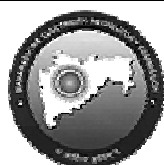


Annexure

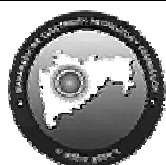


**Annexure I: Summary of the recommendations of the Commission to the State
Government dated May 14, 2004**

Viability of all distribution companies	The State Government should ensure that the dissimilarities in consumer mix and operating parameters do not result in a situation that makes the operations of any particular company unviable.
Minimisation of risks in PPA allocation	While an optimal power purchase cost allocation based on “capacity to pay” may be necessary, certain risk factors would need consideration (e.g. reliance on specific stations, hydrology risks, risks arising out of consumer mix changes, etc). The term of any PPA implemented for the stations of MSEB and allocated to the successor companies should be restricted to 3-5 years to preserve flexibility for future reallocation.
Meeting GoM objectives (if any) of tariff stability and uniformity	The State Government should formulate specific mechanisms as a part of the restructuring process to ensure that objectives of end use tariff uniformity across the A trading company vested with management of peaking power (including hydro), and also for undertaking trading on behalf of the distribution companies could be considered as an interim measure.
Redistribution of liabilities of MSEB	Redistribution of liabilities between the successor entities in order to bridge differences in financials and performance may be acceptable, but only to a reasonable extent. In general the debt allocated should not be disproportionate to the assets of the distribution company.
Innovative arrangements for rural supply	The Commission outlined the need for innovative arrangements on rural distribution management through franchising arrangements to reduce the high level of losses in the rural areas. The Commission noted with concern that certain rural circles have Aggregate Technical and Commercial Losses (AT&C) losses in excess of 80%.
Operation of the SLDC	The Commission concurred that the State Transmission Utility (STU) should operate the State Load Despatch Centre (SLDC) for the present. However, the State Government may consider establishing a representative



	body from the industry to oversee the operations of the SLDC
License area of second licensee	The Commission opined that the intent of the Act is to promote competition and the Commission is averse to recommending any structural measures that could be perceived to be negation of the intent of the Act in any manner. The Commission would have to be guided by the contents of the Electricity Act, 2003, and the policies formulated under it.
Principles of cross-subsidy computation	The philosophy of the Commission on reduction of cross-subsidies is well articulated in all the tariff orders of the Commission. In principle, the Commission remains committed to the implementation of cost based tariffs and progressive reduction and elimination of cross-subsidies.
Payment of subsidies by the GoM	Timely payment of subsidy will be critical to the financial health of the successor entities. Upfront commitment on subsidies would provide the distribution companies the necessary comfort on operations and investments.
Investment requirements in distribution	The State Government should adequately consider the investment requirements that may be necessary in the distribution companies to reduce losses, improve quality of supply and implement open access as directed by the Commission.
Valuation of assets	Section 131 (2) of the Electricity Act, 2003 permits valuation of assets based on revenue potential. The approach to determining the revenue potential should be scientific and should not result in ad-hoc asset valuation. Care should be taken to ensure that there is no tariff shock on this account. Discrepancies between the financial values of assets and physical assets transferred should be prevented.
Provisioning of receivables	Suitable provisioning of overdue receivables should be made to ensure that the distribution companies are not unduly burdened with legacy of the past. The State Government must also ensure that dues of MSEB from the State Government are suitably adjusted in the restructuring process.



Extension of Availability
Based Tariffs (ABT)

The Commission was of the view that the Availability Based Tariffs (ABT) arrangements would need to be extended to the in-State generators and loads for handling imbalances vis-à-vis schedules and settlement thereof. The ABT mechanism would also serve as a trading platform and would thus promote efficiency and market development. Suitable settlement infrastructure should also be implemented

Development of
capabilities in successor
entities

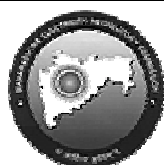
The Commission was of the opinion that significant capacity development will be necessary in the successor entities of MSEB. The State Government, in the opinion of the Commission, should formulate an overall reform implementation plan to ensure that the benefits of reform and restructuring reach the end consumer.



Annexure II: Review of national and international practices and recommendations on rural supply and subsidisation

The Commission has reviewed certain international experiences (particularly Latin America, which shares several socio-economic characteristics with India) that provide certain important pointers:

- **Rural electricity supply needs to be made an attractive proposition for suppliers:** In Chile, the rural electrification program aims to create market incentives for suppliers. Under the scheme the State does not own or operate any facility built under the rural electrification program—that is the role of private investors. The aim is to make rural electrification projects an attractive business opportunity for electric utilities. Companies are required to invest their own resources to increase their commitment to the success of projects. State subsidies are provided only to projects with a positive social return. The first choice is grid supply if the costs permit. However, wherever the costs (evaluated as per an approach based on nationally and internationally practiced methods) exceed the costs of alternatives, suitable alternatives are considered. The model has been very successful in extending rural electricity services in Chile.
- **Private participation should be encouraged:** In Argentina, a scheme of off-grid rural supply rural supply concessions has been introduced to serve remote locations where grid supply is difficult to reach. Concessions are eligible to re-bid for their business every 15 years up to a total of 45 years, competitively against other eligible firms. Tariffs are renegotiated every 2 years. The financial rate of return to be obtained by the concessionaires has been estimated to be close to 14%. The programme has witnessed considerable success in extending electricity services in remote areas.
- **Local participation is vital for successful rural services:** Much of the successful rural electrification efforts in Latin America have depended heavily on local participation. International experience demonstrates that the main power utilities have institutional difficulty in meeting the special demands of rural distribution. Local community level problems often are not addressed by utilities (e.g., right of way, theft, payment default, optimal resource utilisation, etc.). Joint financing by local bodies or users also increases ownership and responsibility for assets.
- **Competition for rural projects is feasible and beneficial:** Chile has successfully introduced competition at several levels. The various communities compete with each other for financing of their projects. Distribution companies compete on implementation of the projects, since these projects earn them a commercial return, once commissioned. Regions compete for funds from the central government. The availability of such funds is linked to implementation, and hence there are inherent incentives for prompt



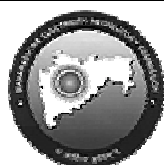
commissioning. Since decision making is decentralised and the rules for selection of projects are transparent and stable, this generally leads to controlling of costs through choice of appropriate technology and prompt implementation.

The Commission, in the case of Mula Pravara Electric Co-operative Society (MPECS), has arrived at similar conclusions on some of the issues involved in rural distribution. MPECS was provided with a license to distribute electricity in 183 villages spread over 5 Talukas in Ahmednagar District by Government of Maharashtra (GoM) on January 28, 1971. As on March 31, 2002, MPECS had a supply base of 1.37 lakh consumers. Based on directions of the High Court, Nagpur Bench the GoM requested MERC under Section 22(2)(p) of the Electricity Regulatory Commissions (ERC) Act, 1998 to examine as to whether and under what conditions MPECS should be allowed to continue its operation, and to make recommendations to GoM in the matter. The views of the Commission were sought on three basic issues:

- i. To assess if MPECS' operations are at least as efficient as comparable distribution areas of MSEB in terms of T&D losses, Collection efficiency, administrative & other costs, level of service in terms of parameters such as transformer failure, response time in fuse calls, time taken to grant new connections, etc.
- ii. Preparation of a time bound programme listing out specific milestones to be reached and made conditional for the continuation of its distribution license as well as for support from GoM and MSEB.
- iii. The parameters and formula for a viable bulk rate for purchase of electricity by the MPECS from MSEB, whether such a bulk rate is desirable and justifiable and if not, the subsidy which would be required to sustain MPECS.

Based on a review of operations of MPECS the Commission recommended in its advice to the GoM that MPECS should continue in its license area as an operator, preferably as a franchisee of MSEB. The key findings of the Commission are as follows:

- MPECS' performance is better than MSEB in the adjoining rural area as well as comparable areas of MSEB in terms of financial and commercial parameters, and also with regard to customer service.
- In order to enable MPECS to turn around its operations during the transition period, a separate mechanism to discharge the past power purchase dues and accumulated losses of MPECS should be evolved, so that the future operations of MPECS are not overshadowed by the burden of past dues.
- Rural supply requires some form of continuous assistance in the present context of the economy, and the sector strategy in this regard should take cognisance of the same. In addition to the above, GoM may consider providing capital subsidy for installation of decentralised energy supply systems based on local resources such as bagasse based



co-generation, biomass based power plants, etc. by MPECS to meet its demand. This would enable self-sufficiency and long-term sustainability of MPECS' operations and reduce MPECS' dependence on GoM for revenue subsidies during the transition period.

The Commission advised that the GoM could consider the findings of the Study Group constituted by GoM on decentralisation of Rural Electrification to Panchayats and alternative structures for supply of electricity in rural areas before taking a final decision on the sustenance of MPECS. The key findings of the study were as follows:

- MPECS case study supports the fact that involvement of local entities could help in creating administratively efficient structures
- Proposed reforms and restructuring in India should take note of learnings from these earlier models and analyze the grass-root level reasons for their better performance
- Good performance by MPECS (even with low willingness to pay) goes to suggest that smaller, manageable but sizeable clusters could better the sector performance
- With a clear policy framework and with involvement of such entities, well run franchisee/local body models can therefore lead to a significant improvement in sector performance
- Customer satisfaction is the key to achieve better performance on receivables and collection efficiency.

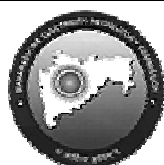
The study concluded that efforts to develop and support franchisee/ cooperative/ local body models should continue. The study made a specific observation that the three tier Panchayati model was well suited for universal application for electricity distribution across Maharashtra. Review by the study group revealed that several rural supply models are operating successfully across the world and have fostered efficiency and quality in rural utility services. It is apparent that the present sector restructuring initiatives should be combined with such initiatives to ensure efficiency and sustainable development of the sector as a whole.



Annexure III: International examples of service obligations for serving socio-economic objectives

Table: International examples of USO arrangements across sectors

Country/State	Sector	USO arrangements		
		Funding	Disbursal	Governance
Wisconsin, USA	Electricity/Gas	1. Federal assistance for low income and weatherisation 2. Utility contribution 3. Non-taxable customer charge	1. Income assistance 2. Weatherisation assistance	State Benefit fund/Rural co-operative fund collects monies. Administered by administrator as per set criteria
Oregon, USA	Electricity	1. Federal funds 2. Per connection charge	1. Income assistance 2. Weatherisation assistance	Public purpose fund administered by State
Uganda	Telecommunications	Fixed charge on revenues of all telecommunications service providers	1. For rural telephony obligations	Rural Communications Development fund (RCDF) creates a subsidy pool. Lowest bidder for subsidies is the selected service provider
Canada	Telecommunications	Toll on all long distance traffic carried by local carriers	To all service providers based on number of residential connections and the tariffs charged	Not available
Argentina	Electricity	From National and Provincial Governments	National Electricity fund established. 60% for tariff subsidies. 40% for rural electrification	Subsidies provided only for states that adhere to reform objectives/tariff principles
Argentina	Gas	1. National and Provincial Governments 2. Other agencies like Pension Office (for supply to aged)	Compensation based on differences between costs and charges	Not available



Case Study: Legislation on low-income energy assistance programs in the United States of America

Extract from Workbook: “INTEGRATING GOVERNMENT-FUNDED AND RATEPAYER-FUNDED LOW-INCOME ENERGY ASSISTANCE PROGRAMS”

LIHEAP Committee on Managing for Results

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Restructuring activity at the state level has been limited in 2000 and 2001. Michigan is the latest state to pass comprehensive utility restructuring legislation, and it was the only state to pass such legislation in 2000.

During 2001, no state passed restructuring legislation; however a number of them, such as Arkansas, Nevada and West Virginia passed legislation to substantially curtail restructuring's implementation or to put it on hold.

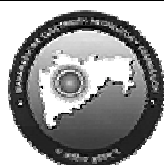
As of October 2001, according to the Energy Information Administration (EIA), 23 states and the District of Columbia have enacted comprehensive restructuring legislation. One state, New York, has allowed restructuring to proceed through regulatory commission order. Georgia has natural gas restructuring, but has had little activity on the electric side.

The states with comprehensive electric (and in some cases gas) restructuring legislation are now:

Arizona, Arkansas, California, Connecticut, Delaware, District of Columbia, Georgia, Illinois, Maine, Maryland, Massachusetts, Michigan, Montana, Nevada, New Hampshire, New Jersey, New Mexico, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Texas, Virginia, and West Virginia

Three states, Vermont, Wisconsin, and Minnesota, opted not to pass restructuring legislation, but did establish mechanisms for funding of low-income energy programs in the event that restructuring eventually could occur.

Among the remaining states, most have active legislative and/or regulatory processes underway to study restructuring and propose implementing legislation. According to the EIA, Alabama, Georgia, Hawaii, Idaho, Kansas, Nebraska, South Dakota, and Tennessee have undertaken little electric restructuring activity to date.



The LIHEAP Clearinghouse continues to focus on how programs that help low-income customers afford their electric bills will fare as a result of the restructuring process. The trend is toward funding them through universal systems benefits charges, also known as public benefits charges, to be assessed by local power distribution entities, which will remain regulated.

Some states that approved restructuring legislation have called for the continuation and expansion of existing low-income rate assistance and conservation programs, e.g., California, Massachusetts, Ohio and Montana. Others, such as Illinois, New Hampshire and Texas, funded low-income energy programs for the first time as part of the restructuring process.

How the low-income programs will be administered has been decided in some states, and remains to be seen in others, as discussed below. The National Center for Appropriate Technology's LIHEAP Clearinghouse makes available a state-by-state narrative of low-income system benefits charge programs. The information presented in this summary is compiled from previous issues of the LIHEAP Networker and additional research by the Clearinghouse. The NCAT summary also provides state-specific World Wide Web links to each state program funded through a system benefits charge. State-specific information about each low-income program can be obtained through these links.

