

## Minutes of the Ninth State Advisory Committee meeting

Date: November 30, 2007  
Time: 15.00 hrs  
Venue: 30<sup>th</sup> Floor, Vista Hall, Centre No. 1, World Trade Centre, Cuffe Parade, Mumbai 400 005

The Ninth SAC meeting commenced with a warm welcome to all the attending members. The discussions that followed as per agenda are given below:

1. Shri Subrato Ratho, Managing Director, Maharashtra State Electricity Transmission Company Ltd (MSETCL), submitted that MSETCL proposes to implement a 5-year investment plan. The presentation seeks to sensitize the State Advisory Committee (SAC) on how MSETCL plans to raise funds and optimize it for transmission augmentation as required for adequate evacuation facility, harness load growth, and improve voltage profile as per the requirements of the State Grid Code. It was submitted that responses of the SAC members on the said 5-year investment plan shall be considered to modify the same, and submit it for approval before the MERC, in due course.
2. Thereafter, Dr. K. Balaram, Consultant to MSETCL, made the presentation [*Copy of which has been circulated to all the attending members*] to apprise the SAC on the technical aspects of the 5-year investment plan of MSETCL. The following observations were made:
  - (i) The Commission observed that augmentation planning for intra-State transmission needs to envisage adequate facility for open access consumers. Development of new Transmission network should not only cater to the evacuation of power from Generating stations, but also should be able to cater to the requirements of open access consumers and other numerous entities.
  - (ii) Shri Jayant Deo, Maharashtra Chamber of Commerce Industries and Agriculture, submitted that the MSETCL should clarify whether Security Criteria [*as provided at page 4 of the PPT*] as stipulated under State Grid Code Regulations are significantly different from that followed by MSETCL since the last 10 years. Shri. Ratho submitted that the criteria are not different and the idea was to show the context behind the proposed 5-year investment plan. It is essential to keep the Security Criteria in mind while planning for growth in the existing transmission system. The present network of MSETCL are not adequate for meeting the Security Criteria parameters specified in the State Grid Code. The 5-year investment plan proposes fund-raising mechanisms to meet the stipulated grid security within FY 2011-2012.
  - (iii) Dr Balaram went on to explain that through the studies it was found that as of today, during peak hours, numerous EHV busbars in the MSETCL network were subjected to under voltage conditions and some of the EHV transformers were overloaded. The proposed plan is aimed to adequately address the situation

- (iv) The Commission enquired whether MSETCL has made adequate planning to take care of over-voltage situations. Dr. Balaram submitted that MSETCL has planned for adequate number of reactors to take care of over-voltage situations.
- (v) Shri Jayant Deo, submitted that figures pertaining to proposed evacuation schemes for generation [*as provided at page 14 of the PPT*] exceed the report of the CEA (of June 2007) on evacuation requirement. The said CEA report should be taken as a basis for preparation of any infrastructure augmentation plan by MSETCL. Dr. S.A Khaparde, IIT-Mumbai, submitted that the said CEA report records the evacuation requirement for the entire nation, and may not accurately register the evacuation requirement specifics for Maharashtra. The evacuation requirement projected by MSETCL may thus be marginally at variance from the CEA specifications. Shri. Jayant Deo submitted that the magnitude of variance between the CEA specifications and the MSETCL specifications are sizable. Shri. Ratho submitted that MSETCL shall cross-check their evacuation requirement projections in line with the CEA specifications. It was further submitted that the various power procurement plans of MSEDCL and the plans of augmentation of Generation capacity by MSPGCL, , the private sector utilities, Independent Power Producers, open access generators, and the generating utilities in the Central sector, were the basis of the evacuation requirements projected by MSETCL for for FYs 2010-2011 and 2011-2012., The possibility of full utilization of the proposed capacity would depend on the fructification of the said power generation plans of the generating utilities and the power procurement plans of the distribution utilities.
- (vi) Shri Jayant Deo referred to the Voltage Level graph [*as provided at page 6 of the PPT*] and enquired as to whether MSETCL cannot meet voltage levels due to any fault in its earlier voltage design or due to the modification in voltage parameters as stipulated by the MERC, under the revised State Grid Code. Shri. Subrato Ratho submitted that MSETCL's not meeting the voltage levels solely due to underdevelopment of the transmission system in the past as adequate funds were not put in for development of the transmission network.
- (vii) Shri. Santanu Dixit, Prayas (Energy) Group, enquired for a comparison of the load projection for FY 2011-12 being 26790 MW vis-à-vis the figures provided in the 17<sup>th</sup> EPS report. Dr. Balaram submitted that the 17<sup>th</sup> EPS report was based on the data available during FY 2003-04 and 2004-05 and records the load growth lesser than the present projections. Shri. Santanu Dixit submitted that it should be clear as to whether the figures mentioned in the 17<sup>th</sup> EPS report, or the presently projected figures, are being taken into consideration while approval of the 5-year investment plan is granted, considering that the differential should require the 5-year investment plan to be accordingly modified. Shri. Subrato Ratho submitted that such an analysis shall be carried out by MSETCL before officially submitting the 5-year investment plan to MERC for approval.

- (viii) Dr. Khaparde submitted that IIT-Mumbai has undertaken detailed research on how a transmission company can achieve appropriate voltage levels through cost-effective ways. Dr Khaparde further submitted that in case they were associated with the MSETCL project, the said research material will be available for MSETCL. Shri Ratho submitted that the material will be quite valuable for the finalization of the 5-year investment plan of MSETCL and such a possibility will certainly be explored.
  - (ix) The Commission observed that apart from the conventional generators, MSETCL should also give due emphasis on the evacuation requirement of wind energy generators while finalizing its 5-year investment plan. It should be borne in mind that wind generators are different from conventional generators. This aspect shall have to be adequately taken care in the short circuit studies and system stability studies linked to Transmission System plan. The Commission stressed the importance of the subject matter further as Maharashtra is taking a lead in wind generation. Dr Khaparde agreed with the observations of the Commission.
  - (x) The Commission observed that there is substantial diversity in the peak demands at Regional and State System. In the Maharashtra State System there is diversity in the peak demand of various distribution Licensees. While designing the transmission network, MSETCL should give due cognizance to the diversities in power demand and take advantage of the same in optimizing the design.
3. Shri Santosh Kamath, Consultant to MSETCL, further apprised the SAC on the financing aspects of the proposed 5-year investment plan of MSETCL [*Copy of which has been circulated to all the attending members*]. The following critical observations were made:
- (i) Shri Jayant Deo submitted that the MSETCL should consider reduction in transmission losses which shall minimize the tariff impact of its 5-year investment plan of MSETCL.
  - (ii) With respect to the investment benchmarking norms, Shri Jayant Deo enquired as to whether norms have been made based on book value. Shri. Kamath submitted that the said norms are for new investments. It was submitted that the thumb-rule norms or benchmark prices currently recognized for augmentation of infrastructure are, Rs. 4 crore per MW of generation, i.e. Rs. 2 crore per MW for distribution and Rs. 2 crore per MW for transmission. The proposed 5-year investment plan envisages the incremental per MW investment to be Rs. 1.05 crore per MW, which compares well with the benchmark value of Rs. 2 crore per MW. Shri Kamath further stated that, in case the augmented transmission capacity is fully utilized, the Transmission Cost which is approx. Rs 126/kw/month will remain unchanged and the consumers will not be burdened. Shri Kamath further clarified that in case of under-utilization of the capacity, there will be adverse impact on transmission tariff to some extent

- (iii) On completion of the presentation of Shri Kamath regarding costing of the proposed augmentation of transmission network in Maharashtra planned by MSETCL Shri Subrato Ratho explained that following 3 constraints were foreseen by him for the proposed expansion projects:
- a) Inability of MSETCL to raise the necessary funding for the projects
  - b) Inability of MSETCL to execute the projects inclusive of site supervision as required
  - c) External constraints such as land acquisition and creating right-of-the-way for the transmission lines

Shri Subrato Ratho further explained that while the external constraints would be managed by MSETCL, a Joint Venture (JV) with Private participants was proposed to address the first two constraints

- (iv) On an enquiry made by Shri Santanu Dixit, Shri. Kamath submitted that the funding shortfall of Rs. 4703 crore that MSETCL has ascertained for its 5-year investment plan pertains to FY 2011-2012. The proposed fund-raising mechanisms through the said JV was to seek and secure adequate funds keeping in view the above shortfall.
- (v) On the proposed JV form for private participation, Commission observed that as regards planning function, MSETCL should essentially function as a STU and not as a transmission company, since the 5-year investment plan is to provide adequate transmission network for all transmission system users in Maharashtra. Shri Jayant Deo opined that the proposed JV model for engaging private participation should be clarified in detail considering the stake of all utilities in the performance of the JV. Shri. Ratho submitted that a JV model for private participation is proposed for discussion before the SAC. However, MSETCL shall finalise a practical and viable model keeping in view the stake of all transmission system users. Presently, the best model for implementation is the JV model, as per the operational and resource analyses undertaken by MSETCL. So far as neutrality is concerned in the optimization of the investment plan as an STU, Shri Ratho submitted that the selection of JV participants may be undertaken by MSEB Holding Company and not by MSETCL, or, the Government of Maharashtra, in consultation with the MERC, which may constitute a special committee to select the final JV team. However, the Commission, observed that MERC need not participate in selecting JV participant, as the same is beyond its regulatory function.
- (vi) Dr S.L. Patil, TBIA, submitted that MSETCL should aggressively put their best efforts during FY 2008-2009 to create capacity augmentation and meet voltage levels (as stipulated in the State Grid Code) before the end of 2011-2012. Shri Ratho submitted that the present 5-year plan for achieving adequate capacity augmentation and voltage levels may be modified with due approval from MERC, and a separate 3-year rolling investment plan shall be shortly submitted for approval before the MERC. Considering the transmission projects executed by MSETCL in the last 2-3 years, Shri. Ratho submitted that the project execution capacity of MSETCL needs to be upgraded. The main concerns of MSETCL, in the execution of its

infrastructure augmentation plans, are cost-effectiveness and expeditious achievement of targets.

- (vii) A view was expressed that there are other transmission utilities in the State and they may also undertake to execute work in their licence area and outside also.
- (viii) Shri Jayant Deo suggested that MSETCL, as an STU should identify where majority coal-based power plants are located and build evacuation facility for the said plants to transmit power into the State Grid. The potential of numerous coal-based power plants to help distribution licensees meet peak demand should be optimally used. Shri P.S. Pandya, REL endorsed this suggestion of Shri Jayant Deo.

4. The next item on agenda 'Providing Financial Support for Consumer Advocacy' was taken up.

Shri Santanu Dixit made a PPT [*Copy of which has been circulated to all the attending members*] to apprise the SAC on the need for consumer advocacy, and proposed method of funding for the same. The funding proposal envisaged by Prayas (Energy) Group is that MERC may earmark a specific fund (for example Rs. 25 lakh per annum) for specific projects and programs for consumer awareness and advocacy. An annual cap (for example Rs. 3 lakh) shall be provided for each organization that initiates to cause consumer awareness and advocacy. A separate 3-member committee may be constituted from existing SAC members, or any individuals of repute and experience, to monitor the operations of the said specific fund, the activity of consumer awareness groups, supervising the optimal use of grants and undertaking a half-yearly review of the said utilisation. The following responses were made on the PPT of Prayas (Energy) Group:

- (i) Shri Jayant Deo supported the proposal of Prayas (Energy) Group. It was suggested that the monies deposited by various consumers with distribution licensees that are un-claimed and un-recovered on termination of supply, may be utilized for the creation of the consumer awareness fund. The fund should be utilized for consumer's individual costs involved in litigation.
- (ii) Dr S.L. Patil also suggested that the said funds should be utilized to support consumer's costs involved in litigation.
- (iii) Dr. Khaparde endorsed the cause of consumer advocacy and suggested that non-governmental organizations may be selected to conduct quarterly seminars on consumer awareness all over Maharashtra.
- (iv) Shri Rajyavanshi, Nimbkar Agricultural Research Institute, suggested that Prayas (Energy) Group should commence a pilot project on consumer awareness. It needs to be ascertained whether allocation of Rs. 3 lakh per annum is sufficient for achieving desired targets.

- (v) Shri P.S. Pandya endorsed the cause of consumer awareness. However, it was submitted that consumer awareness does not mean financially aiding a consumer for litigation.
  - (vi) The Commission observed that the purpose of this presentation of Prayas (Energy) Group, was to sensitize the need to cause consumer awareness, education and advocacy. Financial aid to consumers for litigation is outside the scope of this presentation.
  - (vii) Shri Jayant Deo submitted that funds may be used for legal aids services. Shri. Rajyavanshi submitted the primary goal should be to initiate consumer awareness which shall reduce, if not resolve, many issues culminating into wasteful litigation. It was suggested that each SAC member organization should form their views and responses in writing and submit the same before the MERC.
  - (viii) Shri A.G. Patil, BEST, submitted that only consumer awareness shall be supported by BEST. Financial aid to consumers for litigation shall not be supported.
  - (ix) Shri Ashok Sethi, TPC, also submitted that consumer awareness movement shall be supported by TPC. However, TPC will provide a detailed response later, regarding the implementation of consumer awareness projects. A concern to lessen the burden of litigation costs was made by Shri. Sethi though no assurance was given on financial aid to consumers for litigation.
  - (x) The Commission suggested that Prayas (Energy) Group and one representative from each distribution licensee in Maharashtra may form a Working Group and formulate the way forward to prepare a project to cause consumer awareness.
5. On the issue of energy conservation, the Commission informed the SAC that MERC shall be executing a memorandum of understanding (MOU) in the matter of collaboration in research and information exchange on policies and programmes related to energy efficiency, procurement planning, and electricity market and regulation with the California Energy Commission (CEC), the California Public Utility Commission (CPUC) and the Lawrence Berkeley National Laboratory (LBNL). A scoping workshop to scope out the work that could be undertaken under the MOU shall be shortly conducted by LBNL in Mumbai. The workshop is expected to have as participants, representatives from MERC, MSEDCL, BEST, REL and TPC-D, Bureau of Energy Efficiency, DSM consultants, PRAYAS and other authorised consumer representatives.
6. On the issue of the creation of a limited Franchisee Model in distribution licensee areas, Commission observed that issues concerning the same are subject matter of Case No. 60 of 2007 before the MERC. A public hearing in the said matter has been scheduled for December 6, 2007 and responses thereto may be made in the form of written comments, observations and/or oral submissions.

The Ninth SAC meeting concluded thereafter.

**List of Abbreviations (in chronological sequence):**

1. SAC : State Advisory Committee
2. MERC : Maharashtra Electricity Regulatory Commission
3. MSEB : Maharashtra State Electricity Board
4. MSETCL : Maharashtra State Electricity Transmission Company Limited
5. PPT : Power-Point Presentation
  
6. FY : Financial Year
7. CEA : Central Electricity Authority
8. IIT : Indian Institute of Technology
9. MSPGCL : Maharashtra State Power Generation Company Limited
10. MSEDCL : Maharashtra State Electricity Distribution Company Limited
  
11. CGS : Central Generation Sector
12. IPP : Independent Power Producer
13. JV : Joint Venture
14. STU : State Transmission Utility
15. REL : Reliance Energy Limited
16. TBIA : Thane Belapur Industries Association
17. BEST : Brihan Mumbai Electricity Supply and Transport Undertaking
18. TPC : Tata Power Company

**Enclosures:**

1. PPT of MSETCL presented by Shri. K. Balaram.
2. PPT of MSETCL presented by Shri. Santosh Kamath.
3. PPT of Prayas (Energy) Group presented by Shri. Santanu Dixit.

List of Members / Officials attended the 9<sup>th</sup> State Advisory Committee held on 30<sup>th</sup> November, 2007.

S.No.	Name of SAC Member / official	Institution
01	Shri Subrat Ratho	MD, MSETCL
02	Shri Anil K. Rajvanshi,	Director, NARI
03	Shri M.S. Rao	Addl. V.P. (Trans), REL
04	Shri A.K. Ghosh	Director Finance, MSEDCL
05	Shri M.R. Khadge	CE (STU), MSETCL
06	Dr. K. Balaraman	GM, PRDCL, Bangalore
07	Shri G.S. Limaye	Exe Director (Op) MSETCL
08	Shri P.C. Dolas	AE (STU), MSETCL
09	Shri V.G. Khedekar	JE (System Study)
10	Shri A.R. Kulkarni	TA to ED (Op)MSETCL
11	Shri S. Dixit	Prayas (Energy Group)
12	Shri Anil Kelkar	Institute of Engineers, Pune
13	Shri V.K. Pandit,	M.D., MPECS
14	Shri R.V. Dandapur	MPECS
15	Shri M.P.Pujari	MEDA
16	Prof S.A. Khaparde	IIT, Mumbai
17	Shri Y. Pradeep Kumar	IIT, Mumbai.
18	Shri V.S. K. Murthy B	IIT, Mumbai
19	Shri Vinay Kumar	TBIA
20	Ms Sapna Purohit	MSETCL
21	Dr S.L. Patil	TBIA
22	Shri P.S. Pandya	REL
23	Shri Ashok Sethi	TPC
24	Shri Vinayak Rao	MSEB Holding Co. Ltd.
25	Shri A.G. Patil	CE, BEST
26	Shri Surendra Barania	Central Railway
27	Shri Yahish Agarwal	KPMG
28	Shri Santosh Kamat	KPMG
29	Shri D. Raiva	TPC
30	Shri S.D. Pawar	BEST
31	Shri K.N. Rajgopal	BEST
32	Shri D.A. Sathe	TPC
33	Shri Jayant Deo	MCCI&A, Pune
34	Shri Abhijit Deshpande	CE, MSEDCL
35	Shri M.A. Pakharn	JE, Central Railway
36	Shri P.G. Khandalkar	MSETCL
37	Shri L.N. Mishra	REL, Delhi