

**Minutes of the meeting with TNEB Officials on Generation and
Transmission Planning held on 22-09-2010**

Present

TNERC

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| 1. Thiru. K.Venugopal | Member-I |
| 2. Thiru. S.Nagalsamy | Member- II |
| 3. Thiru. R.V.Rajah | Secretary |
| 4. Thiru. P.Muthusamy | Director/Engineering |
| 5. Thiru. S.Balathandayudhapani | Director/Tariff |

TNEB

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| 1. Thiru. S.Sukumar Solomon | Director/Projects |
| 2. Tmt. S.Kalyani | Chief Engineer/Planning |
| 3. Thiru. P.K.Shanmugam | Chief Engineer/Projects |
| 4. Thiru. A.Balakrishnan | Superintending Engineer/Planning |
| 5. Thiru. K.Thangachamy | Superintending Engineer/System Studies |
| 6. Thiru. V.S.Sankaran Nambiar | Superintending Engineer/Transmission-I |
| 7. Thiru. R.Ganapathy Sankaran | Superintending Engineer/Civil Projects |
| 8. Thiru. K.Anandan | Superintending Engineer/400 kV |

The meeting commenced with the welcome address by Member-I/TNERC.

Member –I stated that the present shortage in TNEB is around 2000-2500 MW and TNEB purchases costly power for meeting this gap. The short-term power management shall be dynamic. The huge shortage will result in to the sellers market. Further TNEB should co-ordinate with the adjacent States for exchange of power. The load forecasting shall be proper and accurate. The capacity addition in the last five years is not sufficient to meet out the demand. The additions to both generation and transmission should be in phase with each other, otherwise these assets will become stranded assets.

Power Point presentation was given by TNEB on Generation and Transmission Planning. Superintending Engineer/System Studies/TNEB explained the proposed capacity addition along with the associated power evacuation schemes. The Superintending Engineer/Transmission-I explained about the various ongoing and proposed transmission schemes for power evacuation as well as system improvement. Superintending Engineer/Civil Projects/TNEB explained on the progress achieved in the ongoing thermal and hydro projects in TNEB.

The views/comments of the Members of the Commission and the response of the TNEB officials are furnished below:

Member-I

1. As agricultural service connections are not metered, agricultural consumption may be arrived at by providing meters in distribution transformers. From the reading of meters of distribution transformers reading of other metered services may be deducted to arrive at the unmetered agricultural consumption.
2. Enquired the frequency of load forecasting. Further, he enquired whether the pending applications for new connections are included in the load forecasting by TNEB.
3. Demand Side Management (DSM) may be taken up to meet the load growth. TNEB should include DSM as a part of their Generation Planning so as to defer addition to generation capacity. The DSM plan will also drive the DSM group to resort to energy conservation and to reduce the T&D losses. The target for DSM should be clearly indicated for each year in the Generation Planning.
4. Based on the past experience, TNEB may project wind generation and the same should be factored in arriving the demand-supply gap. Further, capability for forecasting wind generation should be developed to enable day-ahead scheduling and thereafter arrive at optimum short term power purchase.

5. Since the matter of collecting Infrastructure Development Charges (IDC) is sub-judice before the Hon'ble Supreme Court, this may be kept in view while planning for funds for capital works.
6. The start up power for all the generating plants shall be arranged well before the date of trial run. This may call for commissioning of associated transmission system earlier than the date of synchronisation.
7. The capacity added by the Merchant Power Plants shall not be added in the generation planning unless TNEB enters into PPA with them
8. In respect of NCTPS Stage –II, Member asked about the delay in execution of the project.
9. He also enquired about efficient operation of coal handling facilities at Ennore Port.
10. In respect of Vallur thermal Power project (TNEB-NTPC JV), Member enquired about the Mega power status benefits.
11. In respect of Co-generation projects to the tune of 183 MW, Member enquired about the ownership of the projects, responsibility for commissioning the projects, funding pattern, power purchase arrangements, regulatory approvals etc.
12. Member enquired about the total transformation capacity of the TNEB grid.
13. Enquired whether TNEB follows (n-1) principle in developing transmission and distribution system.
14. He also enquired whether TNEB is installing capacitor banks in their Sub-Stations. Adequate reactive capacity needs to be planned with every sub-station. Similarly, every distribution transformer shall have power factor improvement system so that the LT voltages to consumers are regulated within specified limits.
15. Whether TNEB has framed any operating system to control the reactive power in the grid.

16. Even though TNEB may face right of way problem for their new transmission systems, there will not be any problem in upgrading the existing transmission network
17. Apart from arranging long term generation and transmission planning, Member enquired about the plan for ring main system in the grid for major load centres like Chennai, Coimbatore etc.
18. 400 kV GIS Sub-Stations may be required in and around the Chennai city to meet the growing demand in future
19. In case of development of GIS sub-station for Chennai Metro Rail Project, TNEB may seek financial assistance from the concerned authority for execution of the sub-station.
20. TNEB may evolve a system for operating the hydel power stations to get maximum benefit of hydro generation during peak hours by proper co-ordination with PWD.
21. TNEB / SLDC of TNEB should develop capabilities to forecast wind generation to schedule generation and market power purchase with a view to optimize overall power purchase cost. Wind energy forecasting is already being done in other developed systems like in California grid.
22. TNEB shall ensure the fuel availability for their Gas based generating Station. If a gas station is not operating, gas may be diverted to other stations to avoid wastage of gas or reduce "take or pay" payment.
23. TNEB shall organize a presentation on distribution planning, metering programme, AT & C loss reduction programme and use of RAPDRP separately during October, 2010.
24. Various schemes shall be submitted to the Commission for approval in accordance with the Regulation after the same are approved by the Board of TNEB/successor entities.

Member-II

1. Enquired about the details of metered services, percentage of energy consumption by the metered consumers and their collection.

2. Enquired about the reason for the delay in Vallur (3x500 MW – NTPC & TNEB JV) though the MOU was signed in 2002-03 itself.

TNEB

1. TNEB does not take into account the pending applications for load forecasting. TNEB considers 8% load growth for generation and T&D plan
2. The wind power is not considered in generation planning since it is seasonal
3. The projects developed by the private promoters are not considered in this generation planning
4. TNEB stated that WEGs who have opted for own connectivity arrangement are now willing to switch over to IDC.
5. TNEB stated that they are making sequential payment to the EPC contractor in respect of NCTPS Stage II
6. The main reason for delay in executing NCTPS Stage II plant is delay in turbine supply from BHEL/Haridwar. TNEB also conducts meeting at the level of Chairman, TNEB and BHEL.
7. Coal handling facilities at Ennore Port is sufficient to meet the coal requirement of Mettrur, North Chennai, Ennore and Vallur Thermal Power Stations including the expansion units.
8. TNEB also stated that they got the benefits of Mega Power status for the Vallur thermal project.
9. If BHEL divert Turbines and related accessories from Simhadri to Vallur, the 1st unit of the Vallur Project will be ready by December, 2010.
10. TNEB stated that the allotment in their Tuticorin JV project with NLC is only 380 MW but they demanded 75% of the installed capacity
11. Joint study is being conducted by TNEB and SRPC about the requirement of VAR in the system. Further, SRPC has proposed to utilize the unbalance in UI amount to install capacitor banks in the grid.
12. TNEB stated that 147 MVAR is sufficient to meet the VAR requirement in the grid

13. TNEB stated that they encounter right of way problem in executing the transmission network and this is the major hurdle.

14. TNEB has planned to develop 400 kV network around the Chennai city. Further 400 kV GIS sub-station at Guindy is also programmed by TNEB and Metro Rail Corporation is giving land for developing the sub station for supplying them.

Both the members of the Commission thanked all the participants for their active participation and their inputs.

Secretary
Tamil Nadu Electricity Regulatory Commission