We will also carry out safety evaluations and risk assessments and will liaise with regulatory bodies, local authorities and the community before and during construction.

National Grid and Murphy Pipelines Ltd are committed to working with the community to minimise the impact of our works wherever possible. Our specialist community relations team will keep local people informed throughout construction, and will be available to answer questions and to help resolve any issues.

Construction traffic

National Grid has many years' experience of construction works and we understand people's concerns about how construction traffic might affect local communities.

We will work with the local highways authority to identify the best and safest routes for construction traffic, and we will keep the number of vehicle movements to a minimum wherever possible. We will also identify the types of vehicle permitted to use access roads, and we will impose mandatory speed limits on construction vehicles where necessary, along with wheel-cleaning, road-sweeping and temporary traffic controls as appropriate.

Operation

Once in operation, the PRI will be monitored and operated from our national control centre. No staff will be based permanently at the site, but field staff are on call 24 hours a day to attend the site for maintenance or security reasons. The maintenance lighting would only be used in exceptional circumstances, for instance if occasional maintenance activities continued into hours of darkness.

Under normal operation, noise from the site will be low and should not disturb people living nearby.

Safety

Safety is a top priority for National Grid and we have an exemplary safety record. Great Britain's high-pressure National Gas Transmission System has been in operation for more than 35 years, and has never experienced a serious incident affecting life or property.

PRIs and their associated pipelines are designed, constructed and operated to the most exacting safety standards specified by the Institution of Gas Engineers and Managers and are regularly reviewed by the Health and Safety Executive. Pressure vessels and pipes are constructed using high-grade steel and they undergo rigorous testing before commissioning.

All staff and contractors are formally inducted in health, safety, environmental and security procedures. The construction site will be protected, either by fencing or by clearly marked areas which are staffed, whenever we are at work. We also provide 24-hour site security during construction.

The completed PRI will be fitted with state-of-the-art monitoring devices which feed vital round-the-clock information about the performance and condition of the equipment to our national control centre. If necessary, we can shut down the system using remote control valves.

Once constructed, the PRI is an extremely safe and secure installation, protected from interference by a series of fences and security systems.

If you would like to contact us to find out more, please call the information line or write to National Grid community relations at:

enquiries@milfordhavenpp.co.uk

Or call our free information line on:

FREEPHONE 0800 731 0561

An artist's impression of the proposed reinstated Tirley AGI at year 1, looking across the B4211 from Lime Street

If you smell gas, call the 24-hour National Gas Emergency Service on Freephone 0800 111999.

Calls will be recorded and may be monitored.

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July 2009

Image of a similar PRI at Treaddow, Herefordshire

Fact Sheet

Tirley Pressure Reduction Installation

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Key facts

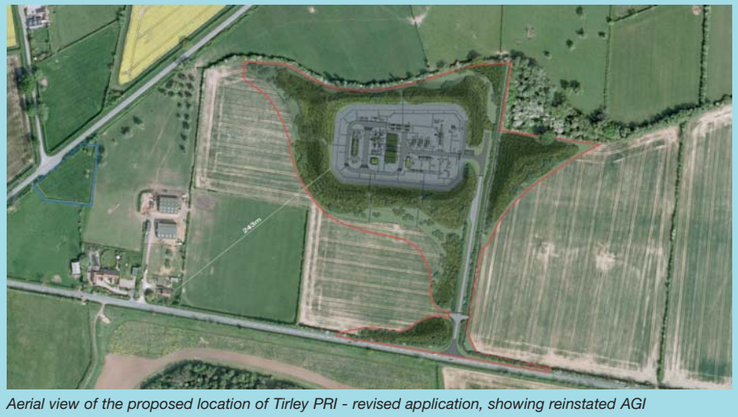
Size: Overall area including landscaping approximately 6.6 hectares; PRI compound approximately 1.3 hectares

Installation Layout: Two single-storey boiler houses (12m long x 14m wide) including four chimney stacks, each 8.5m high (two with two flues and two with four flues); a single-storey back-up generator house; a single-storey instrument building; maintenance lighting columns (14 at 8m high); and perimeter security camera columns (22 at 4.5m high and one at 6m)

Timescale: Application for planning permission submitted to Tewkesbury Borough Council on 19 December 2008. Additional supporting information and changes to the application submitted on 27 July 2009. Subject to receiving planning approval in autumn 2009, construction will take approximately 18 months

Main Contractor: Murphy Pipelines Limited

Aerial view of the proposed location of Tirley PRI - original application



Aerial view of the proposed location of Tirley PRI - revised application, showing reinstated AGI

Why is a new pressure reduction installation needed at Tirley?

National Grid needs to build a new pressure reduction installation (PRI) to connect the new Felindre to Tirley 1220mm diameter gas pipeline to the existing 915mm and 610mm diameter pipelines within the National Gas Transmission System.

PRIs control and regulate the flow of gas and need to be located at strategic points to ensure the country's gas network operates efficiently and economically.

The proposed new PRI will reduce the pressure of gas from the Felindre-Tirley pipeline, which has a maximum operating pressure (MOP) of 94 barg (1364 psi), to 75 barg (1088 psi), to match that of the existing pipelines which run east of Tirley. We need to operate the Felindre-Tirley pipeline at 94 barg to allow gas to flow at its designed pressure and capacity from the new importation terminals at Milford Haven, and we cannot do this without the new PRI to feed this gas safely into the existing pipeline network.

National Grid first applied for planning permission to build a new PRI on a site at Corse, immediately west of the existing Tirley above ground installation (AGI), in April 2006. The application was refused by Forest of Dean District Council.

The council's decision was upheld following an appeal in 2007, but the Planning Inspectors and the Secretaries of State agreed that there is a need to connect a new PRI to the existing gas network at Tirley AGI. They also noted that, if the connecting pipe had a diameter of 1220mm, the new PRI could be up to 10km from Tirley AGI and still accommodate all the gas from Milford Haven.

Site selection process

Following the Secretaries of States' decision at the end of 2007, National Grid has been carrying out an extensive evaluation of potential sites within a 10km radius of the AGI at Tirley. The first stage eliminated areas where it would be inappropriate to locate the PRI for safety reasons, such as the proximity of nearby buildings, and because of environmental issues of national and international importance. The second stage looked at local environmental factors, such as public rights of way, areas of landscape value, cultural heritage and ecology, and an on-site evaluation to identify any other specific environmental factors that would make a site unsuitable.

For the third stage of the process, the remaining potential sites were subjected to a more detailed environmental, technical, operational and cost appraisal, and we also took into account the findings set out in the Inspectors' report and the decision of the Secretaries of State. As a result of the evaluation, in August 2008 National Grid identified two preferred locations. They were on land to the east of Flat Farm off the B4213, east of Tirley AGI, and a revised location on the original Corse appeal site to the west of Tirley AGI. Both of these locations were taken forward to public consultation.

Following two public exhibitions in August and September 2008 and discussions with planning officers from Forest of Dean District Council, Tewkesbury Borough Council and Malvern Hills District Council, together with representatives of the local action group CAPRI (Campaign Against Pressure Reduction Installation), four other areas were put forward for further detailed evaluation along with National Grid's two preferred sites.

This final stage of the evaluation process was completed in autumn 2008 and National Grid concluded that its preferred location for the new PRI is on the land to the east of Flat Farm, off the B4213. Use of this site would also allow us to remove our above-ground equipment from Tirley AGI and return that site to its previous condition.

An artist's impression of the proposed Tirley PRI at year 1, looking into the access road from the B4213

Consultation and planning permission

Since January 2008, we have consulted at each stage of the siting evaluation with planning officers from the local planning authorities within 10km of Tirley AGI (Forest of Dean District Council, Tewkesbury Borough Council, Malvern Hills District Council and Herefordshire Council) together with representatives of the local action group CAPRI, to discuss and seek feedback on the site evaluation criteria, the process and findings.

We held two public exhibitions in summer 2008 to inform local people about the site selection process and to seek feedback and comments on National Grid's preferred locations for the PRI. The comments received from the public, local authority planning officers and representatives of CAPRI were then taken into account during the final stage of the site selection process, before an application for planning permission was submitted to Tewkesbury Borough Council to build the PRI in December 2008.

Copies of the planning application, along with the detailed site selection report, have been available to view at Tewkesbury Borough Council offices and Newent Library. We have also carried out an Environmental Impact Assessment (EIA) to assess the likely effect of the PRI on the local wildlife, landscape and cultural heritage. The results of the EIA have been published in an Environmental Statement (ES), which is also available to view with the planning application.

Since the submission of our application for planning permission to build the PRI, members of the National Grid project team have been in regular contact with Tewkesbury Borough Council planning team. We have received valuable feedback and suggested modifications to our application, both from the Council and from members of the public. Wherever possible, we have taken on board these suggestions and modified our application.

In addition to requests for more information on ecology, archaeology and flood risk, we were asked to review the number of maintenance lighting columns required and modify the landscaping and planting proposals to further reduce the visual impact of the proposed installation. In response to the comments and suggestions made by Tewkesbury Borough Council and members of the public, we have made the following changes to our application:

- the area of landscaping around the PRI compound has increased from 2.04 hectares to 3.77 hectares;
- the volume of earth bunding required for the landscaping has been significantly increased, by approximately 70%, and the contours smoothed and rounded to give a more natural appearance;
- the number of trees and shrubs to be planted in the landscaping has increased from 8,150 to 23,467;
- the number of 8m high maintenance lighting columns has been reduced from 20 to 14;
- the total number of lighting units on the lighting columns has been reduced from 28 to 22.

Construction

Construction will take approximately 18 months and starts with access works, followed by earthworks to level the site and to create the necessary temporary earth bunding and some of the permanent landscaping around the site. Next we construct foundations for buildings and equipment, install pipework, equipment and buildings and put up the perimeter fence. Once the operational equipment is installed, the PRI is fully tested. Finally, we carry out landscaping and tree-planting to minimise the visual effect of the PRI and to help integrate it into the local landscape.

The construction of the PRI will follow best industry practice, which includes plans to manage the effects of noise, dust and construction traffic on local communities and roads, and measures to protect the environment, such as managing groundwater run-off from the temporary construction site.

The design for the proposed new PRI includes integrating existing above-ground equipment at Tirley AGI. Following the commissioning of Tirley PRI the redundant valves at Tirley AGI will be removed. All fences, gates and equipment will be dismantled and removed from the site together with all the surface materials including chippings and tarmac. The subsoil will be broken up and topsoil imported to reinstate the site to the same levels as surrounding land. Following discussions with Gloucestershire County Council Highways Department, we have incorporated a new lay-by into the design for the reinstatement of the grass verge and AGI entrance to provide a safe area away from the B4211 for children to get on and off their school buses.

An artist's impression of the proposed Tirley PRI at year 10, looking into the access road from the B4213