



# GALLOWAY AND LANARK HYDROS PLANNED PROJECTS 2010



## OVERVIEW

ScottishPower's hydro-electric schemes at Lanark and Galloway are the company's oldest generating sites. Although their output is

relatively small, the schemes have proven to be a reliable, flexible generators of clean renewable electricity and valuable assets in the

company's portfolio.

Lanark dates back to 1926 and is believed to be the oldest hydro plant in the UK electricity industry.

Meanwhile, the Galloway scheme is celebrating its 75th anniversary in 2010. Improvements are planned at both schemes in 2010.

## INVESTING IN THE FUTURE OF OUR HYDRO SCHEMES

ScottishPower is upgrading the facilities and infrastructure at Lanark and Galloway hydro-electric schemes to safeguard their future operation.

Lanark dates back to 1926 and is believed to be the oldest hydro plant in the UK electricity industry.

Meanwhile, the Galloway hydro scheme is celebrating its 75th anniversary in 2010.

The investment during 2010 will tackle aspects at both sites to ensure the schemes continue to generate clean green energy.

Several initiatives are planned including key projects to refurbish the penstock at Glenlee Station (Galloway) and replace bridge deck at Bonnington Weir (Lanark).

If you wish more information or to speak to someone in the project team please phone or write to us at the contact details below.

Alternatively, you can email the Projects Manager Simon Hunter at [simon.hunter@scottishpower.com](mailto:simon.hunter@scottishpower.com)



■ The Glenlee penstock (above and left), below, Glenlee Power Station



## GLENLEE PENSTOCK RENOVATION

This project will involve internal and external grit blasting and repainting of the penstock – the large pipeline that carries water to Glenlee Power Station.

This will protect the penstock against corrosion and ensure it can continue to operate for the next 20 years.

The project will be carried over a 20-week period from April to October 2010.

ScottishPower will be taking steps to minimise any inconvenience caused by the project and ensure the safety of local residents, visitors and livestock.

However, there will be a temporary increase in the number of heavy vehicles around Glenlee Power Station, some possible noise disturbance from the grit blasting and some temporary disruption to the Southern Upland Way walking route and a local cycle path.

At the start of the work, until March, Clatteringshaws Reservoir will be drawn down through normal operations to a low level to accommodate rainfall and minimise any risk of flooding, as Glenlee will not be generating while the work takes place.

Special measures being put in place to minimise the impact of the project on the community



■ Clatteringshaws Reservoir

and the environment include:

- Installing temporary trackways, passing places and special holding areas for heavy vehicles to manage traffic
- Erecting livestock proof fencing around the work areas to protect farm animals
- Monitoring noise through baseline and on-going noise assessments
- Restricting working hours of noisy operations to between 8am and 8pm and a maximum of six days a week
- Encapsulating the pipeline to contain residue from the grit blasting and paint spray
- Trimming vegetation outside the bird nesting season
- Adding temporary traffic controls to ensure public safety.

ScottishPower will monitor water levels throughout the project and local stakeholders will be informed of any issues.

## REPAIRS FOR CASPHAIRN LANE SYSTEM

A two-year project is due to start in June to repair the Casphairn Lane Aqueduct System.

The system comprises a concrete aqueduct and tunnel that carries water from the Water of Deugh to Drumjohn Power Station.

The project involves repairs to both structures and painting of the tunnel, along with the replacement of the station intake screens that trap debris and refurbishment of a settling pool.

A detailed environmental risk assessment will be produced for the project to ensure impact is minimal on the water course.

There are few homes in the vicinity but households will be kept informed about the repairs.

It is intended to complete the work in two phases – with the programme of repairs continuing until autumn then work being halted until 2011.

The Scottish Environment Protection Agency has been informed.

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## BRIDGE DECK REPAIRS AT BONNINGTON WEIR, LANARK HYDROS

ScottishPower is seeking all the necessary consents for a major project to replace the worn out bridge deck at Bonnington Weir in summer 2010.

The work will ensure the structure remains capable of operating at a 40-tonne rating for the next 20 years, to provide vehicle access for ScottishPower to the weirs and intake structure, and continued pedestrian access for members of the public across the river along the Clyde Walkway.

Throughout the planning process, the project team has maintained consultations with stakeholders, including the Scottish Environment Protection Agency, Scottish Natural Heritage, Scottish Wildlife Trust, landowners and the local council.

This is to ensure compliance with all statutory approvals and licenses for the planned refurbishment works and to maintain interaction with the local community about the scheme's progress.

An environmental impact assessment has been completed for the work to consider the potential impact of the planned construction activities on wildlife and the environment.

This will include carrying out a number of ecological surveys prior to the start of the works to ensure that appropriate measures are agreed with the relevant licensing authorities and are put in place to manage the planned works and to protect the existing natural environment.

A detailed task and risk assessment for the demolition of the existing



■ Bonnington Weir's bridge deck is set for major refurbishment works and (below left) recent work to install a new tilting gate

bridge deck is also being prepared to ensure no debris enters the river.

The project will result in additional vehicle movements by construction plant with associated potential temporary noise disturbance, especially during the demolition phase.

Working hours of noisy operations are planned to be restricted to between 8am and 8pm, from Monday to Saturday during the scheme, which is anticipated to run from June to November.

A traffic management plan will be

developed with the contractor to provide and maintain segregation of public access from construction vehicles and activities along the route to and from the weir bridge.

This will result in access across the river being temporarily removed for members of the public during the demolition phase of the works.

ScottishPower is totally committed to ensuring that attention to health and safety is paramount during all construction works.

Comprehensive measures will be put in place to assess and review all planned construction activities in order to minimise any potential risks to either the workforce or to members of the public affected by the works.



■ Work at the weir will begin this summer

## OVERHAUL PLANNED FOR CARSFAD UNIT 1

Projects planned for Carsfad Power Station in 2010 include a complete overhaul of Unit 1.

The turbine and generator of Unit 1 will be stripped down and rebuilt, between June and October 2010, and various inspections will be carried out.

ScottishPower will put in place traffic management measures, as necessary.

The major outage should not have any impact on the community or environment.

Planning consent is also being sought for future works to replace the station's switchgear, which will be housed in a container outside the power station.



■ Carsfad Power Station and Reservoir

## EARLSTOUN WORK

Work began in spring 2010 to replace obsolete 11kV switchgear at Earlstoun Power Station.

New switchgear will be installed in a container just outside the main power station building, following work to create a flat base.

The project will have no impact on water courses and is unlikely to cause inconvenience to local residents.