

## SUSTAINING PERFORMANCE – ENVIRONMENT, HEALTH AND SAFETY REVIEW

International Power takes its responsibility to the environment seriously. Our corporate policy (right) demonstrates this commitment.

In our business of electricity generation, the main potential environmental issues are emissions to air, water and land. We aim to limit these emissions within strictly defined levels, always ensuring compliance with government regulations in the countries in which we operate. Environment, health and safety (EH&S) management is wholly-integrated within International Power's business management processes. EH&S performance is reviewed alongside financial and engineering performance. EH&S audits are carried out as part of the combined compliance audit process together with financial, technical and other operational reviews.

### Risks and management systems

Assessing and minimising environmental risks take place early in our business planning cycle – either during the project development stage or when we review potential additions to our portfolio of operational plant. When building or upgrading plant, we use modern, low emission equipment. We operate plants using environmental management systems such as ISO 14001, the international standard for such systems, to ensure good environmental controls and performance. This is done alongside continual improvements in plant efficiency, thereby reducing emissions for each unit of electricity generated.

All existing ISO 14001 certificates were retained during the review period. In Australia, ISO 14001 certification was gained in 2001 by Pelican Point and Synergen.

Health and safety is a paramount management priority, although the forms of management systems and controls vary around the world. Several of our plants have been awarded Royal Society for the Prevention of Accidents (RoSPA) Gold Awards – for example Deeside and Rugeley in the UK and HUBCO in Pakistan.

### ENVIRONMENT – CORPORATE POLICY

Protection of our world environment is the responsibility of everyone. International Power recognises its responsibilities and has an important role to play both in protecting our environment today and in moving towards a sustainable future.

To support these aims, International Power will:

- minimise environmental impact by balancing the environmental, social and economic factors of sustainable development
- implement and maintain effective environmental management systems
- seek to constantly improve our environmental performance and set appropriate objectives and targets
- ensure all staff are fully aware, properly trained and motivated to conduct their activities in an environmentally responsible manner
- work with our customers, partners and suppliers to make the best use of natural resources
- work constructively with our neighbours and local communities where we operate
- ensure compliance with all relevant environmental regulations
- regularly review and report on our environmental performance.

### EH&S

During 2001 we reviewed our corporate management of health and safety. The reporting of EH&S issues is part of the Company's regular performance reporting and review process. Where we have shared or joint ownership of a plant, we seek to ensure good EH&S performance through board membership of the asset-owning company. We always aim to develop good relationships with our neighbours and strive to play a constructive role in the local communities where we operate around the world. In the following regional summaries, we illustrate some of the EH&S and other community highlights for 2001.

## NORTH AMERICA

Throughout North America we have developed and implemented an environmental management system (EMS). This EMS, designed around the ISO 14001 methodology of continuous improvement, establishes a framework for managing environmental affairs throughout the business cycle including development (greenfield and potential acquisition), construction, commissioning and operations.

Throughout the course of our construction programme, we have maintained an excellent safety record at our Bellingham, Blackstone, Hays and Midlothian sites. Careful health and safety management has resulted in very low lost-time accidents records at all these project facilities. In fact, the Occupational Safety and Health Administration (OSHA) reportable and lost-time incident rates for each of these facilities are well below the US national average of 8.8 and 3.3, respectively. Several of our facilities reported zero lost-time accidents while working well over 1 million man-hours during 2001.

Blackstone and Bellingham received environmental recognition from the US Environmental Protection Agency for their use of Best Available Control Technology (BACT). Blackstone and Bellingham's low emission rates may enable regulators to lower the BACT oxides of nitrogen (NO<sub>x</sub>) emission rate standard in the US.

Hays and Midlothian energy facilities have been very pro-active in the state of Texas in lowering air emissions. Hays and Midlothian provided a source for the Texas regulator (the Texas Natural Resource Conservation Commission) to promote lowering the BACT standard for NO<sub>x</sub> emissions from power generation projects in the state of Texas. During the air permitting phase, Hays and Midlothian voluntarily lowered their respective NO<sub>x</sub> emissions limits to almost half the level prevailing at the time.

## AUSTRALIA

At Hazelwood the upgrade programme for the precipitator, which removes dust from the flue gas emissions, is now half completed, and continues on schedule.

An innovative and best practice greenhouse gas reduction programme was produced by the federal government's Australian Greenhouse Office (AGO) with assistance from the generation efficiency standards (GES), which Hazelwood has adopted. While the GES programme is voluntary, a legally binding five-year deed of agreement was also signed.

The mine at Hazelwood has continued its pioneering work in the use of rare and endangered Australian native grasses in the rehabilitation of the former overburden dump, thus increasing the local extent and biodiversity of native grasses. The total number of 'viro cells' planted by hand to date is just over one million. A total of four hectares of land was rehabilitated during 2001. There were a total of 23,585 indigenous trees planted in 2001, including 2,135 in the former overburden dump, 20,250 in the new wetlands and 1,200 as screening for mine expansion.

Construction work was completed on three wetland sites designed to replace those affected by expansion of the mine. In addition to the tree planting scheme, mud, tree root balls and woody debris, including biota, were transferred from the existing wetlands to the new sites to preserve biodiversity. This is believed to be the first time such a project has been undertaken. The wetlands were naturally filled to design level by heavy rainfall in April.

As part of the mine expansion, extensive field works have been conducted in association with interested groups and the local Koorie community to search for, identify and analyse indigenous sites. Some 1,623 artefacts have been found within the area of the first phase mine development. Protocols are in place in the event of further discoveries. Extensive field works have also been undertaken, regarding the history of settlers from Europe in association with interested groups and local residents, to obtain and satisfy the consents for the mine expansion project.

The Hazelwood safety management system (SMS) was certified in July 2001 to the recent Australian standard AS 4801.



**Blackstone**  
**Massachusetts, US**  
**Marmara, Turkey**

## Environmental, health and safety review

continued

Pelican Point power station and Synergen were audited in 2001 to ensure compliance with the Electricity Association of Australia's (ESAA) Code of Environmental Practice and concluded that environmental management, resource management, sustainable development and social responsibility direction are in line with the policies and principles of the ESAA's Code. Pelican Point and Synergen have voluntarily signed a Greenhouse Challenge Co-operative Agreement with the Australian federal government in developing greenhouse gas minimisation programmes.

An active ecological restoration programme, including revegetation of land owned by Pelican Point, has been implemented. To date, approximately 70,000 native seedlings endemic to the local and regional area have been planted.

A dedicated education centre for the local and regional community was officially opened in November 2001. It is designed to increase awareness and knowledge of the station through active and practical programmes.

Synergen has successfully implemented the requirements of its environmental licence and 'environmental compliance agreement' with the EPA. The carefully planned maintenance programme at Synergen ensured that 2001 resulted in no state or federal EPA infringement notices or fines, and no environmental incidents.

### EUROPE AND MIDDLE EAST

#### Czech Republic

EOP has won two prestigious awards highlighting its commitment to high standards of EH&S management. In 2001, EOP was voted the most admired company in the Czech energy sector for the year 2000, according to a poll organised by the Czech Top 100 Association. The assessment was made by top managers from leading Czech companies, on the basis of selected key criteria, including environmental approach and local community programmes.

In April 2001, EOP was awarded the Health, Safety and Environment Award 2000, organized by Business Leaders Forum, the partner of The Prince of Wales International Business Leaders Forum.

#### UK

Deeside continues to perform very well in all aspects of EH&S. To help improve their already excellent record, Deeside staff have been studying the performance of other world class organisations such as Du Pont. This work has led to new initiatives which are detailed on Deeside's own website at [www.deesidepower.com](http://www.deesidepower.com).

The 1,000 MW coal-fired plant at Rugeley was acquired in July 2001. To improve the environmental performance we have commenced planning work to install flue gas desulphurisation (FGD) equipment. FGD reduces the amount of sulphur dioxide (SO<sub>2</sub>) released to the atmosphere by over 90%. Rugeley has an environment centre with classroom, nature trails and other resources used by local schools. Rugeley has an excellent track record extending back over 30 years.

#### Portugal

Pego continues to perform well in EH&S and retained both ISO 14001 certification and Eco-management and Audit Scheme (EMAS) registration in 2001 (in 2000 it was the first plant in Portugal to achieve this).

To improve the environmental performance and in preparation for the new Large Combustion Plant Directive, we have started planning work to install SO<sub>2</sub> and NO<sub>x</sub> emissions reduction equipment.

We continue to further develop and implement our health and safety management system to the requirements of OHSAS 18001. We have been awarded the RoSPA Gold Award for the fifth consecutive year.

#### Turkey

At Marmara power station, work has continued to reduce the impact the station has on the local community – for example, a noise barrier has been built to reduce the impact the main cooling water screening plant has on local housing.

The station arranges regular educational visits from local technical schools and provides information packages and escorted tours of the station and is currently taking six school children from local technical schools for work experience in various departments within the station.

## REST OF WORLD

### Pakistan

HUBCO continues to comply with World Bank environmental guidelines. As part of compliance assurance, oxides of sulphur (SO<sub>x</sub>) and NO<sub>x</sub> levels are checked by air quality monitoring devices at twelve different sites, located up to 15 km from the station.

Kot Addu continues to meet the Pakistani National Environmental Quality Standards in respect of all its emissions. Plans to improve the management of liquid waste from the station are being progressed with a view to meeting future, more stringent emission standards.

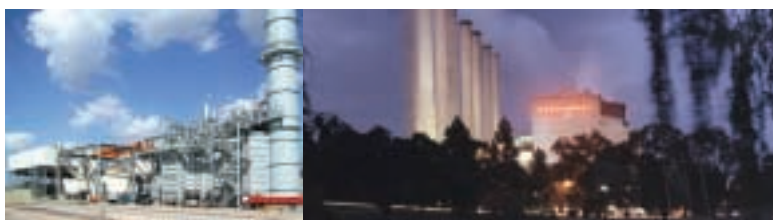
### Thailand

We successfully concluded the first full year of operation in Thailand. This was achieved with zero lost-time accidents and no environmental incidents. The focus in 2002 is to achieve ISO 14001.

Thai National Power (TNP) has established a community support programme which targets, local health issues, local education and local community projects.

Our active health and safety policy covers all our operations in Thailand. We have also supported a drugs prevention programme in the local factories.

Further information is available at our website – [www.ipplc.com](http://www.ipplc.com).



Hays, (unit II)  
Texas, US  
Hazelwood, Victoria,  
Australia