

## Philippines

### Environmental Equipment Project for Power Plants



Meteorological monitoring equipments

#### Outline of Loan Agreement

Loan Amount / Disbursed Amount	457 million yen / 214 million yen
Loan Agreement	December 1994
Terms & Conditions	Interest rate 3.0%p.a. Repayment period 30 years (Grace period 10 years)
Final Disbursement Date	April 1999

#### Project Outline

The project involved the installation of environment monitoring equipments at thermal plants in the Visayas and Mindanao regions in a bid to strengthen environmental monitoring system.

#### Results and Evaluation

The construction of thermal power plants has been advanced in the Philippines with the aim of meeting the burgeoning demand for electricity, however, environmental pollution had become increasingly severe due to gas emissions, etc. In consequence, national ambient air quality standards were revised in April 1993, mandating the implementation of environmental monitoring in and around power stations. In consideration of it, this project covered the procurement of 41 measuring devices to analyze the pollution level of gas emissions, water quality and noise.

The environment monitoring devices installed under this project enabled its executing agency, the Philippine National Power Corporation (NPC), to precisely ascertain the level of air pollution, etc., being generated by power plants, and has contributed to alleviating environmental pollution in the target areas via the implementation of remedial measures such as suspending operations at power plants where pollution is particularly severe.

Moreover, in terms of effects for residents in peripheral communities, the data obtained from the monitoring devices installed under the project has also made it possible for them to verify the security of the existing power plants.

In terms of the operation and maintenance activities being conducted by NPC, since the devices have been used in naturally harsh conditions, including in hydrogen sulfide gas and high temperature environments, problems occurred with the function of some of the monitoring equipments, however, this has had no subsequent impacts on its operation, and measurements are continuing to be made.