue Roe thanked the 140 organisations that support the

Tree Warden Scheme, including National Grid: "The company financial support — the interest far beyond the bounds of a sponsorship and we thoroughly

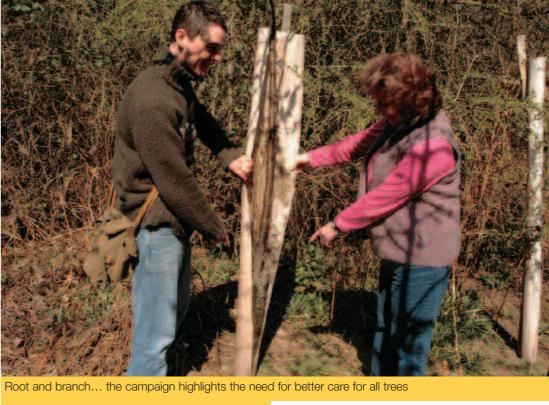
"National Grid is investing billions of pounds in the UK's energy infrastructure over the next five years, and we will be working closely with the Tree Wardens as part of this work. With climate change and carbon footprint on everyone's lips, we are looking even more to our partnership with The Tree Council to help us with these varied challenges."

has about 7.500 volunteers across the country. For more information, visit www.treecouncil.org.uk or

does so much more than just give and enthusiasm of your staff goes eniov working with you." she said.

Isobel Hoseason, National Grid's director of communications, said the company was delighted to continue its support for the Tree Warden Scheme.

 The Tree Warden Scheme now telephone 020 7407 9992.



A caring campaign

The Tree Council has launched a national Tree Care Campaign, highlighting the need for better care for all trees, of all ages.

"Many of us, including National Grid grantors I am sure, planted trees over last winter with a lot of care, expense and enthusiasm," said Tree Council director-general Pauline Buchanan Black.

"But it's not enough just to plant them properly. For young trees, annual aftercare is vital for their first five years — thousands of them die from neglect, especially from the failure to control weeds so they don't compete with the trees for moisture. Established trees also need regular inspection, and can often benefit from mulching.

"If we do have another drought like last summer, or even just a long patch of dry weather, mulching is going to be particularly important. Whether you use loose organic mulches, mulch mats or old carpet, it's a way to control weeds and keep the ground moist and cool.

"For trees that have been in the ground for a year or two, it's important to check that the tree shelters or quards are effective, adjusting. replacing or removing ties and stakes, and ensuring tree roots remain covered with soil," said Pauline.

• For more information about tree care, visit The Tree Council website www.treecouncil.org.uk

Picture perfect

The corridors of National Grid's Lakeside House offices in Northampton have been livened up over the winter thanks to Tree Warden Alan Burgess.

He loaned the company oil paintings of each of the 50 trees featured in The Tree Council's book Great British Trees*.

"National Grid is a staunch supporter and sponsor of The Tree Council's Tree Warden Scheme, so I thought it might like to borrow the paintings for staff to enjoy," said Alan, a retired lecturer.

Alan, Tree Warden in Essex, had some good feedback from National Grid staff one employee emailed him saying: "I feel that to be able to see your paintings of trees in our workplace each day is quite a privilege." * The book was published in 2002 to

celebrate the Queen's Golden Jubilee.

It is now out of print. but many of the trees are featured in two later books. The Heritage Trees of Britain and Northern Ireland and Heritage Trees of Scotland. Both are available from The Tree Council (address below). Posters reproducing Alan's work are available as a set of two costing £12.50 (including post and packing) from The Tree Council, 71 Newcomen Street, London SE1 1YT. They can be viewed on the online shop page at www.treecouncil.org.uk 23

An offer hard to leave alone

The Tree Council's latest book Why are leaves green? A Tree Miscellanv is on offer to all National Grid grantors at a special price.

The book was inspired by Tree Wardens in South Somerset and West Sussex who were keen to have answers to some of the questions about trees they were frequently asked

Volunteers in the Tree Warden Scheme were asked to submit questions they most often faced — over 5,000 were

received. The most commonly asked, and the answers, are featured in the book. Why are

leaves green? A Tree Miscellany ISBN: 978-0-904853-07-0 normally retails at £9.99. National Grid grantors can obtain a copy for just £7.99 including p&p. Please send a cheque to The Tree Council, 71 Newcomen Street,

London SE1 1YT marked Why Are Leaves Green special offer TM1 and enclose your full name

and address.

co-ordinator for Roydon



Your chance to win

Marks and Spencer vouchers worth £50 are up for grabs in our latest grantor competition.

All you have to do is answer the following question:

How many consortia have joined forces with National Grid to form electricity alliances?

You'll find the answer in this issue of Gridline. Send your answers to Gridline Competition, Pages Creative, Stirling House, College Road, Cheltenham GL53 7HY or email john@pagescreative.co.uk.

Entries must be received by July 31 and please make sure you give us your full name, address and phone number.

Laurence's video prize

Grantor Laurence Duggins, a retired farmer of Wigginton, Tamworth, has won two ploughing videos and the Society of Ploughmen's official handbook The Tractor Ploughing Manual.

We offered the handbook and the society's two videos - one about reversible and conventional match plough skills, the other on vintage match ploughing — in the last issue of Gridline.

Winton Pritchard Probert has a reputation for

like a bottle of wine in a raffle at the village social," he said.

So he admitted to being extremely chuffed to win a year's family group membership of the National Trust in the competition featured in the last issue of Gridline.

We asked readers to identify the organisation that had published a new leaflet highlighting the dangers of using agricultural machinery and equipment close to power lines. The answer was the Energy Networks Association.

Ira, 70, got it right and his name was the first pulled from the hat. His prize, currently worth £73, covers two adults and their children or grandchildren under 18.

"Definitely my biggest win to date," he said. "And we are looking forward to using the prize as much as possible."

Ira and his wife Peggy live at Weatheroak Farm*, Bromsgrove Road, Chaddesley Corbett, Kidderminster. Our winner retired from the Midlands Electricity Board in 1990 after 30 years' service, and for many years kept cattle and sheep at his farm until the foot and mouth disease crisis.

The couple have two sons and three grandchildren.

Ira's property is crossed by the 400kV overhead line from Bishops Wood to Kitwell. This line is about to be fully refurbished.