

## Upgrade work to cooling towers continues



Extensive work is now well under way to upgrade the cooling towers at Connaught power station.

The towers are being modified to reduce further the incidence around the station of low-level fogging by water vapour.

This fogging happens under certain weather conditions. These are when the air is relatively cold or humid – when it contains a high proportion of moisture. Typically, this happens more during winter months and when it is cooler at night.

The upgrade will ensure that low-level water vapour will not be visible at even lower temperatures and higher humidity than at present.

In common with many industrial processes, the power station uses water for cooling. Heated water is passed through the cooling towers. Cool air is drawn across them and the heat is rejected to the atmosphere via conduction, convection and evaporation.

station, it is not possible to eliminate it completely. "This high level plume appears, usually in winter, when water vapour is invisible at ground level but rises to where the air is colder and it condenses and so can be seen."



### Dear Neighbour

Welcome to the Summer 1999 edition of the Connaught's Quay power station newsletter.

We started to publish a newsletter for our neighbours following two independently conducted surveys which showed that you, our neighbours, wished to be kept in touch with station news.

It is distributed to homes and libraries in parts of Connaught's Quay and also Burton and Ness on the Wirral, from where the station is visible.

We hope that it is of interest to you. If you do have any questions, or would like to arrange a guided tour, please contact our customer relations co-ordinator Sue Becker at the station.

*D. Farthing*

Derrick Farthing - Station Manager



### Bright sparks earn £2,000 for community hospital

Technicians who developed a ground-breaking idea of international importance won £2,000 for the charity of their choice in a PowerGen business excellence competition.

The team chose the Deeside Community Hospital Millennium Appeal. Launched earlier this year by the hospital's League of Friends, the appeal aims to fund an extension for the day hospital. It has a target of £30,000 for the building plus £10,000 for furnishings.

The winning new technique to improve gas turbine safety is now being adopted by similar gas-fired power stations around the world. In the UK, the Health and Safety Executive has taken a close interest, and the Institute of Mechanical Engineers has published a paper about it.

Head of engineering Jill Lees said: "The team put in a lot of hard work to develop this new technique. We are pleased that it has been recognised by the Health and Safety Executive. It is also very rewarding to be able to make a donation to the charity of our choice."

"It wasn't a difficult decision to choose the Community Hospital. Its facilities are so valuable to the people of Deeside."

League of Friends chairman Mrs Cath Fox said:

"The Millennium Appeal will fund a conservatory-type extension capable of being partitioned off to ensure maximum usage. It will allow day patients to receive treatment near to home rather than travel to hospitals further away.

"This generous donation is the biggest to date and it has really boosted the appeal. Every penny donated actually goes towards the Millennium Project. There are no administration costs."



From left: Power station head of human resources Sandra Perlicki, hospital day services manager Janice Salmon, power station maintenance team member Ian Newmarch, League of Friends members Margaret Benish and Barbara Hughes, and hospital manager Dee Begbie.



Modifications are necessary because, although the design of the cooling towers is to a much higher specification than at a traditional power station, the particular climatic conditions of the Dee estuary around Connaught's Quay mean that until now they have not been operating as well as intended.

Specialist contractors are working on the modifications. The shape of the cooling towers is being changed. The middle sections are being widened. This work will be completed during the autumn and commissioning tests will be carried out before they are put into service.

The project is on schedule to be completed by March 2000.

Station manager Derrick Farthing said: "We believe that the low level fogging was unacceptable and work is now well under way to improve the situation."

"I should like to reiterate, however, that although we expect to reduce the high-level plume of water vapour which can sometimes be seen over the

