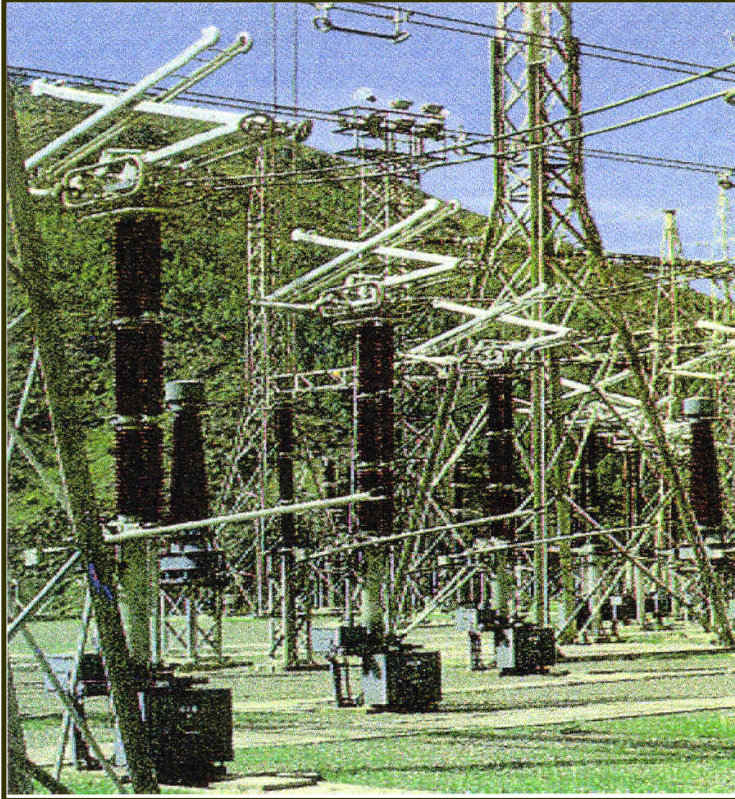


Labrador and San Manuel Substations

Detailed Engineering Design of Substations



Client

Siemens Inc.

Project

Labrador and San Manuel Substations
Pangasinan, Philippines

Project Period

Start March 1997
End February 1998

Project Description

The National Power Corporation (NPC) of the Philippines intended to erect the 230/500 kV new Labrador and San Manuel substations and to extend the old Labrador 230 kV Substation. The two substations are located in Nagsaad, Sn. Manuel and Kadampat, Labrador both in Pangasinan. Trans-Asia was a subcontractor for Siemens in the performance of engineering services which included complete design of structures consisting of administration building, warehouse, motor-court, relay houses, guard houses, watch towers, pumps house, access road, power transformer foundation, high voltage equipment foundation, portal and gantry foundations, mesh wire seclusion switchyard fence, boundary CHB fence and other related structures. The works also included the field investigations of the five (5) existing bridges en route to the project site whether these bridges can withstand heavy loads during the transporting of heavy transformer equipment.

Scope of Services:

Trans-Asia was commissioned to undertake civil works, structural and architectural designs. The works also include engineering support during construction (ESDC).