

CALACA II THERMAL POWER PROJECT

Country	Republic of the Philippines	
Location	Batangas, Luzon	
Client	National Power Corporation (NPC)	
Financial Sources	Overseas Economic Cooperation Fund (OECF), Japan	
Period of Services	Detailed Engineering & Design	March 1989 to March 1991
	Supervision of Project Implementation	April 1991 to November 1996

Description of Services

The construction of thermal power plants fired with indigenous sub-bituminous or lignite coal has been a key element of the NPC's system power development program to reduce the country's heavy dependence on imported oil. Calaca Thermal Power Project, located 110 km south of Manila, is one of such attempts, and the construction of the second unit is in particular being hastened as an impending alternative to the Philippine Nuclear Power Plant (600 MW) which was decided by the Government to be mothballed on a permanent basis. A special care in designing the boiler and ancillary equipment is taken to eliminate problems that might otherwise occur due to the use of low grade, run-of-mine local coal.

Scope of Services

Detailed engineering and design, and supervision of project implementation

Main Features of the Project

Installed Capacity	300 MW	
Boiler	Steam Pressure	169 kg/cm ² , 538°C
	Temperature	1,036 ton/hr
	Evaporation	Natural circulation, drum type, balanced draft
	Type	Sub-bituminous or lignite coal with heat value of 3,700 - 4,700 Kcal/kg
Turbine	Fuel	
	Max. Continuous Rating	330 MW
Generator	Type	Tandem compound, single-reheat, multi-cylinder, directly connected to generator
	Rated Capacity	355 MVA
Main Transformer	Type	Synchronous, 3-phase, horizontal shaft
	Rated Capacity	355 MVA
	Rated Voltage	22 kV /241 kV
	Type	Outdoor, 3-phase, oil-immersed, forced-oil forced-air cooled



Batangas (Calaca) Coal-Fired Thermal Power Plant II (300MW)