

**Third Party Evaluator's Opinion on
Srisailam Left Bank Power Station Project**

**Rajendra Singh
Former Member (Hydro-Electric)
Central Electricity Authority
Govt. of India**

Relevance

In order to achieve faster economic development, electric power sector had been the priority sector for public investment in India. There had been wide spread shortage of electric power during peak hours in Andhra Pradesh as well as in other parts of the country. Therefore, increasing peak supply capacity had been accorded top priority. Srisailam left bank power station project (6 X 165 MW) had been planned to utilize unused water flowing from Srisailam reservoir to Nagarjuna Sagar reservoir, to develop hydro power during peak hours. Conventional power generation was considered feasible only up to the year 2000, because of expected increase in diversion of water upstream for irrigation in Karnataka and Maharashtra States. To maintain the generation capability of the station even after 2000, pumped storage operation of the plant was envisaged. Thus, the relevance of the project at the time of appraisal was definitely extremely high.

The six generating units began actual operation in stages from 2001. The maximum Output of 967 MW was recorded in FY 2004. As the diversion of water upstream has not increased as expected, the plant was operating in conventional mode only and supplying electric power during peak hours. As per the data released by the Central Electricity Authority (CEA), Govt. of India, the gap between peak demand and peak power availability continues in all parts of India. It has been indicated that during 2006-07, peak power demand and peak power availability in Andhra Pradesh would be 11219 MW and 9696 MW respectively indicating shortage of 1523 MW (13.6%). Increasing the peak power availability, therefore, would remain the priority issue. In view of above it can be concluded that relevance of the Project continues to be extremely high as highlighted in ex-post evaluation report.

Efficiency

At the time of appraisal, it was anticipated that the project would start delivering benefits in a period of 87 months starting from January 1987 to March 1994. The project, however, has been actually completed in 212 months starting from February 1988 to September 2003, finishing about ten and a half years later than the initial schedule. The DPR was based only on the preliminary Investigations. It was assumed that rock structure shall be similar to Right Bank power house. During the excavation, it was, however, observed that the rock structure was not as originally anticipated. Presence of poor rock, heavy seepage and fault zones led to abnormal increase in excavation as well as concrete works.

The cost of the Project has reached 78,093 Million Yen which is approximately 30% higher than the cost of 60,044 Million Yen estimated at the time of appraisal. The main reasons of increase in cost had been increase in amount of civil engineering works and escalation in the cost of Electrical and Mechanical works.

The operation and output of the project is almost as planned. However, due to abnormal delays in the execution of the project and due to significant increase in the cost of project, the level of efficiency in terms of overall execution of the project was low as correctly brought out in Ex-post evaluation report. An important lesson has to be drawn from this experience that project execution should be undertaken only after adequate investigations.