

Clarification of points discussed during TVS on dtd 21.09.2012 at MERC.

1) Actual load of 2010-11 and 2011-12 is to be considered.

Actual load for the year 2010-11 is 19764 MW. Actual load for the year 2011-12 is 20907 MW. Forecasted load for year 2011-12 is shown as 22318 MW. Accordingly forecasting of load upto 2015-16 is shown.

Actual load for the year 2011-12 is being considered and further forecasting is revised accordingly as follows.

Financial Year	Previous forecasting in MW	Revised forecasting in MW
2011-12	22318	20907 (actual)
2012-13	23826	22318
2013-14	24780	23210
2014-15	25789	24154
2015-16	26857 + 3872 = 30729	25154 + 3872 = 29026

Generally for purpose of network planning forecasted load as well as network will be always on higher side, due to following reasons.

- Network is being planned considering expansion of next 5 -10 years.
- Delay in acquisition of land for substation.
- Delay in getting clearances from various departments.
- Major Right Of Way (ROW) problems.
- Delay on contractor's part (labour problem) for completion of work.

Even though proposed network seems to be on higher side today, considering life of Transmission lines (as 30 years), this can be utilize to its optimum capacity in next 10-15 years.

2) LE Schemes.

MSETCL is having a policy for replacement of conductor and earth wire of EHV lines in service more than 25 years and equipments in service more than 20 years under life extension schemes, to minimize interruptions and have quality of supply. MSETCL has already taken up the work of replacement old equipments such as circuit breaker, CT, LA, etc under 99 Nos. of life extension schemes. Work of 66 Nos. of Life Extension (LE) schemes at various substations in Maharashtra is completed during the period 2007-2012. Work of 33 Nos. of Life Extension (LE) schemes is in progress.

During 2009-10 to 2011-12 180 Nos. of old power Transformers were replaced resulting in capacity addition of 6561 MVA, thereby reducing overloading and increasing redundancy in the network under JICA (Japan International Cooperation Agency)

3) Assumptions made in Business plan.

The Business plan for FY 2011-12 to FY 2015 -16 is prepared on the basis of the upcoming generation and upcoming demand in Maharashtra state. As per forecasting peak demand of Maharashtra state (including Mumbai) for the year 2011-12 is 22635 MW and will be increased upto 30729 MW (2015-16) including triggering load of DMIC project. Table showing year wise increase in upcoming demand is given in point No. (1). The forecasted demand of Maharashtra state during the year 2011-12 was 22318 MW. As per actual, max. load reached during the year 2011-12 is 20907 MW. Considering actual, max. load reached during the year 2011-12 forecasted load for the year 2015-16 will reach upto 29026 including triggering load of DMIC project.

The generation in Maharashtra state during 2011-12 was 15492 MW. This will increase upto 32946 MW during 2015-16. To evacuate power generated by MAHAGENCO it is essential to establish 400 KV substation in respective area and to construct 400 KV and 220 KV lines to transmit this power to the load centre.

Further considering the upcoming demand, to improve quality of supply and to remove transmission constraints, additional 220 KV & 132 KV substations, link lines, capacity additions in existing substations are proposed. As such the works proposed in Business plan are increased.

System study is carried out considering existing and proposed EHV network to confirm that loading of lines, ICT and T/f considering redundancy.

For implementation of business plan care has been taken. Land acquisition for all the substations proposed for commissioning during 2012-13 is completed. Works of construction of lines related with substations are already in advanced stage. Land acquisition for most the substations proposed for commissioning during 2013-14 is completed.

4) Methodology of preparation of cost of individual Project (cost Data).

For preparation of estimates of each scheme Cost Data is being prepared on yearly basis of following points.

- a) Recent cost of every item purchased by Central Purchase Agency (CPA).
- b) Cost of equipments, other than CPA purchase items, budgetary offer is collected from various manufacturers. Average cost of offers received is being considered.
- c) Minor items such as conductor, earthwire accessories, Insulator hardware is being taken from turn key project offers. Average cost in turn key project offers is being considered.
- d) For consideration of price variation ieema circulars are being considered.

5) Assumptions made for capitalization.

While projecting capitalization, the tentative period for completion of particular scheme is being taken into consideration. For purchase of land and other activities, provision of @ 20% of project cost is being done for first year. For procurement of material and speed up the work, provision of @ 40% of project cost is being done for second year. Remaining amount of @ 40 % of project cost is being considered for third year.

However due to delay in acquisition of land, major Right Of Way (ROW) problems, delay in getting clearances from various departments, delay on contractor's part (labour problem), commissioning of projects get delayed, which results in less capitalization during particular period.

6) Meeting with DMIC and MIDC for upcoming load.

Hon. Chairman MERC advised that for confirmation of upcoming load of DMIC project as well as in MIDC area meeting is to be arranged with DMIC project.

A meeting of the officials of DMIC project, MIDC and MSETCL will be arranged soon and load forecasting of DMIC project will be revised.

7) Advance action regarding implementation of schemes covered in business plan is required.

As already stated in point No. 3 above, for implementation of business plan care has been taken. Land acquisition for all the substations proposed for commissioning during 2012-13 is completed. Works of construction of lines related with substations are already in advanced stage. Land acquisition for most the substations proposed for commissioning during 2013-14 is completed.

Action for acquisition of land for the substations proposed for commissioning during 2014-15 and 2015-16 is started. Process for tenderisation of substation and lines is started. Proposals for obtaining various clearances are initiated.

8) Impact on tariff.

This point is considered in data gap reply submitted to Hon'ble Commission and is included in public notice.

9) Estimate on Transmission losses.

Actual transmission losses of MSETCL are 4.31% for the year 2011-12. MSETCL requesting MERC to maintain the losses at the tune of 4.85 % as a bench mark. It is not possible to control the flow on various lines. Uncertainty of losses is seen due to following reasons.

- a) Maximum power flow from East to West to meet the demand.
- b) In future the maximum IPP generation coming in East of state and load of western Maharashtra is increasing.
- c) Injection and drawal point of open access consumers.
- d) Hydro generation in western Maharashtra is operated for peak hours and as per need of system.
- e) Uncertainty of availability of gas.