

Indonesia

Priok Steam Power Plant Unit 3 & 4 Rehabilitation Project



Priok Steam Power Plant Unit 3

Outline of Loan Agreement

Loan Amount / Disbursed Amount	1,590 million yen / 1,555 million yen
Loan Agreement	July 1988
Terms & Conditions	Interest rate 3.0%p.a. Repayment period 30 years (Grace period 10 years)
Final Disbursement Date	January 1996

Project Outline

The project covered the rehabilitation of boilers, turbines, and other major components of Units 3 and 4 (50MW × 2) at Priok Steam Power Plant, targeting improved operational efficiency, fuel cost savings, the restoration of generating capacity, and the extension of its plant life.

Results and Evaluation

The exhaustion of crude oil reserves in Indonesia had become the focus of widespread attention, and diversification in methods of power generation as well as increased efficiency for oil-fired power plants had become urgent issues.

Under this project, boilers, turbines, and other associated equipments of Units 3 and 4 were replaced. Unit 4 went into commercial operation in the second half of 1994, and Unit 3 in early 1995. Average thermal efficiency of both units improved up to 29.9% (target level: 31.3%), and peak load reached 45MW (target level: 50MW). However, delays in completion forced Units 3 and 4 to operate continuously without proper rehabilitation during 1990-93, when Indonesia experienced severe power shortages. These overuse caused components to become even more deteriorated and superannuated. Moreover, changes to government fuel policies increased generation costs and made it necessary to shut down Units 3 and 4, in 1996 and 1998, respectively.

The executing agency, Perusahaan Listrik Negara (PLN), is currently conducting periodic maintenance work at the power plant, and is exploring the feasibility of converting the plant to a combined cycle power plant, whilst looking into related technical capabilities, financial viability and so forth.