Reforms in distribution

9.25 Some of the major initiatives in helping utilities to improve efficiency and commercial viability included establishment of regulatory mechanism at the Central and state level, restructuring of the state power utilities, metering of feeders & consumers, energy accounting & auditing and securitization of outstanding dues of CPSUs. The Ministry of Power signed the MoUs with the states to undertake time-bound distribution reforms. 28 states have constituted independent regulatory commissions and 23 SERCs have issued tariff orders for rationalizing tariffs. States are moving towards Multi-Year Tariff (MYT), Time of Day (ToD) metering and intra-state Availability Based Tariff (ABT). 16 SEBs/Electricity Departments have been unbundled and corporatized, and 23 SERCs have issued open access regulations. Consumer Grievances Redressal Forums and Ombudsmen have been constituted/appointed in 22 states.

AT&C losses and restructured APDRP

9.26 The Accelerated Power Development Reforms Programme (APDRP) was launched in 2002-03 as additional central assistance to states for strengthening and upgrading sub-transmission and distribution systems of high-density load centres, in order to reduce AT&C loss and commercial loss and to improve quality and reliability of supply. So far, Rs. 7,646.35 crore has been released to the states under the investment component and another Rs. 2,879.73 crore for cash loss reduction under the incentive component. The Power Finance Corporation indicated that the aggregate technical and commercial (AT&C) losses of the state power utilities at the national level for 2004-05, 2005-06 and 2006-07 were 34.82 per cent, 35.18 per cent and 33.07 per cent respectively of the total energy available for sale. Although at the national level the AT&C losses have not shown much improvement, the losses have come down in towns where APDRP has been implemented (Box 9.3).

9.27 The Chief Ministers' Conference, held on May 28, 2007, resolved to reduce AT&C losses to at least 15 per cent through the next five years in the APDRP project areas. Further, State Governments must ensure upfront payment to the utilities for free or subsidized provision of power. It was decided to continue APDRP during the Eleventh Five Year Plan, with revised terms and conditions, as a Central Sector Scheme, with a size of Rs. 51,577 crore, focused on actual, demonstrable outcomes in loss reduction. Towns and cities with a population of more than 30,000 (10,000 in case of special category states) and certain high-load density rural areas would be covered under the scheme. Projects under the scheme would be taken up in two parts. Part A would include projects for baseline data construction and IT applications for energy accounting / auditing and consumer service centres. Part B shall include regular distribution strengthening projects.

9.28 Expected investment in Part A is Rs. 10,000 crore and that in Part B is Rs. 40,000 crore. Initially, funds for the projects under both the parts will be provided through loan which will be converted into grant on specified conversion conditionalities relating to achievement of project targets about baseline data (Part A) and reduction of AT&C losses (Part B). Restructured APDRP will also cover an enabling component for the implementation of APDRP (Part

Box 9.3 : Recommendations of the working group on AT&C loss reduction (Extracts)

Considering the need to evolve uniformity in approach for loss reduction, the Forum of Regulators constituted a Working Group which, inter alia, recommended the following;

- Transmission losses should not be clubbed with distribution losses. It is essential that losses should be segregated into technical and non-technical (commercial) losses.
- The third party verification of technical and financial data of the utilities may be done.
- SERCs should pay attention to estimation of energy supplied to un-metered agricultural consumers.
- The trajectory for loss reduction should keep in view the actual loss levels, past capital expenditure made for improving network and future capital expenditure plans.
- Payback period and life cycle cost analysis should be carried out for selecting the appropriate technological intervention aimed at reducing technical losses.
- Feeder for agriculture supply should be segregated, where the supply to agriculture is substantial.
- Under-achievement of the loss reduction target should be borne by the licensee and SERCs may encourage suitable local area based incentive and disincentive schemes for the staff of the utilities linked to reduction in losses.

C) and facilitating reforms in the power sector and a separate component to provide incentive for utility staff (Part D) in towns where AT&C loss levels are brought below the base line levels (Box 9.3).

9.29 The Power Finance Corporation Ltd. (PFC) is the nodal agency for operationalizing the programme. The steering committee, constituted to implement the programme, has approved 599 projects at the cost of Rs. 1,947.70 crore under Part 'A' of R-APDRP.

Rural electrification

9.30 Under the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), which is continued during the Eleventh Five Year Plan, 59,882 villages have been electrified and connections to 53.78 lakh BPL households have been released (up to 31.3.2009). 327 projects have been sanctioned for implementation in Phase-I of Eleventh Five Year Plan period at a sanctioned cost of Rs. 16,254.12 crore for electrification of 49,704 un-electrified villages and release of electricity connections to 161.76 lakh BPL households. 280 projects have been awarded till 31.3.2009. Besides 327 projects, ongoing 235 projects of Tenth Five Year Plan are also being executed during Phase 2 of the Eleventh Five Year Plan. Franchisees are in place in 97,211 villages in 16 states.

Energy conservation and efficiency

9.31 The Bureau of Energy Efficiency (BEE) has taken initiatives to promote energy efficiency, targeting reduction in demand of 5 per cent during the Eleventh Five Year Plan (Table 9.12).

9.32 To create awareness, painting competitions are held every year for students of Class 4 and 5. The National Action Plan on Climate Change has decided to launch a national mission for enhanced energy efficiency for achieving growth with ecological sustainability by devising efficient and cost-effective strategies for end-use Demand Side Management through innovative service delivery and promotion of market based implementation at an accelerated pace.

Table 9.12 : Conservation initiatives

Initiative	Components	Achievements/developments
Bachat Lamp Yojna	Provides high quality compact fluorescent lamps to consumers at rate comparable to that of incandescent bulbs	The scheme was recently approved by the CDM Executive Board of the UNFCCC and implementation has just begun
Standards & Labeling Scheme	Lays down minimum energy performance standards for high energy equipment and appliances.	Avoided capacity generation of 828 MW.
Energy Conservation, Building Code and existing buildings	Sets performance standards for new commercial buildings with connected load of more than 500 KW or 600 KVA of electricity consumption	Avoided 7 MW capacity addition.
Demand Side Management	DSM in agriculture & municipalities	Approval for implementing the scheme was received in 2008-09.
Strengthening state designated agencies (SDAs)	Financial assistance to SDAs for strengthening institutional capacities	Avoided capacity addition of 793 MW
National Energy Conservation Awards	For specified sectors large, medium and small industries. For SDAs and municipalities from 2008	Avoided capacity addition of 475 MW
Energy efficiency in enterprises	For small and medium enterprises	Approval for implementing the scheme has been obtained.

Source : Ministy of Power.