

4.3 Observations

The foregoing analyses demonstrate the impacts on the costs of development of utilizing different levels of foreign equity participation for two projects of quite different magnitude - the 13,000 MW Three Gorges and 1,200 MW Gehe Yan Water Control Projects. Within the context of assumptions with respect to costs and financial parameters, the conditions which would be necessary to assure financial viability of the hypothetical joint venture enterprises have been demonstrated.

In order to model the financial implications of a joint venture enterprise which would own and operate bulk power supply facilities, a number of critical assumptions have had to be made concerning China's policies affecting the financing of power developments. The key assumptions are that power revenues would be based on tariff rates which would reflect the actual cost of service, and that the indirect foreign exchange earnings of electric power would be explicitly recognized through according a right to convert revenues to the joint venture enterprise as necessary to meet all of its foreign exchange obligations.

Justification of a policy allowing for power revenue convertibility is based upon evidence of the high rate of consumption of electricity by industry and agriculture, and hence the importance of electrical energy as an intermediate input to nearly all of China's exports. This is likely to be increasingly so as electric power supply is substituted for other forms of energy and direct linkage between costs and revenues in the electric power sector could provide added incentives to increasing overall efficiencies in both development and operation.

Comparison of the results of the case studies for Three Gorges and Gehe Yan highlight the significance of a major difference in assumptions which affect the outcome. In the case of Three Gorges the joint venture enterprise is assumed to be the owner operator of the Gezhouba development as well as of the Three Gorges project. This provides the enterprise with a substantial revenue base from the outset of construction at Three Gorges and significantly reduce the level of