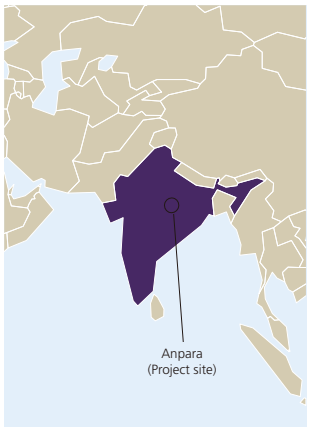
External Evaluator: Hajime Sonoda

Overall Rating **B**

A Foundation for Sustained Growth



36 India

Anpara Power Transmission System Project (1)(2)

Helping to stimulate industry by providing a stable power supply

Loan Amount/Disbursed Amount	31.338 billion yen / 25.588 billion yen
Loan Agreement	June 1991/January 1996
Terms & Conditions	Interest rate 2.3–2.5%, Repayment period 30 year (grace period 10 years), Partial untied (1)/General untied (2)
Final Disbursement Date	January 1999/March 2001
Executing Agency	Uttar Pradesh Power Corporation, Ltd. (http://www.uppcl.org/)

Project Objectives

This project's objective was to provide a stable supply of electricity to meet the growing demand for electricity in central and western Uttar Pradesh (UP), which is the main consumption area of electric power generated by the Anpara Thermal Power Station in south-eastern UP, by constructing high-voltage electric transmission and transformer facilities, thereby improving the electric power service in UP and contributing to industrial promotion and increased employment opportunities in the region.

Effectiveness & Impact

Rating **a**

It is confirmed that transmission lines constructed through this project transmitted 3,700MWh in FY2004 from the Anpara thermal power station, which is amounts to 8.4% of all electricity supplied in Uttar Pradesh. In addition, the availability factor of the facilities was 99% in FY2005, and transmission losses were below 2%, meaning that the operating conditions of the facilities constructed through this project were excellent. The state's electricity shortages remain as a serious concern; however, under this project cutting-edge power outages prevention devices were installed, and there have been no major (region-wide) power outages within the transmission lines since the startup of operations. Thus, the project has clearly helped increase the stability and reliability of the electricity supply. Therefore, this project has largely achieved its objectives, and effectiveness is highly satisfactory.

Relevance

Rating **a**

This project has been highly relevant with India's national policies both at the time of appraisal and at the time of the ex-post evaluation. Both India's Seventh Five-year Plan (at the time of the appraisal) and its Tenth Five-year Plan (at the time of ex-post evaluation) emphasized the importance of development of the power sector for sound domestic economy growth.

Efficiency

Rating **b**

Though project costs were lower than planned (88% compared to the plan), project period was much longer than planned (166% compared to the plan), therefore the evaluation for efficiency is moderate. The main reason for the delay was the additional time to obtain permits, select consultants, complete bidding procedures, and land acquisition.

Sustainability

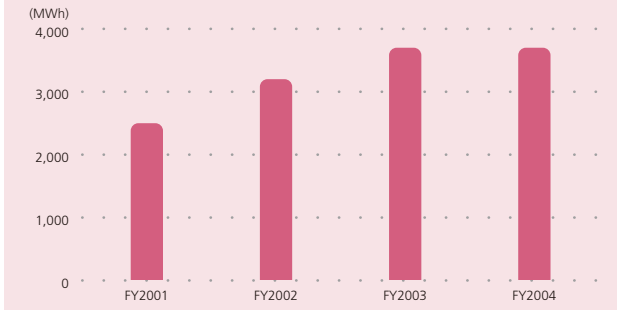
Rating **b**

Though some problems have been observed in terms of the executing agency's financial concern and an excess of staff (particularly unskilled staffs), sustainability of this project is moderate. The operation and maintenance performed on facilities constructed through this project is excellent, resulted in an operation rate of 99%.

Conclusion, Lessons Learned, Recommendation

In light of the above, this project is evaluated to be satisfactory. As a lessons learned, the kind of project that both transmission and power generation facilities were supplied within the same project, it is critical to conduct supervision to ensure that the projects' completion dates are not too far from one another, so as to maximize project effectiveness. It is hoped that the state of Uttar Pradesh will improve the problem of power shortage observed at the time of the ex-post evaluation by completing the Anpara C thermal power station construction project.

Electricity transmission of Anpara-Unnao line



Third-Party Opinion

Complete synchronization in project implementation between the generating and transmission sides is difficult but this project was implemented without problems. This project is expected to have an even greater impact on the regional economy once the Anapara C thermal power plant is completed.

Name of specialist: Mr. Sankaran Kartha Narayanan Nair (consultant)
Graduate of the University of Madras in India. Currently an advisor to the council at India's Applied Economics Research Center. Specializes in infrastructure provision policies, electric power, transportation (railways), and communications.