

## 2.3 Power Sector Companies

### Transmission and Distribution Losses in power sector companies of Rajasthan

#### Highlights

Against the norms of four *per cent* for Transmission loss and 11.5 *per cent* for Distribution loss, actual losses ranged between 6.01 and 8.15 *per cent* and 34.06 and 45.51 *per cent* respectively. Transmission & Distribution losses in excess of the norm of 15.5 *per cent* was Rs.11,624.80 crore for the period of five years from 2000-01 to 2004-05.

*(Paragraphs 2.3.11 and 2.3.18)*

The performance of Rajasthan Rajya Vidyut Prasaran Nigam Limited with regard to evacuation of power within the State deteriorated during 2003-05 as within State transmission losses increased to 4.72 *per cent* in 2003-04 and 4.59 *per cent* in 2004-05 as compared to 4.10 *per cent* in 2000-01, despite a capital investment of Rs.1,125.16 crore.

*(Paragraph 2.3.11)*

Due to Transmission & Distribution losses in excess of the norm of 15.5 *per cent*, consumers had to bear additional burden of Rs.4,183.57 crore in the form of higher tariff equivalent to 17 *per cent* of average tariff for the year 2004-05.

*(Paragraph 2.3.34)*

Distribution loss in excess of that allowed by the Regulatory Commission was Rs.2,508.75 crore during the period of four years from 2001-02 to 2004-05.

*(Paragraph 2.3.18)*

Deficient implementation of Low Tension-less system resulted in loss of envisaged energy saving of 1,193.47 million units valued at Rs.399.40 crore.

*(Paragraph 2.3.31)*

Shortfall in installation of capacitor banks resulted in loss of envisaged saving of energy to the extent of 75.36 million units valued at Rs.23.04 crore in Transmission system and 199.66 million units valued at Rs.68.58 crore in Distribution system.

*(Paragraphs 2.3.14 and 2.3.23)*

### ***Wasteful expenditure on IT enabling services***

**2.3.20** With the objective of reducing distribution losses on rural distribution network, JVVNL conceived (1996) a Remote Control Load Management scheme. Initially it was planned to be implemented as a pilot project in 33 KV Grid sub-stations at Machwa, Kalwar and Hatod in the District of Jaipur. Tenders on turnkey basis were invited (January 1997) for the purchase of equipments, their installation and commissioning. The purchase orders were placed in January 1998 on Shyam Telecom Limited and CMC Limited at a cost of Rs.1.50 crore each. The total cost of the scheme comprised Rs.2.22 crore for hardware/ software and Rs.0.78 crore for fail safe transformers.

As per the supply order, 100 *per cent* payment including installation and commissioning charges was to be released after one month from the satisfactory installation and commissioning of the entire system. The Company released (2000-02) an amount of Rs.2.90 crore in full payment against the agreed cost of Rs. 3.00 crore, for no recorded reasons.

It was observed in audit that:

- \* no test report showing the successful commissioning of the system was available with the company;
- \* the system could not be implemented so far (August 2006) due to non availability of continuous three phase power for 24 hours a pre-requisite for operating the software; and
- \* the management was also not aware of the three phase 24 hours power supply requirement for operating this system at the time of planning as well as acquiring and commissioning the system.

Thus, failure of the Company to ensure three phase 24 hours power supply for operation of the system at the time of acquisition and implementation of the system resulted in wasteful expenditure of Rs.2.15 crore\* towards purchase of hardware/ software. Besides, the targeted benefit amounting to Rs.2.48 crore per annum arising out of reduction of losses, improvement of voltage profile and improvement in power factor *etc.* as envisaged in the project report also could not be achieved.

---

\*proportionate amount according to actual payment made ( Rs. 2.22 x 2.90 ÷ 3.00 = Rs.2.15).  
The cost of the fail safe transformer has not been taken as the same is being used.