Power Sector Reforms in Maharashtra: Advice of Maharashtra Electricity Regulatory Commission to the Government of Maharashtra on Sector Restructuring

# Recommendations of the MERC to the State Government on the restructuring of MSEB

(Accompaniment to Commission's letter No. MERC/Legal/120/MSEB Restructuring/1732 dated 17<sup>th</sup> September, 2004)



## A. Background

1. The power sector in Maharashtra is being restructured as per the requirements of the Electricity Act, 2003 ("the Act"). The Government of Maharashtra ("GoM" or "the State Government"), through its letter dated April 8, 2004, referred certain issues relating to restructuring of the Maharashtra State Electricity Board (MSEB), for statutory advice of the Commission as per the provisions of Section 86 (2) (ii) of the Act. M/S SBI Capital Markets, advisors to the State Government, also made a presentation to the Commission on the various restructuring options being considered. The Commission also received copies of a separate presentation prepared by MSEB that, while containing further details, presented the same issues and conclusions.

2. The Commission conducted a review of the proposed arrangements, and communicated its initial views to the State Government on May 14, 2004. Specific issues on which the State Government sought the opinion of the Commission were addressed in the response of the Commission. The Commission also highlighted certain additional issues relating to implementation of the changes in sector structure that the State Government and MSEB would need to consider. These included issues relating to allocation of costs (including power purchase costs), intra-State ABT implementation, settlement systems, asset valuation, treatment of contingent liabilities, scheduling and despatch, metering, etc. The summary response of the Commission is attached as Annexure I to this document for ready reference.

3. The Commission's review revealed several complexities in the restructuring of the sector and formation of distribution companies. In view of the impending deadline of June 9, 2004 existing at that stage for restructuring MSEB, the Commission advised on certain essential restructuring measures being undertaken first. The Commission recommended that beyond the initial changes follow-up restructuring measures could be undertaken to usher a more permanent sector structure. The Commission noted that Section 131 (4) of the Electricity Act, 2003 permitted further restructuring of the successor entities by the State Government.

4. The deadline for restructuring of State Electricity Boards has subsequently been extended by the Government of India (GoI) till December 9, 2004. This provides a window of opportunity to evaluate the issues and imperatives identified by the Commission in its statutory advice in further detail. Accordingly, the Commission has evaluated in greater detail certain issues relating to formation of the distribution companies and protection of consumer interests. The findings and recommendations of the Commission are contained herein.



## **B.** Review of Restructuring Options

5. The State Government's letter and the presentation to the Commission outlined three basic options for restructuring of MSEB.

- **Option I**: Extension of the existing MSEB structure with only distribution company being formed consequent to restructuring;
- **Option II**: A traditional (balanced) distribution company structure featuring *three* distribution companies;
- Option III: An urban-rural structure featuring two urban and four rural distribution companies.
- 6. The objectives stated by the GoM /MSEB for restructuring are summarised below:
  - (i) To improve consumer service;
  - (ii) To enhance competitive response of functionally unbundled entities and enhance business value;
  - (iii) To create entities which would focus on commercial efficiency and financial viability;
  - (iv) To provide level playing field for successor companies;
  - (v) To protect the interests of employees.

7. From the State Government's letter and the presentation made on April 7, 2004 it appeared that the State Government is inclined in favour of Option III. The State Government/MSEB concluded that the Urban-Rural structure is considerably superior to the traditional structure on account of the following reasons,

- Business value retention to the tune of Rs. 587 crores occurs in the combined entities on account of the Urban-Rural structure;
- Subsidy administration to the rural distribution companies is transparent in the Urban-Rural structure;
- Urban-Rural structure is suitable when cross-subsidy elimination is mandated;
- The Urban-Rural structure promotes higher competitive readiness;
- Attention to rural areas is higher on account of greater operational and investment focus as the urban companies are left to manage their own affairs.



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8. At this stage it is essential to recount the points of advice of the Commission to the State Government through its communication dated May 14, 2004. The objective of the advice was to ensure that the finalised option is robust, and caters to the healthy development of the sector in Maharashtra in future, addressing the requirements and concerns of *all* sections of consumers and citizens of the State in an equitable manner. The Commission had expressed its concern that sector structure and distribution company configuration should not result in imbalances among the distribution companies that create more long term problems than they solve in the short term. The key recommendations of the Commission are summarised as Annexure I to this document. The important points of advice, insofar as they relate to the formation and operations of the distribution companies are as follows:

- (i) Optimal size of companies The structure proposed should not result in some or all of the distribution companies becoming unwieldy in size, thus negating any advantage that more focussed operations may bring about. The Commission observed that optimal sizing and the resultant focus has helped improve the performance of distribution companies in several states in the country consequent to restructuring.
- (ii) Maintaining service levels in all distribution companies: The companies with significant rural composition should not suffer from neglect, and new and efficient means of extending service in these areas must be implemented;
- (iii) Equitable loading of costs: The financial restructuring process adopted should not create any disproportionate loading of liabilities and costs to certain distribution companies in a manner that creates future inflexibility;
- (iv) Accurate computation and timely payment of subsidies: Payment of subsidy should be adequate for meeting the subsidisation requirements and should be made on a timely basis. A scientific mechanism for computation of cost of service should be evolved to identify the true subsidisation requirements of various consumer classes (or distribution companies);
- (v) Furthering competition and choice: The proposed structure should encourage competition and choice for the consumers of the State in accordance with the provisions of the Act;
- (vi) Compatibility with future changes: The proposed arrangements should be adequately robust to ensure that the rationalisation of tariffs and improvements in operating efficiency of the various distribution companies do not necessitate fresh restructuring. In other words the restructuring model adopted should not adopt a static view of operations based on present performance levels.



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9. The Commission would like to reiterate that the Option II and Option III presented to it are not directly comparable on account of the wide variations in sizes of the distribution companies. For a reasonable comparison, the number of distribution companies in the two variants should have been similar if not the same. The *traditional* structure, as presented to the Commission, fails to meet the Commission's criteria on optimal size. A more detailed discussion and comparison on size of distribution companies (national and international) is provided subsequently in this paper.

10. The Commission appreciates that having focussed urban distribution companies that are capable of reacting faster to competitive threats holds intuitive appeal. However while evaluating the advantages of the Urban-Rural model, the Commission has also found that the benefits are not well substantiated. As far as the value retention (or reduction in subsidy requirement) under a Urban-Rural structure goes, the Commission notes that this is based on two basic assumptions made by GoM/MSEB;

- Higher reduction of losses 4% in urban areas and 2% in the rural areas in the Urban-Rural model as against an average 1% in the *traditional* model.
- Greater ability to prevent migration of consumers 25% migration assumed in the *traditional* model as against 5% in the urban rural model due to superior competitive response.

The Commission is constrained to observe that the above assumptions leading to the conclusions on increased value retention (or reduction of subsidies) are not based on any concrete evidence or reason. Reductions in system losses should be possible under a more focussed management set-up in either structure. In particular, if the number of distributional companies is optimal, and profit centre concepts backed by superior Management Information Systems and accountability mechanisms are introduced, such improvements should be possible in either of the structures. Similarly, the ability to prevent migration is not a function of the structure per-se, but of the ability of the management of the companies to provide superior customer service and bring down technical and commercial losses. In the Commission's opinion this is more dependent on the size of the distribution companies and the management structures and systems introduced, rather than on the consumer mix.

11. On the other hand, based on the data and analysis provided by GoM/MSEB, the Commission observes certain risks in the Urban-Rural structure that need to be mitigated, without which certain key objectives of sector reforms and restructuring may be vitiated.

a. The Urban-Rural structure results in four rural distribution companies with large financial losses and subsidy requirements. The Commission is apprehensive that the poor cash flows in these distribution companies could result in lack of investment in network upgradation, loss reduction and improvement in service standards. Since



these companies may not be under direct competitive threats, their ability and inclination to improve performance standards would be correspondingly lower.

- b. The conclusion that the Urban-Rural structure would lead to more transparent subsidy administration needs further substantiation. It could be argued that the urban distribution companies with cash surplus would be reluctant to let go of such surpluses, and hence there could be occasion to gold plate costs. On the other hand such surpluses can result in legal obligations to reduce tariffs in these distribution companies, even as the rural distribution companies continue to make huge financial losses. Hence, unless alternative mechanisms envisaging measures such as consumption taxes or a charge akin to universal service obligation (USO) charges are proposed, the objective of transparent subsidy administration may not be met.
- c. The proposed Urban-Rural structure could render the rural distribution companies over-reliant on State support for even basic operational issues. While the Electricity Act, 2003 does provide considerable safeguards, by requiring advance payment of subsidies, it may be inadvisable to make the companies reliant on State support to such an extent. Hence, if predominantly rural Discoms are created, alternate funding mechanisms to supplement tariff revenues (like a USO charge) would be necessary to prevent over-reliance on State payouts.
- d. The Urban-Rural model proposed suggests that a part or all of the consumer mix differences can be neutralised through differential allocation of costs (power purchase costs or cost of servicing capital liabilities). Unfortunately this takes a static view of cost allocation. Even if *optimal* allocation were to be possible at the time of formation of the distribution companies, as the tariffs are progressively rationalised, the profitable urban distribution companies may become unprofitable. Thus the measures adopted to create financially (but not necessarily operationally) stronger urban distribution companies could quickly become counter-productive. This could also hinder the Commission's intent to progressively rationalise retail tariffs.
- e. The Commission is also keen that the new sector structure furthers competition. It is the mandate of the Commission to promote competition in the State and ensure that the new sector structure promotes a level playing field for all players. Thus the ability of the successor entities of MSEB to withstand competition should not be contingent upon a superior consumer mix "granted" at the time of formation, but on the ability of the companies to improve efficiency and provide superior service. A mix that is presently favourable under an Urban-Rural structure may create a false sense of security and ability to withstand competition, when in reality it could result in prevention of fair competition and slower improvements in operating efficiency and



customer service. This would thus affect the consumer interests. The arrangements proposed should ensure that such an eventuality is avoided, even if an Urban-Rural structure is implemented.

12. It is instructive to review the variations between the Urban and Rural distribution companies, as demonstrated in the following table<sup>1</sup>.

	Parameter	Urban	Rural	Total
	Operations and Financial Indicators			
А	Sales (MU)	14906	24566	39473
В	Sales (% of total)	37.8%	62.2%	100%
С	Power Purchases (MU) at Discom	20409	36714	57123
D	Power Purchase (% of total)	35.73%	64.27%	100%
Е	Distribution Loss (MU) (C-A)	5502	12148	17650
F	Distribution Loss (%) (E/C)	26.96%	33.09%	30.90%
G	Collection efficiency (%)	98.77%	77.10%	88.73%
н	Units Collected (MU) (A*G) <sup>2</sup>	14724	18940	35264
I	Distribution ATC loss ( $\%$ )	27.85%	48.41%	38.74%

13. As shown in the table, more than 62% of MSEB's sales are to rural areas. Distribution losses in the rural distribution companies are considerably higher than those in the urban distribution companies. If the collection efficiencies are considered, the disparity between the urban and rural areas becomes even more stark. Applying the ATC losses, the MU lost in the rural distribution companies amounts to 12148 MU, as compared to 5502 MU in the urban companies. The overall ATC loss in the rural areas works out to 48.41% as compared to 27.86% in the urban distribution companies. If transmission losses are added to the distribution losses, it is apparent that well over 50% of the energy procured for the rural distribution companies is not collected. As per data

<sup>&</sup>lt;sup>2</sup> Units collected assumed for the present purposes as a product of sales and collection efficiency. If the differences in the tariff rates of various categories are considered, the number of units collected could be lower due o lower collection efficiency in the subsidised categories.



<sup>&</sup>lt;sup>1</sup> Data for FY 2002-03. The data has been furnished by MSEB and has not been verified by the Commission, and has been adopted as matter of convenience.

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furnished by MSEB, certain rural circles have AT&C losses as high as 80%. The data clearly indicates that the thrust of the efforts of the GoM/MSEB must be directed at the rural areas, and merely isolating the relatively smaller urban pockets from the rural areas would be insufficient to address the problems of the electricity sector in Maharashtra.



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# C. Restructuring Objectives and Priorities

14. Unless the fundamental issues are addressed, it is likely that the organisational and financial restructuring process would need to be revisited within a few years. Restructuring of the sector merely to meet statutory requirements, or continuation of status quo by creating regional monopolies solely through favourable consumer mix would be detrimental for the sector and its consumers in the long term.

15. The Commission would like the GoM to consider the following additional objectives and priorities while undertaking the restructuring of MSEB.

- i. Each of the successor entities of MSEB should be manageable in size
- ii. Supply to rural areas should not be treated as a "problem", but as a socio-economic objective
- iii. Community involvement should be an integral part of the supply model, particularly where socio-economic objectives are also sought to be addressed in addition to commercial objectives
- iv. Certain degree of subsidization of rural supply is inevitable. The mechanisms proposed for subsidization should be transparent and effective.
- v. Adequate technical and commercial arrangements required to support such sector structure should be put in place

16. The Commission recognises that the issues involved are difficult to address. New and innovative approaches that address the core issues that afflict the sector must be formulated to ensure that the restructuring process results in net benefits for the sector and its consumers. The Commission has reviewed international experiences and practices on some of these issues. Based on its analysis and review the Commission has formulated certain specific recommendations on restructuring initiatives. The GoM should consider the same while finalising the sector restructuring model.



## D. Specific recommendations on sector restructuring

#### (i) Size of distribution companies

17. At the heart of the MSEB's problems is the poor efficiency in operations. In this regard there is little alternative to metering, billing and collection improvement through sustained efforts. However, MSEB's unwieldy size and lack of accountability poses the greatest problem for loss reduction. The Commission has reviewed national and international data on the **size of distribution companies**, and compared the same with the options proposed in Maharashtra.

Country	No. of Discoms reviewed	Average D	Discom size
			No. of consumers
		MU sold	(Million)
Argentina	18	1,573	0.36
Brazil	17	11,123	1.58
Peru	9	812	0.23
Hungary	6	4,673	0.83
Australia	5	4,945	0.40
El Salvador	3	940	0.29
Colombia	3	5,039	0.96
Bolivia	2	625	0.20
Dominican Rep.	2	4,494	0.41
Guatemala	2	1,825	0.56
Panama	2	1,699	0.23
Georgia	1	1,484	0.37

Table: International c	comparison o	on size of	distribution	companies <sup>3</sup>
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#### Table: Comparison of distribution company size in India

	No. of	Avera	ge Discom size
State	Discoms		
			No. of consumers
		MU sold	(Million)

<sup>&</sup>lt;sup>3</sup> Source: An Analysis of Electricity Distribution Privatization in Developing Countries , Mangesh Hoskote, Adil Marghub, Steven Ostrover, 1999. Data for privatized distribution companies only



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State	No. of Discoms	Avera	ge Discom size
Delhi	3	2,752	0.84
Andhra Pradesh	4	8,559	3.53
Karnataka	4	4,673	2.92
Haryana	2	4,375	1.76
Orissa	4	1,596	0.33
Rajasthan	3	4,635	1.69
Maharashtra (Traditional)	3	13,157	4.33
Maharashtra (Urban-Rural)	6	6,579	2.17

18. It is apparent from the above tables that a three Discom configuration would make the distribution companies in Maharashtra larger than any of the national and international examples cited above. A five or six Discom configuration (irrespective of the Urban-Rural or traditional structure adopted) would strike a reasonable balance between the size of the companies on the average and the number of companies to be formed.

19. It needs to be recalled that till recently the MSEB was structured in six zones for ease of administration. The zones were carved out based on their geographical and electrical characteristics to ensure holistic development of the sector across the State. A five or six Discom configuration would be line with the approach adopted in creation of the zones.

#### (ii) Framework for supply in rural distribution companies/areas

20. The Commission is of the opinion that rural supply issues must be tackled directly at the time of sector restructuring and the conventional approach to rural supply requires to be looked at afresh. The cost of extending the grid for rural supply, in terms of both capital and operating cost, typically tends to be understated. Utilities are reluctant to extend supply in rural areas where recoveries from tariff are far lower than costs. Utilities also have little appreciation of local problems, leading to service denial and poor service levels.



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# Evaluating alternatives to Grid Supply: Avoiding average cost of supply as a measure of cost to serve

The average cost of service benchmark often adopted for evaluating the cost of supply to electricity consumers does not consider the higher network erection and maintenance costs, higher T&D losses, and the costs of reaching commercial service to such areas. This leads to obfuscation of the true costs involved, thus impeding innovative alternatives and technologies, which appear to be more expensive than grid supply when they are (in reality) cost effective for rural services. It also prevents alternative models of rural supply from taking root, and perpetuates direct utility supply. On the other hand this also results in the utilities taking little interest in extending quality supply since the utilities are well aware that the costs of rural supply are far higher than the average costs. The table below provides an indication of the relative costs involved in the various means of supply.

Table:	Indicative costs of	extending rural	supply to micro	levels (Rs./kwh) <sup>4</sup>
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Generation Technology	Minimum	Maximum
Grid Extension to village	11 (5 km)	51 (50 km)
Central Village Diesel	12	15
Village Biomass	9	11
Micro Hydro (Village)	8	8
Solar Station (Village)	40	56
Small Diesel	14	17
Solar Home System	34	40
Solar Lanterns	39	45

As evident from the table above, there are several alternatives that are far superior to grid supply. In fact (as demonstrated in the table below), certain options like small hydro and biomass can be far more attractive for this purpose. Even if the numbers indicated above were subject to alteration on account of changes in costs (particularly the cost of fuel) due to external factors, supply from such sources would still be far more economical than extending grid supply for far flung rural areas with low load density.

21. There is a need to look at alternatives for rural supply apart from the conventional Utility Supply model. The Commission is embarking on a detailed exercise on evaluating various rural

<sup>&</sup>lt;sup>4</sup> Source: The World Bank. These figures have not been authenticated by the Commission independently and have been assumed only for illustrative purposes for the present exercise.



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supply options. As a part of the study, field data from various rural circles of Maharashtra will be analysed to evaluate the appropriate model for rural supply in the State. Detailed review of international practices and precedents will also be undertaken as a part of the study. For the present the Commission has reviewed certain international experiences (particularly Latin America, which shares several socio-economic characteristics with India) that provide certain important pointers on rural supply policy. These are summarised in the box below. The international good practices can be adapted to the conditions prevailing in Maharashtra. A more detailed account of specific country experiences is provided in Annexure II.

#### Rural Supply: Key lessons from best practices in Latin America

- Rural electricity supply needs to be made an attractive proposition for suppliers: The aim of policy should make rural electrification projects an attractive business opportunity for electric utilities and other interested suppliers. The first choice typically should be grid supply if the costs permit. However, wherever the costs exceed the costs of alternatives, suitable alternatives are considered.
- Private participation should be encouraged: Dominance of the State in rural supply has often led to denial of supply. In India, newer models like franchising and composite generation and distribution schemes are now encouraged by policy and the statute. These facilities should be utilised to the fullest.
- Local participation is vital for successful rural services: 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.
- Competition for rural projects is feasible and beneficial: It is possible to introduce competition for rural supply projects in a manner that ensures low cost and speedy implementation. 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.

22. In this context it is important to recount the findings of the Study Group constituted by GoM on *Transfer of Maharashtra State Electricity Board's Rural Electricity Distribution & Rural Electrification Schemes to Panchayats.* The Study Group analysed the performance of the Mula Pravara Electric Co-operative Society (MPECS) and observed the following:

 MPECS case study supports the fact that involvement of local entities could help in creating administratively efficient structures



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- Proposed reforms and restructuring in India should take note of learning 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.

23. The Study Group 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. The present sector restructuring initiatives should be combined with such initiatives to ensure efficiency and sustainable development of the sector as a whole.

24. The Commission's own findings on the reference made by the GoM to the Commission on MPECS are similar to that of the Study  $\text{Group}^5$ . The Commission is of the opinion that wherever possible franchising of services and/or involvement of local bodies must be pursued, particularly in the rural areas. The Commission is of the view that with better management such franchisees and co-operatives/local bodies can provide better service at lower costs, benefiting the licensees, the consumers and the franchisees. Subsidisation requirements can be met through the USO funding arrangements (discussed subsequently). Suitable institutional arrangements can be put in place to make such franchising arrangements a win-win proposition for the licensee, the franchisee/local body and the State Government<sup>6</sup>.

25. It is relevant to note that while strategies on franchising and innovative arrangements for rural supply and subsidy administration may or may not have significant bearing on the territorial definition of the distribution companies, they can potentially affect aspects like staff allocation, capital

For alternate supply cost of supply = Rs. 900,000. The alternate supplier would now receive Rs. 400,000 in subsidies. The remaining Rs. 100,000 could be shared between the licensee and the State Government. This would encourage the licensee to seriously evaluate alternatives to grid supply, while potentially resulting in savings in subsidy for the State Government.



<sup>&</sup>lt;sup>5</sup> 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. <sup>6</sup> The simple example below exemplifies how such arrangements can be beneficial for all parties.

Assume cost of grid supply/extension = Rs. 1000,000 met through Rs. 500,000 in tariffs and Rs. 500,000 in subsidies.

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structuring, etc. Hence such approaches need to be adequately factored into the restructuring initiatives.

26. Establishment of such franchising arrangements would require establishment of systems for monitoring service standards and other performance measures of the franchisees. As per the provisions of the Electricity Act, 2003, primary responsibility of maintaining performance standards would continue to be the obligation of the distribution licensee in the area. The distribution company on its part can put in place suitable incentive/penalty mechanisms to ensure that the performance of the franchisee meets the desired standards and targets. Adequate metering and related infrastructure would need to be established on priority basis to ensure commercial accounting, adherence to quality of service standards and governance requirements. A comprehensive framework for evaluation of commercial performance of licensees and franchising on release of connections, billing, fault rectification, etc would also need to be implemented.

27. As the Commission has mentioned in its earlier recommendations, the State Government should develop a comprehensive reform implementation plan while undertaking the restructuring exercise. The measures suggested by the Commission should be considered while developing the plan.

#### (iii) Subsidy financing and administration

28. The subsidy financing and administration in the new sector structure featuring multiple sources and recipients would need to be managed differently. The large gap between revenues and costs in certain distribution companies cannot be addressed by differential allocation of power purchase costs or capital liabilities alone. The Commission has pointed out in its earlier advice to GoM that there are several limitations in following such an approach, which can be a part solution at best. In general the experience across the world has been that rural electrification programmes can rarely be self-supporting (including in developed countries). Hence, a transparent mechanism for servicing the subsidisation requirements is preferable to alternative measures that introduce new risks and rigidities in the sector. The need for continued subsidisation, and certain options on transparent subsidy administration arrangements has also been highlighted in the report of the Study Group on *Transfer of Maharashtra State Electricity Board's Rural Electricity Distribution & Rural Electrification Schemes to Panchayats*.

29. The Commission is of the opinion that a separate Power Development and Subsidisation Fund (PDSF) should be set up to administer subsidies and facilitate development of the sector – particularly in the rural areas. Several countries across the world have shifted to such funding arrangements for providing 'smart subsidies' to companies that wish to serve the universal access market, or directly to customers. 'Smart subsidies' are operational in several Latin American countries



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and some Asian and African countries. Such subsidies could replace the concept of enforced crosssubsidisation, currently prevalent in the country.

30. Several important issues would need to be addressed in this regard to ensure that the operation of the PDSF is transparent:

- a. What purposes should the fund be utilised for?
- b. How should the fund be financed?
- c. If a tax or charge (akin to a USO charge) is introduced for certain categories of consumers/licensees, what should be the value of the charges?
- d. Who should collect and distribute the charges for the fund?
- e. Who should administer the fund? What should be the governance structure?

31. Annexure III to this report provides some examples on such methods of funding of USO arrangements across sectors in various countries. It provides a relevant extract that provides an overview of legislative efforts and practices in the USA for a comprehensive energy assistance programme implemented there. In Maharashtra (and in India in general), where the need for subsidisation is much higher, the need for such funding arrangements cannot be overstated.

32. The Commission is of the opinion that all subsidies that are intended for objectives for which the fund has been established should be routed through the fund. This will encourage proper targeting of such subsidies and aid transparent administration. The impact of the subsidies can also be better evaluated. It is desirable that the production or consumption taxes for the funding of the PDSF and the committed subsidies to be made available are declared upfront. This will prevent uncertainty among the consumers/utilities who are contributing to or accessing the fund, and will also provide the necessary clarity for budgeting by the Government(s) for this purpose. With reasonable assumptions on tariffs, the funding requirements (through taxes and subsidies/grants) can be computed. While changes from the baseline performance parameters and tariff assumptions - and hence the funding requirements - are inevitable, the approach would provide reasonable certainty to all concerned, and would facilitate healthy development of the sector in the State. The State Government would be free to provide higher subsidies and subventions if required to meet subsidisation requirements for particular licensees, consumers or classes of consumers in line with the provisions of the Electricity Act, 2003. Also, while the Commission would not be bound by the tariff assumptions made, they would certainly guide the Commission in the tariff setting process and would thus provide the necessary regulatory certainty to the consumers and licensees.



## 1 E. SOME CLARIFICATIONS ON ADVICE DATED 14.05.2004

- 33. The Commission also takes this opportunity to briefly clarify and elaborate some matters contained in its earlier advice to GoM (summarized at Annexure I) to bring out its intention, as follows:
  - (a) The Commission had suggested that a representative body from the industry be established to oversee the operations of the SLDC. The intention was not to dilute the independence of the SLDC, but to bring together relevant stakeholders to advise the SLDC on operation related issues.
  - (b) With regard to the need expressed by the Commission to introduce an intra-State ABT mechanism, the Commission is of the view that the frequency band of 1.5 Hz (presently adopted in the regional system) would require to be reduced under such a mechanism in order to achieve better power quality.
  - (c) The Commission also believes that a mechanism needs to be set up to ensure that load addition is matched by capacity augumentation.

## F. Conclusions

- 34. Based on its analysis and review of national and international practices, the Commission, is of the opinion that it would be appropriate to form five or six distribution companies out of the present distribution operations of MSEB. The distribution companies should be appropriately structured to ensure that they are not unwieldy. The configuration of the distribution companies should consider the possible and likely changes in the short and medium term in the efficiency levels of the distribution companies, and the rationalisation of tariffs as per the requirements of the Electricity Act, 2003. Disproportionate allocation of capital liabilities and power purchase costs is inadvisable, since this can lead to inflexibility in sector operations in future.
- 35. The Commission, after having reviewed the options forwarded by the State Government, is of the opinion that necessary safeguards need to be implemented to ensure protection of consumer interests in the restructuring exercise. In particular, if the Urban-Rural Discom model is adopted, appropriate safeguards will be necessary to ensure adequate funds for rural electricity services. A separate power development and subsidisation fund should be established for capital and revenue subsidies. The fund can be financed through a tax or cess on certain categories of



consumers or on utilities. Central and State Government grants and subsidies should be routed through the fund, if they are intended for purposes for which the fund has been established. The administration of the fund should be transparent based on clearly established objectives and principles. Suitable governance structures should be incorporated.

36. Newer and innovative methods for rural electrification need to be evaluated and over-reliance on the conventional model of extending utility supply needs to be reduced. The distribution companies should evaluate local body participation and franchising options to reduce operating costs and improve efficiency in operations. Community involvement, private participation and competition should be ensured to the extent possible to reduce costs and meet specific requirements of communities. The Electricity Act, 2003 provides the enabling structure on such issues and the same should be utilised to the fullest extent.

The Commission recommends that the State Government, through a qualified expert body/consultants, should undertake further studies and analysis on the issues and suggestions provided in this document and in the earlier advice of the Commission on restructuring of MSEB. Based on such studies and analysis, the framework for restructuring of MSEB and development of the electricity sector in the State should be put forth for public views and comments. The final framework on sector structure should be decided duly considering the comments and opinions elicited.

