## MINUTES OF THE 5TH STATE ADVISORY COMMITTEE MEETING HELD ON 11.02.2005 AT 11.30 HOURS

Dr. Pramod Deo, Chairman, MERC welcomed the Members of the State Advisory Committee. He stated that, while the meeting has been overdue, the agenda comprises three important and inter-related issues for discussion in the context of the new legal framework, all of which have far-reaching implications for the achievement of its objectives and, particularly, to the vital matter of rural electrification. The relevant documents had been sent to the SAC Members earlier, and copies of the presentations on these subjects have also been circulated today.

- 2. Electronic presentations were then made as follows:
  - (a) Cross subsidies and agricultural tariff, by Shri Palaniappan of ICRA Management Consultancy Services (based on the presentation made by Dr. Pramod Deo to FOIR in December, 2004).
  - (b) Draft document on advice proposed to be given by the Commission to GoM on Rural Electrification Policy, by Shri Anup Verma of KPMG.
  - (c) Advice furnished by the Commission to GoM on restructuring of MSEB, by Shri A.M. Khan, Secretary, MERC.

(Elaborating on some aspects of the presentation on Rural Electrification Policy, Shri A. Vishwanath of KPMG pointed out that, while inviting bids for selection and appointment of franchisee, the key requisite is the provision of accurate data. The rural energy generating sources also have to be clearly identified, with specific fuel linkages. He also stressed the need for a proper mechanism for monitoring fuel linkage/ use in such rural energy generation in view of instances of misuse of the dispensation provided in some other States.)

3. Chairman drew attention to the fact that all three presentations indicated that the key issue in the future agenda posed by the new Act is the approach to rural areas, for which only an enabling framework has been provided, and appropriate mechanisms and alternative methodologies have to be worked out urgently. A whole range of considerations is involved while addressing the provision of electricity to the large proportion of rural households who are deprived at present, improving the quality and extent of supply to the existing consumers, the agency and institutional set up to service the rural areas, the financial set up to support this system, the need for a dedicated body to oversee rural electrification which would have to be more than merely a financing body, the determination of cost to serve such areas and consumers, etc.

4. According to Shri Prabhakar Kukde of Tata Power Company (TPC), there can be only one criterion for selection of the route for addressing these issues, viz. the model that is most likely to be successful. He stated that, from his own earlier experience in MSEB, distribution planning had hinged on the diversity factory, the lower the diversity factor, the better being the planning and resource utilization. The MSEB system had been developed with a design considering diversity factor of 40%, and the entire programme of generation and transmission planning had been built up accordingly. However, over time this diversity factor basis had been diluted owing to a variety of factors such as longer line lengths, increase in the number of pumps (normally rated for 3 HP) to be catered to by each distribution transformer, and a shortfall in capacity addition. Shri Kukde pointed out that the farmers have a social cycle and operating time frame. Keeping this in view, one 163 KVA distribution transformer should

cater to 83 number of 3 HP pumps with 40% diversity factor. However, with increasing load shedding affecting farmers' schedules, these distribution transformers now have to bear a much higher load, leading to higher loss, burning of transformers, service quality failures etc. He also submitted that, although much is said about reduction of cross subsidy in tariff, provision of explicit subsidy, etc. even at a rate of Rs 1.10 per unit including subsidy, the amount that farmers have to pay is simply not affordable considering the present economics of agriculture.

Shri Kukde stated that, since the introduction of the regulatory process, the average cost of supply as well as cross subsidy has shown a declining trend. Therefore, the licensees' billing and collection efficiency would determine the fate of the whole system. Commercial losses should be the main area of concern to the utility, and billing and collection efficiency were, therefore, the critical factor for the success of the system. Any improvement in the distribution efficiency will result in reduction in commercial losses. This alone would allow the licensee greater cash flow to enable him to invest more in replacement and maintenance and provide better service. In this context, Shri Kukde stated that while MSEB admits to ATC losses of upto 80% in some rural areas, the transmission loss component could not in any event be considered to be more than 10%. The remaining losses would consist of commercial losses, for which there may be many reasons such as theft, distribution loss, improper meter reading, non-installation of proper meters, lack of political or administrative will, etc. Therefore, it was necessary to consider introducing the franchisee system in the distribution network at various places on a manageable scale, for which local bodies, NGOs, co. op. societies, etc. could be involved.

5. Dr. Ashok Pendse of Mumbai Grahak Panchayat (MGP) stated that, even though three tariff Orders had so far been passed in respect of MSEB, on the one hand the agricultural consumption pattern has not changed, whereas arrears are increasing along with increases in tariff, which indicated the need to possibly revisit the whole approach.

6. Shri Girish Sant of Prayas, while welcoming the initiative of the Commission to focus on these important issues, drew attention to the need for a census of all consumers, installation of metering of all agricultural consumers and monitoring on a scientific sampling basis, particularly in the context of the situation brought out by Dr. Pendse. With regard to some of the points made in the presentation regarding interaction on these issues between GoM and the Commission, he cautioned that this should not result in any dilution of the arm's length regulatory process. As far as metering is concerned, group metering or metering at the DTC level and sampling on that basis could be a more result-oriented option.

In Shri Sant's view, the responsibility for rural electrification would have to remain primarily with MSEB. However, MSEB could motivate co.op societies, local NGOs and local bodies to take up the distribution system as franchisees responsible for maintenance, billing and collection, which would help increase recovery significantly. He expressed the view that, if MSEB were allowed to disintegrate, the whole network of the State would be seriously jeopardized. Therefore, in the matter of restructuring and related issues, a great deal of care would have to be taken before any decisions are taken. A pilot franchisee scheme could be formulated for replication throughout the State depending on the result. To this end, there could certainly be a consultative process between MSEB, GoM, the Commission and other stakeholders. 7. Referring to an earlier intervention of Dr Anil Rajvanshi of Nimbkar Agricultural Research Institute (NARI) contemplating a franchisee type of model for distributed generation through micro-utilities which did not involve a formal co-operative structure, Shri D. M. Pawar, Vice Chairman, Mula Pravara Co-operative Electric Society Ltd. (MPECS) stated that doubts with regard to the viability of MPECS and other such rural institutions was misconceived, and invited Members to visit the MPECS area to see how efficiently service is provided by a formal co-operative society. As Secretary, MERC had himself mentioned during the presentation regarding the Commission's findings communicated to GoM, MPECS' recovery is better, T&D losses are lower and service standards and response time better than in MSEB areas. This being the case, he queried as to why only privatization was being thought of rather than co-operativisation. He also stated that the demand for free power had never been made by the farmers, who were more interested in reliable and quality power.

With regard to the Commission's advice to GoM regarding the role envisaged of MPECS as a franchisee rather than as a distribution licensee, Vice Chairman, MPECS sought greater clarity, which he had raised informally in an earlier discussion with Secretary, MERC. Shri Khan, Secretary, MERC mentioned that, apart from the limited role envisaged for the franchisee under the Act, additional functions could be vested in a franchisee by mutual agreement with the distribution licensee, which may benefit both parties as well as the consumers.

8. Dr. Anil Rajvanshi of NARI stated that one of the critical issues in supply to rural areas involving distributed generation was the question of who would set up the microutilities, what their structure would be, and under what framework they would operate. He pointed out that there are models for the rural areas in other sectors such as telecom, and cited the successful example of BSNL, whereas telecom provision to the rural areas was considered to be an impossible task earlier. One would have to examine what will happen and what requires to be done when MSEB becomes effectively the rural supply company for the rural areas, because there is really no one else. His own interactions indicated that local MSEB officials can be enthused to make alternative models a success. There was a need to identify and create conditions in which an entity would be encouraged to establish micro-utilities at the taluka or village level. For this purpose, however, the nature, extent and pricing of back up support from MSEB need to be clearly spelt out.

9. Dr. Ranade of Mahratta Chamber of Commerce, Industries & Agriculture, Pune agreed with Dr. Rajvanshi. At present, the route for providing for rural areas is open-ended, and charting the way forward is critical, for which the Commission could provide the forum for co-ordination of a long-term plan. Taking into account the new National Electricity Policy, the District level can be the basis for such planning, and the data and circumstances at this level would need to be considered for identifying appropriate models and sources. Joint ventures between different types of entities such as local bodies, co-operatives, etc. could be also thought of. However, in order to establish any sustainable model of distribution and supply, considerable capacity building would be required. Moreover, integration of alternative sources of energy as well as interaction between different institutions would have to take place so that bankable projects can be drawn up for financial assistance through some kind of central funding. The tariff for such ventures may include a formula for escalation so that there is predictability and it becomes possible to confirm viability and attract financing.

Regarding the agricultural pump sets, Dr. Ranade stated that the equipment being produced and used at present is highly over-specified, leading to a whole range of problems

for availability and supply of power. It is found that, in most cases, even 3 to 5 HP meters are not required. In fact, load matching of such equipment should be a basic part of the responsibility of the franchisees or other entities in their areas. Appropriate technologies are available for this purpose, for example the award winning work done at Solapur, which could be used to compel manufacturers to modify their specifications accordingly.

10. Dr. Ashok Pendse of MGP stated that, if revenue or capital subsidy were provided to the rural distributor, such distributor cannot be free to fix whatever rates he chooses, and that his tariff would have to be regulated. A pure franchisee under the Act in any case has to follow the tariff fixed for the principal distribution licensee.

With regard to various alternatives for MSEB restructuring, particularly the Rural-Urban Discom model favoured by MSEB as against the Commission's suggestion of a 'balanced' structure but with a larger number of Discoms, Dr. Pendse suggested that the models available in the telecom sector could be examined. Taking the analogy of the telecom sector, access or service charges to be paid by other providers can be given to the Rural Discoms, and the Urban Discoms could stand on their own.

11. With regard to the appropriate entity for rural distribution or franchisee, Dr. Khaparde of IIT, Mumbai, pointed out that co-operative ventures could also be successful if there is a feeling of belonging and ownership. Referring to the point made by Dr. Ranade, he stated that IIT is working on a sample system under its R&D programme for integration on the technical side. The viability of the system is being examined, and the results could be provided in around 3 months' time.

12. Pursuing his focus on distributed generation and distribution through micro-utilities, Dr. Anil Rajvanshi asked whether, in order to enable quick operationalization, a small area could be allowed from MSEB, but with the provision of a stand by facility from MSEB. It was pointed out that Dr. Rajvanshi's concept was distinct from the concept of franchisee envisaged under the Act. Shri Kukde of TPC also pointed out that, in such a case, for the economics to be viable, there would also have to be a provision for purchase of power from the micro utility when it is running below capacity, for instance during night hours, and this would require an examination of viable rates for both sides.

13. Shri Satish Seth of Reliance Energy Ltd. (REL) opined that the purpose of any scheme or model should be to achieve both technical and commercial viability if it is to survive. The thrust areas at the operational level have to be proper metering, meter reading, billing and collection, apart from purely technical parameters. Proper billing itself has important implications for commercial success, not least because billing errors result in consumers' resistance to recovery. Underlying these requirements, capital investment has to be adequate and ongoing. Moreover, the scheme has to provide for what happens if the entity should fail. Thus, an integrated financial model taking into account all these factors is required.

With regard to the issue of subsidy against the tariff to consumers, Shri Seth opined that such subsidy should be provided only on a reimbursement basis after the full bill is paid, and be credited to a bank account. This would result in better targeting for achievement of the socio-economic objectives of the subsidy.

It was also essential to conduct a census of consumers every 3 years, for which purpose consumers must be required to provide data sheets for correction of billing data such as tariff categorization, etc., failing which there should be penalty for non-response.

With regard to MSEB's restructuring, Shri Seth felt that, whatever model was adopted, the question of where the existing MSEB personnel would go had to be addressed. Their potential efficiency and productivity must be tapped and enhanced, for which technical enablers can be applied so as to put positive pressure on them to perform better, which is possible with training.

Returning to his point regarding the importance of proper metering and meter reading, Shri Seth referred to their Orissa experience where, earlier, meters were purchased at a low cost of Rs 250/-, but it was subsequently decided to provide more expensive meters costing around Rs 1200/-. This was because, if the meter itself is not proper, then the licensee or other entity's cash flow, which is critical, will be seriously affected.

Shri Seth concluded by stating that, if all these principles are observed and factors dealt with, any model that is suited to the local requirements can be put in place.

14. Shri Jayant Kawale, Chairman, MSEB, informed the Members that, in the last 3 months, with the active support of GoM, the average collection has increased to the extent of Rs 100 crores per month, thousands of hooks have been removed, and concerted action has been taken against theft and other malpractices. However, ultimately, coercive collection from those who cannot pay is not sustainable. As Dr. Pendse and Shri Girish Sant had pointed out, the progressive increase in agricultural tariff has not resulted in a corresponding increase in recovery. In his view, there is a psychological and socio-economic barrier beyond which the agricultural tariff cannot be increased in the present circumstances. At the same time, expecting the constantly increasing requirement of subsidy to be provided by GoM is also not sustainable. Therefore, he believed that a fresh look needs to be taken at the tariff rationalization process, keeping these factors in mind.

Shri Kawale also opined that the Standards of Performance recently fixed by the Commission would make it very difficult for any new player to enter the field of rural distribution.

With regard to the alternatives under Sections 13 and 14 (exempted entities, and licensees) as against the franchisee model, the fact, for instance, of the MPECS type of structure resulting in management being closer to employees and the public and, therefore, being more efficient, in contrast with MSEB which is too unwieldy had led to the conclusion that it should, therefore, be broken up. Shri Kawale pointed out, however, that institutions like MPECS are not replicable on a wider scale. Even the matter of provision of subsidy against the bulk supply tariff requires settling. Because of this kind of problem, internalization within MSEB may be the only solution, but with a franchisee model. In view of this situation and various political and other factors, the local distribution model through entities such as the local Panchayats is not appropriate or sustainable. However, competence could be built up over time, and strong milk or sugar co-operatives, for instance, could graduate from being franchisees to licensees, provided there is an adequate data base. Shri Kawale mentioned in this context that MSEB are now metering and monitoring DTCs on a much larger scale than before. Dr. Pramod Deo, Chairman observed that the franchisee model perhaps needed to be tried out on a pilot basis. If MSEB could prepare a paper on this, the Commission could provide a platform for discussion. Shri Kawale stated that MSEB are already initiating a franchisee process for Bhiwandi, although it is not necessary that such a model be restricted to difficult areas alone.

15. Concluding, Dr. Deo, Chairman expressed confidence that there would be a concerted focus on the issues involved in the provision of electricity to the rural areas on which the discussion had focused. The Commission could provide a platform for interaction between GoM, MSEB and the public with regard to the various possibilities and implications of MSEB restructuring. As the outcome of the discussions at the meeting, the draft advice document on Rural Electrification Policy would be revised, and would also integrate the relevant aspects of the restructuring issue.

16. List of participants is annexed.

(A.M. Khan) Secretary, MERC

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## List of participants present at the State Advisory Committee meeting held on 10th February, 2005 at 11.30 hours.

- 1. Dr. Pramod Deo, Chairman, MERC.
- 2. Shri A. Velayutham, Member, MERC.
- 3. Shri A.M. Khan, Secretary, MERC
- 4. Dr S.A. Khaparde, IIT, Mumbai

- 5. Dr Anil K. Rajvanshi, Director, NARI
- 6. Dr S.L. Patil, Secretary General, Thane-Belapur Industries Association
- 7. Shri M. Meshram, Chief Engineer (DE), Central Railway.
- 8. Shri Jayant Kawale, Chairman, MSEB
- 9. Shri Satish Seth, Executive Vice Chairman, Reliance Energy Ltd.
- 10. Shri B. P. Pandey, Principal Secretary (Energy), GoM.
- 11. Dr Ashok Pendse, Mumbai Grahak Panchayat
- 12. Shri D.M. Pawar, Vice Chairman, Mula Pravara Electric Co-op. Society Ltd.
- 13. Shri A.V. Tendulkar, Chief Engineer, BEST Undertaking.
- 14. Shri S.P. Ranade, Chairman, Energy Sub-Group, MCCI&A
- 15. Shri Girish Sant, Prayas,
- 16. Shri Prabhakar Kukde, TPC Ltd.
- 17. Shri W.G. Gorde, Ombudsman.
- 18. Shri S.C. Singh, Sect. Engg., Central Railway
- 19. Shri N. Nimbkar, President, NARI
- 20. Shri Subodh Shah, director, REL
- 21. Shri Palaniappan, Head-Energy, ICRA
- 22. Shri R.V. Kulkarni, Managing Director, MPECS
- 23. Shri E.B. Kapse, OSD, MPECS
- 24. Shri G.M. Bhagat, Supdt., BEST Undertaking.
- 25. Shri Sanjay Bhatia, Secretary, MSEB
- 26. Shri J.D. Kulkarni, Addl.General Manager, TPC Ltd.
- 27. Shri Prakash Beria, Addl. Vice President, REL
- 28. Shri A.B.Shyamkul, OSD, Govt of Maharashtra
- 29. Shri P.B. Patil, Dy Secretary, Energy, Govt of Maharashtra
- 30. Shri P.S. Pandya, Sr. Consultant, REL
- 31. Shri Anup Verma, KPMG
- 32. Shri M.N. Bapat, Technical Expert.