

Background to the Reform

The power sector in Orissa suffered from high transmission and distribution losses, inadequate accountability for various segments (generation, transmission, and distribution), poor financial performance, poor quality of service and manpower related issues. There was a pressing need to solve the financial problems of Orissa State Electricity Board (OSEB) and meet the projected demand of funds for investment in generation, transmission and distribution system. It was also the time when the new National Economic Policy, 1991 was announced which envisaged liberalisation and private participation in infrastructure development.

Reform Agenda

Keeping this view in mind, the State Government of Orissa pioneered Reform and Restructuring in the power sector by introducing POWER SECTOR REFORM ACT, 1995, which came in to effect from 1st April 1996. Orissa Electricity Regulatory Commission (OERC) was formed to establish an independent and transparent regulatory regime. The Government of Orissa decided to restructure and substantially privatise the power sector, to make power supply more efficient and to be able to meet the investment needs of the sector. The Orissa government's ultimate objective was to withdraw from the power sector as an operator of utilities, having instead privately-managed utilities operating in a competitive and appropriately regulated power market. Power sector industry and market structures to be established under the reform program had been defined so as to facilitate this ultimate objective with no further institutional restructuring. The World Bank supported these government initiatives by providing US\$350 million assistance.

The scope of the reform program was:

- Unbundling and structural separation of generation, transmission, and distribution into separate services to be provided by separate companies
- Private sector participation in the new hydroelectric generation and transmission utilities, the Grid Corporation of Orissa (GRIDCO) and the Orissa Hydro Power Corporation (OHPC)
- Privatisation of thermal generation and distribution
- Competitive bidding for new generation
- Development of an autonomous power sector regulatory agency, the Orissa Electricity Regulatory Commission. The role of OERC was to:
 - Take measures conducive to an efficient electricity industry in the State
 - Issue license for transmission and distribution and set tariff
 - Safeguard the interests of consumers
 - Prevent monopolistic behaviour by operators
 - Reforming of electricity tariff at the bulk power, transmission, and retail levels

The Orissa power sector reform was carried out in two phases as explained below:

First Phase of Reform

Two Government-owned corporate utilities were formed with agreement ensuring full autonomy with effect from 1st April 1996. These were:

- Orissa Hydro Power Corporation (OHPC) - responsible for hydro power generation
- Grid Corporation of Orissa (GRIDCO) - responsible for transmission and distribution functions

Second Phase of Reform

Pursuant to the Orissa Electricity Reform Rules, 1998, the Govt. of Orissa transferred the distribution assets and properties along with personnel of GRIDCO to four distribution companies with effect from 26th November 1998. These four distribution companies namely CESCO, NESCO, WESCO and SOUTHCO continued to function as affiliates of GRIDCO up to 31st March 1999. Through a process of international competitive bidding, GRIDCO disinvested 51% share to Private Sector Investors keeping a share holding 39% with it and 10% share for Employees Welfare Trust. No asset sale had actually taken place. Assets have been assigned to respective companies. At present, GRIDCO purchases power from independent generation utilities e.g. NTPC, OHPC, OPGC, IPPs, CPPs and provides it to four privatised distribution companies who in turn cater to the need of customers. The figure at the end of this Annexure gives a view of the restructured power sector ownership in Orissa.

Outcome and Learnings:

The power sector restructuring in Orissa has shed significant light on the inherent difficulties in the reform process. Valuable lessons could be learnt from this project that could aid other states like Chhattisgarh in restructuring and reforming their power utilities. Some key results and insights are

- Following the power sector reform, the net cash flow for Government of Orissa has improved significantly as can be seen in the table at the end of this Annexure
- The T&D losses that were assumed (Staff Appraisal Report of the World Bank) to be 39.5%, were actually greater than 50%. OERC based their Tariff Order considering 35% T&D losses, leading to an additional T&D loss of 15% being absorbed by GRIDCO as losses. The higher than anticipated T&D losses are one of the most important reasons for the current situation in Orissa wherein the private distribution companies are unable to pay GRIDCO and hence have caused shadow on the overall reform exercise. The higher than assessed T&D losses were in turn on account of higher agricultural consumption, which were actually commercial losses. Non metered supply to most agriculture consumers made it impossible to estimate the true extent of the T&D losses
- Even though 100% Collection Efficiency was assumed by FY98, the actual collection was 83% in FY99
- Tariff increase was assumed to be 16% in FY97 and 18% in FY98. However weighted tariff increase by OERC in its two orders was less than 10% each year, with a 20 month gap between the two tariff orders
- The crucial aspect of government support during the transition period was neglected, and GRIDCO was expected to break even in FY 98. Haryana and Andhra Pradesh

learnt from the Orissa example and have provided for transition period support from the State government

- The impact of captive power was not analysed which took away a significant share of consumers
- The project did not anticipate that in order to make the distribution companies attractive to the private investors, GRIDCO would have to retain in its own books about three times the quantum of liabilities passed on to the four distribution companies. To make the distribution business attractive to private investors, only around Rs. 650 crores of total liabilities was passed on the four Distribution Companies while GRIDCO, the Transmission company, retained with it Rs. 1950 crores of liability in its own books, as all distribution companies were loss making undertakings

Net Outflow for Govt. of Orissa	FY94	FY95	FY96	FY97	FY98	FY99	FY00
Without Reforms	-178	-101	-203	-178	-204	-317	-137
With Reforms	-178	-101	-203	74	68	150	122

New Structure of Electricity Sector in Orissa

