Minutes of the 20th Meeting of the State Advisory Committee held on 30 December 2011 in Mumbai.

Agenda Item No.1 **Preliminary Remarks by Hon Chairman**

The Twentieth Meeting of the State Advisory Committee of the MERC was held on Friday, 30th December 2011 in Mumbai. Shri V.P. Raja, Chairman, MERC, presided over the meeting. Shri V. L. Sonavane, Member, and Shri Kuldip Khawarey, Secretary of MERC, were present. The meeting commenced with a warm welcome by the Chairman. Leave of absence was granted to those who could not attend the meeting

The Chairman noted with satisfaction that the Commission could conduct SAC Meetings as scheduled, on the last Friday of every quarter i.e. in March, June, September and December 2011. Similarly, in 2012 also, the SAC meetings will be held on 30th March, 29th June, 28th September and 28th December 2012, he announced.

The Chairman informed the meeting that there are some very important items for discussion. He said the Commission has received a directive from the Ministry of Power dated 30th November 2011 with respect to Open Access for the consumers using 1 MW or more power. As provided under Section 88 of the Electricity Act, 2003, the Commission seeks advice of the State Advisory Committee on the issues of major matters of policy. Another important issue for discussion related to the strengthening of the transmission network in Mumbai with a view to bringing in more power into the metropolis as the demand goes on increasing. Relating to the two grid disturbances disrupting the power supply in Mumbai in November 2010, the Commission appointed a Study Committee headed by Prof. S.A.Khaparde, IIT, Mumbai, to suggest remedial measures to strengthen the existing transmission network in MMR area. Prof Khaparde submitted his final report in June 2011. Based on this study report, a Standing Committee with Director (Operations), MSETCL, as convener has been constituted by MERC in August 2011 to prepare a 5-year business plan and a 15-year prospective plan for MMR and the entire Maharashtra State. The Standing Committee recommended that a working group should be formed to identify the key areas in which various clearances from different Government Departments and authorities are required to be obtained for speedy completion of the transmission system upgradation in Maharashtra. The Chairman requested the Principal Secretary (Energy), Government of Maharashtra, to extend cooperation for getting statutory clearances from various Departments such as Revenue. Forest, Environment and Local Self-government at the earliest.

The Chairman then took up the items listed on the agenda circulated earlier.

Agenda Item No.2 Confirmation of Minutes of the 19th SAC meet

The Chairman stated that a copy of the minutes of the 19th meeting of the SAC held on 30th September 2011 had been circulated to all SAC Members and Special Invitees with a request that they give their comments, if any. Since there were no comments, the draft minutes were adopted unanimously.

Agenda Item No. 3 Action Taken Report on the earlier meetings

The SAC Members and Special Invitees noted the Action Taken Report on the decisions of earlier meetings, circulated along with the Agenda Items.

Agenda Item No.4 <u>Discussion on Cross Subsidy</u>

The Chairman requested the Commission's consultants, PwC, to make a presentation on the progress made so far in the matter of forming a roadmap on reduction of cross subsidy.

Accordingly, PwC made a presentation in which the following points were made: The level of cross subsidy is dependent on the way the cost of supply (CoS) is defined

- Average Cost of Supply (ACoS)
 Cost of Supply (voltage-wise)
 Cost of Supply to various consumer categories
- Utilities to segregate their accounts in a time-bound manner to capture network and supply-related costs accurately
- Need to develop guideline for computing CoS
- Cross subsidy may be based on ACoS till such time.

The key principles adopted for the roadmap:

- a) Each licensee has different level of cross -subsidy, hence the roadmaps will be different for each
- b) ACoS is used to assess the level of cross subsidy across consumer categories
- c) Except LT domestic category, intra-consumer category cross subsidization is not considered
- d) Average Billing Rate (ABR) of a category is defined on an aggregate basis as the ratio of the total amount billed (tariff income) and sales to the category
- e) ABR as percents of ACoS of various categories are changed on yearly basis to reach the target level of cross subsidization without any tariff shock.

PwC has suggested that:--

- i) Segregate the accounting system to capture network and supply related costs accurately
- ii) Develop a guideline for computing the cost of supply to various consumer categories
- iii) Licensees may submit the computation of cost to supply to consumer categories along with the MYT filing each year backed up by appropriate load research
- iv) The roadmap should be made co-terminus with the control period of MYT regulations.

Members and Special Invitees have noted the above.

Agenda Item No. 5 Impact of 'directive' from MoP dated 30 November 2011 with respect to Open Access for 1 MW and above consumers

The Chairman stated that the Commission has received a 'directive' from the Ministry of Power, Govt of India, dated 30 November 2011 with respect to Open Access (OA) for 1 MW and above consumers of power. The Chairman requested the Members, the Special Invitees and other stakeholders to send in their considered views to enable the Commission to formulate its guidelines in the matter.

The following Members made a presentation on OA, followed by a discussion:

- 1. Independent Power Producers' Association of India (IPPAI)
- 2. Thane Belapur Industries Association
- 3. Indian Energy Exchange

The IPPAI presentation briefly explained the issues related to –

- a) Perspective of various stakeholders
- b) Regulators' role
- c) Ground realities with regard to reluctance of DISCOMs
- d) Concerns of DISCOMs regarding their revenue loss, cross subsidy etc.
- e) Capital cost for laying down a separate distribution network.

At the outset, Shri Harry Dhaul, Director General of IPPAI, stated that his association was not able to comprehend fully the MoP notification. Since it is only a sort of a guideline, a clarification is necessary as to whether is it within the purview of the Regulators to implement on it or not. With the implementation of this guideline, the consumers of 1 MW and above may go out of the purview of the Regulatory body and the tariff of such consumers will be determined by the market. In fact, the consumers of 1 MW and above will be deemed as OA consumers. In India, the Distribution System is largely in the hands of the Government Sector, i.e. State Utility. When such consumers get out of the State Utility network, the impact on the State Utilities is going to be very high as these consumers are the subsidizing consumers. This situation ultimately will lead to seeking more ARR and the tariff increase to the subsidized consumers would be inevitable. The subsidized consumers would not be able to sustain this tariff shock.

Another important point is: if power supplier to the consumers of 1 MW and above fails to supply, what happens to them? Would such consumers be able to source the supply from the Distribution Licensee, or will they have to seek supply from Power Exchanges? Under such a situation, the main beneficiary of this new system will be the Power Exchanges. Therefore, the Distribution Licensee has to come out with a clear strategy in terms of (i) revenue loss, (ii) forced supply obligation and (iii) cross subsidy surcharge, etc. However, there are certain advantages such as improved efficiency, competition and tariff rationalization. The Regulatory body is required to formulate a transparent procedure for grant of non-discriminatory OA, intra-State unscheduled balancing mechanism in sync with inter-State unscheduled balancing mechanism and redress metering issues, etc.

Dr Ashok Pendse of TBIA made a presentation by bringing out some relevant issues, such as

- What stand is being taken by the Railways at the national level
- If the demand is less than the capacity contracted as per existing PPAs with the generators, who will bear the fixed charges
- Increase in tariff for residential consumers
- When the unit rate of RGPPL, Parli-6, Paras-3 is above Rs.4.50 and the market rate is lower than this, will some of these generators be in a position to sell in the open market
- Regulations should specify that cross subsidy surcharge will be collected by the transmission utility and paid to the distribution utility.

Ms Ashwini Chitnis of Prayas Energy Group stated that they had not studied the various issues which could be impacted by the MoP 'directive.' However, the primary issue is if the Commission is bound by the MoP 'directive.' If yes, then there will be a plethora of issues to be addressed, including legal and governance issues such as:

- i) Conflict of interest of DISCOMs as EA, 2003, makes USO mandatory for DISCOMs
- ii) Whether MoP can issue such a directive?
- iii) Certain technical issues.

Prof S.A. Khaparde stated that the principle of Open Market is that the risk is to be shared equally by all the participants and the Regulator has little role to play in this scenario. Now, the question is if the Indian Power Market is ripe enough to be left to itself? This issue needs to be addressed.

Shri R.K. Madan, Advisor to Adani Group, said that considering the total power market in the country and the generation capacity coming up in the private sector, merchant power should be encouraged.

Shri Rahul Nayak of Indian Energy Exchange made a presentation highlighting some of the salient features of the MoP 'directive' as under:

- State Electricity Regulatory Commissions (SERCs) will not regulate energy charges for bulk consumers
- Only wheeling charge and cross subsidy surcharge will be calculated for bulk consumers.
- DISCOMs do not have an obligation to supply to Bulk Consumers
- How are SLDCs equipped to meet the deviations by bulk consumers in realtime and its settlement?

Smt Rupadevi Singh of Power Exchange of India said her organization was yet to study the MoP 'directive' in detail, and therefore, not making any comments at this juncture.

The Chief Engineer, MSLDC, said that the problems of variation in voltage levels, overloading or frequency level may have to be looked into in this context and be factored into. The ancillary services in India have not developed to the extent it is required to meet

the OA regime. At present, the peak demand in Maharashtra is about 15000 MW and in off-peak period about 12500 MW. OA should be implemented in a phased manner.

Shri Ashok Sethi of TPC said that most of the points, which TPC wanted to raise, were covered by earlier speakers. However, some of the points he wanted to reiterate were -

- a) The risk factors should be shared equally by all participants
- b) Removal of cross subsidy
- c) Whether the consumers are able to pay or not
- d) Whether any budgetary support is required, and to what extent
- e) Wheeling charges settlement mechanism with SLDC
- f) Settlement of under-drawl and over-drawl
- g) Metering issue (one-level or two-level settlement)

Shri R.R. Mehta of Reliance Infrastructure said that while dealing with the subject matter, we should consider two documents together i.e. MoP 'directive' and APTEL judgment with reference to the issues of health of various DISCOMs. There is no history or case study to show where the open market system is working. The DISCOMs are least affected, provided the Commission is able to tackle complex issues such as cross subsidy, availability of power and movement of consumers. The low-end consumers should not be overlooked. Keeping in mind the various problems related to this highly complex issue, we are of the opinion that OA may be implemented in a phased manner.

Shri O.P. Gupta, General Manager, BEST, said that the EA, 2003, has exempted the BEST from OA, it being a statutory local body. However, the BEST is in agreement with the views expressed by RInfra, TPC and others and whenever specific issues come up in the future, the BEST will submit its views accordingly.

Shri Ajoy Mehta, MD, MSEDCL, said that taking into consideration the views of various other Utilities/Licensees, it is felt that the Commission may explore the possibility of a one-to-one meeting with the Licensees and other stakeholders which would help to address the various issues expressed during this SAC meeting. MSEDCL will be happy to extend all cooperation in this regard.

The Chairman stated that the Commission has noted the points raised by various speakers and will take a decision about convening meetings with licensees and other stakeholders.

Agenda Item No. 6 **Presentation on Five Year Business Plan for MMR**

The Chairman stated that the two grid disturbances which occurred in November 2010 in Mumbai had severely affected the power supply to MMR, including parts of South Mumbai. After a review meeting with all transmission utilities of the state, a detailed study was carried out under Prof S.A. Khaparde. The study report recommended that steps should be taken to strengthen power supply in terms of generation and transmission to cater to the projected future load demands of Mumbai to avoid recurrence of power supply failure.

MERC had constituted a Standing Committee comprising representatives from MSETCL, TPC, RInfra, Western Regional Load Dispatch Centre, State Load Dispatch Centre, IIT, Mumbai and outside experts to review the situation and suggest remedial measures to overcome the existing transmission bottlenecks in MMR and in the state. The Committee was entrusted with the responsibility of preparing a 5-Year Business Plan and a 15-Year Perspective Plan for MMR and for Maharashtra State.

The Chairman requested Shri U.G.Zalte, Executive Director, MSETCL and convener of this Standing Committee, to make a presentation on the progress made so far.

Shri S.T. Shinde, Chief Engineer, State Transmission Utility (STU), made the presentation in which the following salient points emerged:

Tata Power has been designated as a deemed transmission licensee under Section 14 of the EA, 2003. TPC owns 17 Receiving Stations with voltage levels of 220 kV and 110 kV. TPC transmission network is connected to MSETCL at three locations (i) Trombay, (ii) Kalwa and (iii) Borivali through 220 kV / 110 kV tie lines and with R-Infra at 220 kV Borivali through the double circuit Aarey-Borivali line. The entire system is a part of the Maharashtra Intra State Transmission system (InSTS).

MSETCL transmission system is directly connected with MMR at its following EHV sub-stations at Kalwa, Boisar, Borivali and Trombay. About 1050 MW power is exchanged through these interconnection points of transmission to meet the MMR demand. Considering various facts such as (a) development of a commercial complex at the Chhatrapati Shivaji Airport, (b) rehabilitation of slums in Airport area, (c) development of a commercial complex in Godrej Vikhroli area and (d) vertical load development in other areas, the anticipated peak demand in MMR for 2014-15 will be about 4500 to 5000 MW, including triggering loads. The expected demand is to be catered in three stages –

- a) Developing transmission network on the outskirts of MMR
- b) Developing suitable EHV grid stations within MMR for injection of power
- c) Developing adequate transmission network to disperse power to load center.

Some of the salient recommendations of the Standing Committee are as under –

- a) Various Government Agencies such as MMRDA, SRA, CIDCO, Airport Authority, SEZ, Railways and MCGM need to be involved at the planning stage for MMR so that necessary support can be obtained for implementation of the project.
- b) All the 110 kV lines in MMR area need to be necessarily converted from overhead to underground and the same RoW can be used for 220 kV line with insulated cross arms.
- c) For all identified long terms transmission schemes, the model of competitive bidding through private sector participation should be explored. For this, the

State Government may formulate appropriate guidelines and appoint an Empowered Committee.

Ghodbunder Sub-station—Rinfra: Shri M.S. Rao, Senior VP of RInfra, made a brief presentation on the work proposed to be carried out. He stated that availability of land is the main problem at Ghodbunder and the intervening forest area comes in the way of construction of overhead transmission line from PGCIL Boisar sub-station He, therefore, suggested that wherever possible, towers can be installed and in other areas, we may opt for an underground option.

Member of MERC, Shri V.L. Sonavane, said it appears that for the last many years no action has been taken by the existing transmission licensees in MMR to address the issue of network planning for bringing required power into MMR. The Committee is, therefore, required to address the associated problems and come out with solutions, so that the same could be put up before the Government for its final decision.

Shri R.K. Madan, Member of the Standing Committee, said that huge generation capacities are coming up in neighboring States in private and State sectors. About 5000 MW of power is being sourced from outside the State, another 4000 MW is being scheduled to be added in the transmission network by 2013 within the State itself and adequate transmission systems need be developed to meet this load inflow well in advance. Therefore, wherever possible, the underground and overhead options may be considered.

Shri Ajoy Mehta, MD, MSEDCL said that the Commission and/or the State Government need to address two important issues – (i) capital investment required for such transmission network augmentation and (ii) recovery of such capital investment through regulatory system.

Prof Kharpade, IIT, Member of the Standing Committee, said that the Committee took utmost care to address the problems by focusing on various issues and submitted its recommendations. He felt that if the recommendations are followed, it will be possible to achieve the target. He opined that the concept of a single window clearance may be explored for obtaining early clearances.

Shri Ramakrishna, Member of the Standing Committee, observed that since the RoW is not a new issue, we may consider practicality of the situation and in view of the modern technology available around the world, it will be possible to either go in for underground and/or OH cabling.

Shri Vidyadhar Kanade, Principal Secretary (Energy), Government of Maharashtra, felt that creation of single window clearances may not be possible as the issues involved various Departments such as forest, revenue and agriculture. He suggested that a list of problem areas, involving various Departments/Agencies, may be provided so that all possible efforts could be made to obtain early clearances.

The Chairman stated that the points raised by various members/stakeholders were noted. It is necessary that the Standing Committee brings out its Report with recommendations, including alternative solutions, at an early date. The Report may be submitted to the Commission with a copy to Shri Zalte, Convener of the Group, for further action. A list of issues, including statutory clearances, be prepared and submitted to the Principal Secretary (Energy) for taking up the matter with other Departments / Agencies.

Copy of the presentation was circulated to all SAC Members and Special Invitees and other stakeholders.

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Encl: Copy of presentations

- a) Roadmap for Reducing Cross Subsidy in Maharashtra
- b) TBIA presentation on Issues related to Open Access
- c) IEXL presentation on Open Access
- d) IPPAI presentation on Open Access
- e) MERC Co-Ordination Committee presentation on Five Year Business Plan

List of Persons who attended the SAC Meeting held on 30 December 2011

Members:

- i. Shri Vidyadhar Kanade, Principal Secretary (Energy), GoM
- ii. Shri S.S. Yadav, Senior DEE (TD) BB, Central Railway
- iii. Dr S.L. Patil, General Secretary, Thane-Belapur Industries Association
- iv. Prof S.A Khaparde, IIT, Mumbai
- v. Shri Anil Kelkar, Institution of Engineers, Pune Local Centre.

Special Invitees

- vi. Shri Ajoy Mehta, Managing Director, MSEDCL
- vii. Shri O.P. Gupta, General Manager, BEST Undertaking
- viii. Shri U.G. Zalte, Director (Operation), MSETCL
- ix. Shri Ashok Sethi, TPC
- x. Shri R.R. Mehta, RInfra
- xi. Smt Rupadevi Singh, MD & CEO, Power Exchange India Ltd.
- xii. Shri Harry Dhaul, Director General, IPPAI
- xiii. Shri Rahul Nayak, Indian Energy Exchange Ltd

Co-Ordination Committee Members

- xiv. Shri S.T. Shinde, Chief Engineer, STU
- xv. Shri P.B.Hote, Chief Engineer, SLDC
- xvi. Shri O.P. Singh, SE, Western Region Power Committee
- xvii. Shri V. Ramakrishna, Adviser, JSW Energy Ltd
- xviii. Shri R.K. Madan, Adviser, Adani Group
- xix. Shri M.S. Rao, Senior VP, RInfra.