महापारेषण

MAHARASHTRA STATE ELECTRICITY TRANSMISSION COMPANY LIMITED
(CIN NO U40109MH2005SGC153646)

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MSETCL/CO/STU/Sys/MTC/ No = 4274 **Date:** 8 MAY 2025

To,
As per mailing list

Sub: Minutes of 13th Maharashtra Transmission Committee (MTC) meeting held on 17 April, 2025.

Please find enclosed herewith minutes of the 13th Maharashtra Transmission Committee (MTC) meeting held on 17 April, 2025 at 11:00 Hrs. This meeting was hosted by AEML-T at 220 kV Aarey EHV Substation.

It is to be noted that the minutes of above meeting are also available on website www.mahatransco.in in STU section.

Thanking you.

Yours faithfully

Chairperson - MTC And
Chief Engineer (STU)

Copy s.w.r. to:

1) The Director (Operations), CO, MSETCL, Mumbai

List of MTC Members

Sr. No.	Name of Organization	Name of Nominee & Designation	Committee position	Email ID
1	State Transmission Utility (STU)	Chief Engineer-STU	Chairperson	**CESTU@mahatransco.in**
2	State Transmission Utility (STU)	Superintending Engineer -STU	Member Convener	**sesys@mahatransco.in**
3	MSLDC	Chief Engineer-SLDC	Member	**cesldc@mahatransco.in**
4	MSETCL	Superintending Engineer (O&M)	Member	**se1om@mahatransco.in**
5	MSEDCL	Chief Engineer (Distribution), CO, Mumbai	Member	**cedist@mahadiscom.in**
6	MSPGCL	Rahul Sohani (Superintending Engineer)	Member	**cegw@mahagenco.in, seest1@mahagenco.in**
7	Maharashtra eastern grid Power Transmission co ltd	Atul Sadaria	Member	**atulj.sadaria@adani.com**
8	Adani Electricity Mumbai Ltd. (Transmission Business)	Rakesh Raj (Head Planning – AEML Transmission)	Member	**rakesh.raj2@adani.com**
9	Tata Power Co. Ltd.- Mumbai- Transmission	Sh. Kiran Desale (Head-Transmission)	Member	**desalekv@tatapower.com gstawre@tatapower,com**
10	Central Railway	S.S.Parihar (M Chief Electrical Engineer/Electrical Energy Management/CR)	Member	**dyceetrdcrly@gmail.com**
11	M/s Tata Power Company Ltd. (Distribution)	S. Savarkar	Member	**svsavarkar@tatapower.com**
12	Adani Electricity Mumbai Ltd. (Distribution Business)	Abaji Naralkar (Asst. Vice President)	Member	**abaji.naralkar@adani.com**
13	BEST Undertaking	Smt. Manisha Krupanand Daware.Divisional Engineer (Project)	Member	**depro@bestundertaking.com**
Additional Member:				
1	MSETCL	Superintending Engineer (Project Scheme-I)	Member	**SE1prj@mahatransco.in**

Minutes of the 13th Maharashtra Transmission Committee (MTC) Meeting held on 17 April, 2025 at 220 kV Aarey EHV Substation

The 13th Maharashtra Transmission Committee (MTC) meeting was held on 17 April, 2025, at 220 kV Aarey EHV Substation(AEML-T). The Chief Engineer (STU), Chairman of MTC, presided over the meeting. Representatives of MSLDC, MSETCL, MSEDCL, TPC-T, AEML-T, TATA Power, and BEST attended the meeting, and the Central Railway representative attended this meeting through VC.

At the onset member convener of MTC welcomed all the MTC members present & other participants in the 12th MTC meeting. After a brief introduction of the participants, the member convener of the MTC informed the members of the agenda points of the 12th MTC.

Agenda Point No. 1:

Confirmation of minutes of the 12th MTC Meeting

Member convener of MTC, informed that minutes of the 12th MTC meeting held on 27 January, 2025 were circulated to all the members vide STU Letter No. 879 Dated 31 January, 2025. No comments are received from members, and Member Convener requested to conform the MOM of the 11th MTC Meeting.

With the consent of the members present the Minutes of 12th MTC meeting held on 27 January, 2025 are confirmed.

MSETCL Schemes

Agenda Point No. 2:

Replacement of old existing 0.4 ACSR Deer conductor by equivalent High Performance Conductor (HPC) along with suitable hardware and accessories for 220 kV Chinchwad-Urse line (SC portion from loc. No. 1-31 (Route length = 11.10 km)) along with strengthening of end bay at 220kV Urse S/S and 220 kV Chinchwad-1 S/S by replacement of 0.4 ACSR single conductor with High Performance Conductor (HPC) & allied equipments & hardwares under EHV O&M Division-II, Pune

The MSETCL representative placed before the MTC a proposal for the replacement of the old existing 0.4 ACSR Deer conductor with an equivalent High Performance Conductor (HPC) along with suitable hardware and accessories for the 220 kV Chinchwad-Urse line (SC portion from loc. No. 1-31 (route length = 11.10 km)) along with the strengthening of the end bay at 220 kV Urse S/S and 220 kV Chinchwad-1 S/S by the replacement of the 0.4 ACSR single conductor with a High Performance Conductor (HPC) & allied equipment & hardware under EHV O&M Division-II, Pune.

The MSETCL representative highlighted that the 400 kV Talegaon (PG), Chakan, Lonikand-l, and Lonikand-ll substations are feeding power supply to the 220 kV network of the Pune Ring Main transmission system. The 220 kV Urse-Chinchwad S/C line was commissioned in the year 1974. At that time, 0.4 Deer conductor was used as per routine practice with a conductor capacity of 747 amps. For the last few years, this line has been continuously supplying 700-770 amps. In

this loading condition, the N-1 criterion for this line is not satisfied. 220kV Urse-Chinchwad is one of the main source lines to 220kV Chinchwad S/S, carrying approximately 260 MW continuously. It has frequent LTS operation at Chinchwad-I s/s to avoid the tripping of this line. Due to the overloading problem, distress load shedding needs to be implemented as per system condition. For controlling the loading on the 220kV Urse-Chinchwad line, it is required to hand trip the 220kV Chinchwad-Hinjewadi line. Due to this, all EHV s/s under Hinjewadi MIDC pocket & Pirangut s/s are fed radially through 220kV Kandlagaon s/s.

The MSETCL representative highlighted that the 220kV Chakan-Bhosari-I S/C line & Lonikand II-Bhosari-I S/C line also act as the main power source line to the Pune Ring Main network. Any tripping or breakdown on either of the above lines results in an increase in loading on the 220 kV Urse-Chinchwad line or the 220 kV Chinchwad-Chakan line. Hence, to avoid the overloading of the Pune Ring Main network, LTS is implemented on the 220kV Chinchwad-Urse, 220kV Chinchwad-Chakan, 220kV Chakan-Bhosari-I, and 220kV Lonikand-Bhosari-I lines.

An MSETCL representative explained that schemes for the replacement of old existing 0.4 ACSR Zebra conductors by equivalent High Performance Conductors (HPC) for 220 kV Talegaon-Ambi-PGCIL Ckt-1 & 2 and 220 kV Talegaon-Urse Ckt-I & II (DC lines on MC towers having a route length of 9.72 km each) are also under consideration.

The MSETCL representative submitted that the 220kV Chinchwad-Urse line SC loc. No. 1-31 (route length = 11.10km) is only considered for replacement of the old existing 0.4 ACSR Deer conductor by an equivalent High Performance Conductor (HPC) instead of the total line, as the portion from loc. No. 1-36 will be bunched from loc. No. 36 to LILO tower location no. 1, and a tap will be provided for the 220kV Urse-Sahara line from LILO tower loc. no. 1. The work of the LILO portion of the 220 kV Chinchwad-Urse S/C line into the M/C line is in progress. The balance section of the line (10km) will be replaced by a high-ampacity conductor after conversion of the LILO section to M/C.

The STU (System Transmission Utility) section, vide MSETCL/CO/STU/No.0-138 dt. 07.02.2025, has conducted a system study and recommended the replacement of the existing conductor with a High Performance Conductor (HPC) on the mentioned EHV line. This scheme is a non-DPR scheme.

The MSETCL representative further highlighted the benefits of the scheme as follows:

1) The replacement of the existing conductor of the 220 kV Chinchwad-Urse line by HPC will maintain the 220 kV Hinjewadi Network reliability from the 220 kV Chinchwad side as well as from the Kandalgaon side.
2) It will enable outages on other Pune Ring Main lines.
3) It will increase the power handling capacity of the 220 kV Urse-Chinchwad S/C.
4) It will help to take preventive outage for maintenance & repair work of other lines of the Pune Ring Main Network.

The Estimated cost of the scheme is **Rs. 14.13 Cr.**

The MTC agreed that the proposed scheme is a short-term solution to address the Pune Transmission constraints; however, it can not be executed for want of outages till the completion of ongoing WIP/proposed schemes in Pune for relieving the PRM transmission constraints. Therefore, it is not feasible to execute the scheme in the present situation. Further, CE MSLDC stated that after the completion of schemes for relieving the PRM transmission constraints, outages in this corridor will be feasible, and it would be a better option to revive the upgradation of 220 kV Urse Chinchawad corridor to multicircuit, for which a major portion of the work has already been completed, instead of the conversion of a single circuit to HPC. This would also enhance the reliability of the PRM with the addition

of sources. As such, MTC directed MSETCL to review the proposed scheme in light of the above observations and has kept this scheme on hold at present.

Agenda point no. 3:

Replacement of existing 0.2 ACSR Panther conductor along with hardwares, insulator strings by HTLS conductor of 132kV Pandharpur-Utopian-Welspun-Mangalwedha & 132kV Pandharpur-Nimboli- Mangalwedha lines along with associated 132kV bay strengthening work under EHV O&M Division, Solapur

MSETCL has withdrawn this agenda; hence, the scheme was not discussed in the meeting.

Agenda Point No. 4:

Replacement of existing 0.2 ACSR Panther conductor along with necessary hardwares, earthwire, insulator string by HTLS conductor of 132kV Bale-Kumbhari-Gokul Dhotri Co-gen - Chetak Solar Generation-Akkalkot line corridor under jurisdiction of EHV O&M Division, Solapur.

The MSETCL representative placed before the MTC a proposal for "Replacement of existing 0.2 ACSR Panther conductor along with necessary hardware, earth wire, and insulator string by HTLS conductor of 132kV Bale-Kumbhari-Gokul Dhotri Co-gen-Chetak Solar Generation-Akkalkot line corridor under jurisdiction of EHV O&M Division, Solapur."

An MSETCL representative explained that the 132kV Bale-Akkalkot line was commissioned in the year 1978. on 31.03.1998, and the following substations/co-generations are made LILO on the original 132kV Bale-Akkalkot line.

a) 220/132kV Kumbhari (South Solapur) s/s was charged on 02.02.2014 by making LILO on 132kV Bale-Akkalkot line at loc. no. 58.

b) 132kV Gokul Sugar Co-generation was charged on 12.12.2018 by making LILO on the 132kV Bale-Akkalkot line at loc. no. 91.

c) 132kV Chetak Solar Co-generation s/s was charged on 16.12.2022 by making LILO on the 132kV Bale-Akkalkot line at loc. no. 115.

At present, the Akkalkot-Wagdari-Karajgi region of Solapur District is a solar energy-prone area, and evacuation is carried out through the 132 kV Wagdari S/S. The 132 kV Wagdari substation is connected to the 132 kV Akkalkot & Naldurg substation through 132 kV lines. There is approximately 230 MW of renewable generation connected at the 132 kV Wagdari S/S.

Similarly, 132/33kV Akkalkot S/s is connected to 220/132kV Bale S/s through a 132kV S/C line via 132kV Chetak Solar & 132kV-Gokul Cogen & 220/132kV Kumbhari S/s. The evacuation of RE power is carried out by a 132 kV link between 220 kV Bale and 132 kV Akkalkot S/S via 132 kV Chetak Solar, 132 kV Gokul Cogen, and 220/132 kV Kumbhari S/S.

The MSETCL representative submitted that it is observed that due to solar generation, power flow from 132kV Wagdari & 132kV Akkatkot & Chetak Solar towards Bale increases the loading on the 132kV Bale-Kumbhari link up to 530 amps, and the line tripped due to LTS operation.

The MSETCL representative highlighted that recently, the 100 MW Sunsure Solar generator was granted GC at the 132 kV level of 220 kV Kumbhari S/S, which will further increase loading on the 132 kV Bale-Kumbhari-Akkalkot corridor. Further, several RE power project developers are interested in the establishment of solar projects near the Akkalkot & Wagdari region. However, due to the non-availability of transmission margin, grid connectivity cannot be granted.

The MSETCL representative explained that since the 132 kV Bale-Kumbhari-Akkalkot corridor is vital for the evacuation of RE power, and due to the aging effect, the line is deteriorating rapidly due to electrical and mechanical stresses, resulting in the tripping of the line. As such, MSETCL proposed to replace the existing 0.2 ACSR conductor of 132 kV Bale-Kumbhari-Gokul-Chetak-Akkalkot line with a high-performance conductor.

The Estimated cost of the complete scheme is **Rs.45.21 Crore.**

Chairman MTC stated the view of the implementation of the revised procedure for granting grid connectivity to the RE generators to InSTS on 07.01.2025 & the cancellation of a number of GC applications due to noncompliance by the applicants under the revised procedure. STU needs to take a comprehensive review of the necessity of the earlier proposed Transmission system enhancement scheme for RE evacuation.

MTC discussed the above scheme in detail, and the committee recommended the scheme for submission to GCC for approval, subject to re-verification by STU.

Agenda Point No. 5:

"Scheme of replacement of existing 0.2 Panther ACSR conductor by High Performance Conductor (HPC) of 1. 132 kV Walchandnagar – Malinagar trunk linr including LILO portion of 132 kV Nira – Bhima SSK Co-gen and 132 kV Bawada substation under EHV division, Baramati. 2. 132 kV LILO line for 132 kV Purundawade substation on 132 kV Nira – Bhima – Walchandnagar line under EHV O &M division, Solapur."

The MSETCL representative placed before the MTC a proposal for ""Scheme of replacement of existing 0.2 Panther ACSR conductor by High Performance Conductor (HPC) of 1. 132 kV Walchandnagar – Malinagar trunk line including LILO portion of 132 kV Nira – Bhima SSK Co-gen and 132 kV Bawada substation under EHV division, Baramati. 2. 132 kV LILO line for 132 kV Purundawade substation on 132 kV Nira – Bhima – Walchandnagar line under EHV O&M division, Solapur."

The MSETCL representative highlighted that the 132kV Walchandnagar – Malinagar trunk line is made LILO at the 132kV Bawada S/stn & 132kV Nira-Bhima co-gen. Load from Bawda, Indapur Ujani backwater, and partly load of Malshiras Taluka catered by the 132 kV Bawda substation. At an ambient temperature of 45 degrees, the maximum permissible load handled by this conductor is 398 amps. Due to development, the loads of these areas are increasing. Presently, the load on the line normally crosses 445-450 amps. In addition to that, the total load of 132 kV Bawada s/s is fed from the 132 kV Malinagar-Bawda-Nira-Bhima-Purundawade line radially.

The MSETCL representative explained that recently, augmentation of transformers at the 132kV Bawda S/S was completed and S/S capacity was enhanced by 2x25 MVA. As such, in the future, the incremental load cannot be catered to by the existing 132kV Malinagar-Bawada line. The 132 kV Walchandnagar – Malinagar line acts as a main source for the heavily loaded pocket of Indapur and Malshiras Taluka and is heavily loaded. Max load of 132 kV Bawda S/S 45 MW / /220 A, 132 kV Purundwade **70 MW / 350 A**. Hence, a total of **128 MW**/640 A.

The MSETCL representative submitted that generally, in peak load situations, the loading of 132 kV Malinagar – Bawda reached up to **570A** max, at which LTS operated. The total peak load of 132 kV Bawda and 132 kV Purundwade substations is around an average of **700** A throughout the year. To cope with the increasing load demand, at present there is only one immediate option to enhance the current carrying capacity of the line. This will be achieved by replacing the existing 0.2 Panther conductor with an equivalent HPC conductor.

The estimated cost of the scheme is **Rs. 67.37 Crore.**

MTC opined that the presently proposed scheme seems non-executable, as the entire line under consideration is critically loaded & there are outage constraints for execution of the scheme. The chairman of MTC directed MSETCL to discuss and submit a detailed executable execution plan within a specified timeline along with all such proposals henceforth to MTC. This would enable the committee to assess the practicality of such plans to execute these schemes in the shortest possible timelines so as to reap expected immediate benefit while according to the recommendation. The committee directed MSETCL to present an execution plan of the scheme in the ensuing meeting & till then decided to keep the above scheme on hold.

Agenda Point No. 6:

Replacement of existing 0.4 ACSR conductor by High Performance Conductor (HPC) along with suitable hardwares, accessories for SC on DC towers of 220kV Babhaleshwar - Alephata line (65.397 km) along with strengthening of associated 220kV bays at respective substations under EHV O&M Division, Manchar

The MSETCL representative placed before the MTC a proposal for "Replacement of existing 0.4 ACSR conductor by High Performance Conductor (HPC) along with suitable hardware and accessories for SC on DC towers of 220 kV Babhaleshwar-Alephata line (65.397 km) along with strengthening of associated 220 kV bays at respective substations under EHV O&M Division, Manchar."

The MSETCL representative submitted that the 220kV Alephata S/S is one of the important and critical substations in the Pune Zone, and the major source for this substation is the 220kV Babhleshwar-Alephata Line. It feeds vital areas of Alephata, Kathapur, Narayangaon, and some parts of Chakan. All these areas are known for developing industrial areas in the Pune district. Chakan is one of the biggest five-star MIDCs in the Pune region. All these areas are fed through 132 kV Chakan, 132 kV Narayangaon, 220 kV Kathapur, and 220 kV Alephata S/S.

Also, for the last few years, the 220kV Babhleshwar-Alephata line has been continuously feeding approximately 700-790 amps to the 220kV Alephata S/S and its downstream substations. Day by day, due to continuous load growth and industrialization, the load on these substations also increases considerably, and ultimately the load on the said line also increases drastically.

To maintain the loading of the 220 kV Babhleshwar-Alephata line within permissible limits, the CB of 220 kV Alephata-Kathapur line has been hand-tripped on a daily basis for the last one and a half years.

Considering the above facts, the strengthening of the 220 kV Babhleshwar-Alephata source line is very much essential to meet the future load demand and to overcome overloading constraints by replacing the existing ACSR conductor with a high-performance conductor (HPC). The MSETCL representative highlighted the brief scope of work as follows:

LINE PART:

1. Dismantling of existing 0.4 ACSR conductor of 220 kV Babhleshwar-Alephata Line circuit no. -1 from 220 kV Babhleshwar S/Stn gantry up to 220 kV Alephata S/Stn gantry.
2. Supply & re-stringing of 520 sq. mm High Performance Conductor (HPC) along with suitable hardware and accessories for the 220 kV Babhleshwar-Alephata Line under Line Maintenance S/Dn, Babhleshwar under EHV O&M Division, Babhleshwar and EHV O&M Division Manchar, Pune.

SUBSTATION PART

At 400 kV Babhaleshwar S/S:

1. Bay strengthening for 220 kV Alephata Bay at 400 kV Babhaleshwar S/S by replacement of existing 0.4 ACSR conductor with equivalent HPC and suitable hardware and insulators.
2. Replacement of existing 220 kV WT of 220 kV Alephata Bay and 220 kV CT's of Alephata Bay.

At 220 kV Alephata S/S

1. Bay strengthening for 220 kV Babhaleshwar Bay at 220 kV Alephata S/S by replacement of existing 0.4 ACSR conductor with equivalent HPC and suitable hardware and insulators.
2. Replacement of existing 220 kV WT of 220 kV Babhaleshwar Bay and 220 kV CT's of Babhaleshwar Bay.

The MSETCL representative mentioned the technical benefits of the scheme:

A. Power transmission constraints will be reduced, as the power-handling capacity of the line will be increased.

B. Reliability of power supply to Chakan, Narayangaon, and especially to 400 kV Lonikand, the nodal substation for Pune ring main, will be increased.

C. Grid steady state and transient stability will be increased.

D. Replacement with a high-ampacity conductor ensures the bulk power transmission of the system.

The estimated cost of the scheme is **Rs. 64.16 Crore.**

The MTC noted that the proposed scheme is a short-term solution to address the existing transmission constraints; however, it can not be executed for want of outages until the completion of ongoing WIP/proposed schemes in Pune for relieving the PRM transmission constraints. Therefore, it is not feasible to execute the scheme in the present situation. As such, MTC directed MSETCL to review the proposed scheme after completion of the Shikrapur evacuation project presently underway and targeted to be completed by Sep-2024 .

Agenda Point No. 7:

Replacement of existing 0.4 Deer/Zebra ACSR conductor by High Performance Conductor (HPC) & disc insulators by long rod porcelain insulators string along with necessary double type hardware of 220 kV Jejuri – Kondhwa line along with strengthening of end bays under EHV O&M Division-I Pune

The MSETCL representative placed before the MTC a proposal for "Replacement of existing 0.4 Deer/Zebra ACSR conductor by High Performance Conductor (HPC) & disc insulators by long rod porcelain insulators string along with necessary double-type hardware of 220 kV Jejuri – Kondhwa line along with strengthening of end bays under EHV O&M Division-I Pune.

The MSETCL representative submitted that the 220 kV Jejuri-Kondhwa line was commissioned on 23.02.2012. The 220 kV Jejuri-Kondhwa line is one of the important lines of 220 kV Pune Ring Main Network. The said line has a route length of 32.77 km and is strung with 0.4 ACSR conductor. The current carrying capacity of the said line is 747 amps at5°C.

The MSETCL representative explained that 220 kV Kondhwa SS feeds the core area of Pune city, especially the defense area, Kondhwa, and Wanwarie, which is the main defense of Pune city, including the Military Command Hospital. Also, 220 kV Kondhwa S/S is the main and only source for 220 kV Nanded City S/S & Flagship S/S, which fed important areas of Pune City, including the IT park.

The MSETCL representative highlighted that the 220 kV Jejuri-Kondhwa line is the main source for the 220 kV Kondhwa S/S. The other source is available from 400 kV Jejuri S/S to 220 kV

Phursungi S/S and then 220 kV Phursungi S/S to 220 kV Parvati S/S to Nanded City S/S. However, the total load of 220 kV Parvati S/S cannot be managed on this source of Kondhwa-Nanded City & Jejuri-Kondhwa line due to line loading conditions.
The link between 220 kV Chinchwad S/s and 220 kV Parvati S/s is kept open as the load of 220 kV Chinchwad S/s is increased & the load of Flagship S/s is also on the 220 kV Jejuri Kondhwa line via Nanded City S/s due to overloading of 220 kV Urse-Chinchwad line.
The MSETCL representative further highlighted that due to the increase in the load of 220 kV Chinchwad S/S, it cannot feed the load of 220 kV Parvati S/S & flagship S/S in the future. 220 kV Flagship S/S is also now fed from 400 kV Jejuri SS via 220 kV Nanded City & 220 kV Kondhwa SS. In case of an outage on the 220 kV Jejuri-Kondhwa line, it is very difficult to manage the load of 220 kV Parvati, Flagship, Nanded City, Kondhwa S/S, and associated S/S on the 220 kV Parvati-Phursungi line due to the constraint of current-carrying capacity (replacement of existing ACSR by HPC is in process).
The estimated cost of the scheme is ₹ **38.65 Crore.**

The chairman of the MTC directed MSETCL to discuss and submit a detailed executable execution plan within a specified timeline, along with all such proposals henceforth to the MTC. This would enable the committee to assess the practicality of such plans to execute these schemes in the shortest possible timelines so as to reap expected immediate benefit while according to the recommendation. The committee discussed the above scheme in order to meet the present & future load requirement & to address the overloading, and after detailed deliberation and discussion, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 8:

Replacement of 0.2 ACSR conductor by HPC of 100kV Kalwa-Reliable, Kalwa-STD, Sify-Reliable, Sify- STD, 100kV Kalwa- NOCIL- 1& 2 & 100kV NOCIL- STD Alkali line

The MSETCL representative placed before the MTC a proposal for "Replacement of 0.2 ACSR conductor by HPC of 100kV Kalwa-Reliable, Kalwa-STD, Sify-Reliable, Sify-STD, 100kV Kalwa-NOCIL-1 & 2 & 100kV NOCIL-STD Alkali Line."
The MSETCL representative submitted that the 100 kV Kalwa-Reliable, Kalwa-STD Alkali, Sify-Reliable, Sify-STD Alkali, 100 kV Kalwa-Nocil 1 & 2 D/C Line, and 100 kV Nocil-STD Alkali lines have already rendered the full lifetime of services for which they were commissioned in the year 1984.
The MSETCL representative added that these lines are passing through heavy pollution zones, chemically polluted zones, etc., areas having high corrosive effects. Moreover, due to the humid atmosphere of the Mumbai & Navi Mumbai area, these lines are getting deteriorated day by day. 100 kV Kalwa-Reliable, Kalwa-STD, Sify-Reliable, and Sify-STD lines are continued in service. However, now, due to the aging effect, they are vulnerable to frequent breakdowns and need heavy attention and maintenance.
The MSETCL representative submitted that in the 100 kV Reliable substation, there are 2 Nos. of incoming sources, i.e., the 100 kV Kalwa-Reliable and Reliable-Sify lines. In the 100 kV STD substation, there are 5 Nos. of incoming sources. In the 100 kV Sify Substation, there are 2 Nos. of incoming sources, i.e., 100 kV Sify-STD and Reliable-Sify lines.
The MSETCL representative highlighted that the 220 kV line in charge studied six months of minimum and maximum loading data. It is observed that these lines are loaded from 50 to 65%

of their capacity, and they reached up to 392 amps on the 100 kV Kalwa-Reliable line on date 30.03.2022 at 16.00 hrs. 306 amps on the 100 kV Kalwa-STD line on date 19.02.2022 at 11.00 hrs. 329 amps on the 100 kV Sify-Reliable line on date 29.03.2022 at 14.00Hrs and 190 amps on the 100 kV Sify-STD line on date 12.01.2022 at _____ is necessary to replace the existing Panther conductor with a high-ampacity Casablanca conductor to avoid load shedding in the Navi Mumbai area. The MSETCL representative added that if the load increases, then the N-1 criteria will not be fulfilled, and conductor replacement might be tough at the time of execution.

MSETCL representative explained brief scope of work as follows:

- Supply of High Performance Conductor (HPC) along with allied hardwares & accessories equivalent to existing 0.2 ACSR conductor, Porcelain insulators etc.
- Dismantling of existing 0.2 ACSR conductor with all accessories & hardwares and transportation of removed/dismantled materials to site store as per instructions of site-incharge.
- Stringing of HPC conductor along with allied hardwares, accessories & porcelain insulator etc.
- Strengthening of associated end bays.

Technical benefits explained by MSETCL representative as follows:

- ✓ Enhanced current carrying capacity of the existing corridor using same RoW.
- ✓ Enhanced reliability of power supply to EHV consumers.
- ✓ Increased transmission capacity to meet future load growth demands.
- ✓ Grid stability will be improved.

The estimated cost of the scheme is **Rs. 48.26 Crore.**

The chairman, MTC, directed MSETCL to discuss and submit a detailed executable execution plan within a specified timeline along with all such proposals henceforth to MTC. This would enable the committee to assess the practicality of such plans to execute these schemes in the shortest possible timelines so as to reap expected immediate benefit while according to the recommendation. The committee discussed the above scheme in order to meet the present & future load requirement & to address the overloading, and after detailed deliberation and discussion, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 9

Replacement of 0.2 ACSR conductor by 316.5 sq.mm HPC along with hardware for 110kV Jaysingpur-Miraj line under Kolhapur Division.

The MSETCL representative placed before the MTC a proposal for "Replacement of 0.2 ACSR conductor by 316.5 sq.mm HPC along with hardware for 110 kV Jaysingpur-Miraj line under Kolhapur Division.

The MSETCL representative submitted that the 110kV Jaysingpur substation was commissioned in the year 1974 and the 110kV Jaysingpur-Miraj line has been working since 1976. At present, the 110kV Jaysingpur substation is having 2 source lines from 220kV Miraj, i.e., one direct circuit and the other is through Miraj-Miraj TSS-Takaliwadi-Kurundwad-110kV Jaysingpur, and another source from 220kV Tilawani S/stn, i.e., Tilawani-Ichalkaranji-Jaysingpur.

The MSETCL representative highlighted that the 110 kV Jaysingpur-Miraj line has a maximum loading of 413 amps (during the summer season) and the maximum load of 110 kV Jaysingpur S/stn is 89 MW (535 amps). Further, in the event of busbar operation at 220 kV Tilwani, the 110

kV Miraj-Jaysingpur line will act as a source to 110 kV Ichalkaranji via the 110 kV Jaysingpur-Ichalkaranji line. Considering the above facts & to evacuate upcoming solar generation in the Sangli district, the scheme of replacement of the 0.2 ACSR conductor by a 316.5 mm² HPC conductor along with the necessary hardware of 110 kV Jaysingpur-Miraj line is proposed by MSETCL.

MSETCL representative explained brief scope of works as follows:

- Replacement of existing 0.2 ACSR conductor by 316 mm² HPC conductor along with necessary hardware of 110kV Jaysingpur- Miraj line.
- Replacement of end bay equipments at 220kV Miraj and 110kV Jaysingpur S/Stn with suitable ampere capacity equipments (CT, Wave Trap & Jumpering work).

The cost of the Scheme is **Rs. 14.82 Cr.**

Chairman, MTC stated that in view of the implementation of the revised procedure for granting grid connectivity to the RE generators to InSTS on 07.01.2025 & the cancellation of a number of GC applications due to noncompliance by the applicants under the revised procedure, STU needs to take a comprehensive review of the necessity of the earlier proposed Transmission system enhancement scheme for RE evacuation.

MTC discussed the above scheme in detail, and the committee recommended the scheme for submission to GCC for approval, subject to re-verification by STU.

Agenda Point No. 10:

Scheme of enhancement of transformation capacity by replacement of existing 2 x 25MVA, 132/33kV T/Fs by 2 X 50 MVA, 132/33kV T/Fs at 132kV Khapri S/s under RS Ringmain Division Nagpur under Nagpur zone

The MSETCL representative placed before the MTC a proposal for "Scheme of enhancement of transformation capacity by replacement of existing 2 x 25MVA, 132/33kV T/Fs by 2 X 50 MVA, 132/33kV T/Fs at 132kV Khapri S/s under RS Ringmain Division Nagpur under Nagpur zone."

MSETCL representative highlighted The 132 kV Khapri Substation was commissioned in the year 2004. The substation supplies electricity to key areas such as MIHAN, MAHA-METRO, hotels, and Nagpur International Airport. With rapid urbanization, new residential complexes, malls, and industries have significantly increased the demand for power.

MSETCL representatives explain that Executive Engineer R.S. Ring Main Division has informed them that two new 33 kV feeder bays are required for Khapri Depot under the PM E-Bus Sewa Scheme of the Central Government, with a proposed load of 8.153 MVA, to support public bus services. Additionally, an alternate source of supply for AIIMS has been proposed with a 12 MVA load, requiring one new 33 kV feeder bay. These additions aim to enhance power distribution and ensure a reliable supply for essential services in the region. Maximum loading reached on both the T/Fs is more than 85 % of installed capacity.

The MSETCL representative added that during an outage/tripping of any one of the T/F, the load is not managed on the other two T/Fs, i.e., not satisfying the (N-1) criteria. The proposed scheme fulfills the augmentation scheme criteria. Therefore, considering the future loading and outage constraints and to satisfy (N-1) criteria, replacement of T/Fs is proposed at 132 kV Khapri S/S by MSETCL.

The cost of the Scheme is **₹ 1585.68 Lakhs.** Cited Work will be commissioned in **FY 2026-27.**

In order to meet the present & future load requirement, N-1 compliance, and to enhance system reliability after detailed deliberation and discussion, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 11:

Scheme of establishment of 33kV level by providing additional 2X50 MVA, 220/33kV T/Fs along with HV & LV bays, 06x33kV feeder bays, 2x33kV PT bays and 2x200kVA, 33/0.4kV Station T/F bays at 220/132kV Amalner S/s under EHV (O&M) Division, Jalgaon in Nashik zone.

The MSETCL representative placed before the MTC a proposal for a "scheme of establishment of 33 kV level by providing additional 2x50 MVA, 220/33 kV T/Fs along with HV & LV bays, 06x33 kV feeder bays, 2x33 kV PT bays, and 2x200 kVA, 33/0.4 kV station T/F bays at 220/132 kV Amalner S/S under EHV (O&M) Division, Jalgaon in Nashik zone.

MSETCL representative highlighted that, at present, the supply to Amalner Taluka in Jalgaon District is fed from 132/33 kV Amalner S/S under EHV (O&M) Division, Jalgaon. The installed capacity of 132/33 kV Amalner S/S is 100 MVA (i.e., 2x50 MVA T/Fs). The maximum demand reached is 58.64 MVA. There are 7 nos. of 33 kV feeders emanating from 132/33 kV Amalner S/S, having 11 nos. of 33/11 kV MSEDCL's substations & one no. of HTC. The total connected installed capacity of MSEDCL at the 33 kV level is 101.30 MVA.

There are 3 Nos. of 33/11 kV, 5 MVA substations sanctioned under AG Policy – 2020 and proposed on existing 132/33 kV Amalner S/s. Thus, the total connected installed capacity will increase up to 116.3 MVA against 100 MVA. Considering rapid agricultural growth due to abundant water resources, the 132/33 kV Amalner S/S may fall short of meeting this demand. Further, the length of the 33 kV Patonda feeder emanating from the 132/33 kV Amalner S/S is 37 km, having 3 nos. of 33/11 kV S/S with 25 MVA connected load. The voltage regulation of this lengthy feeder is 17.51%. Thus, there will be improvement in voltage regulation after shifting the long-length 33 kV Patonda feeder from the 132/33 kV Amalner S/S to the 220/132 kV Amalner S/S.

The NSETCL representative submitted that due to space constraints at the 132/33 kV Amalner S/S, it is not possible to erect an additional power transformer and 33 kV bays. In view of the above, MSETCL proposes to create kV level at the 220/132 kV Amalner S/S.

The estimated cost of the scheme is **₹ 2700 Lakh.** This scheduled commissioning of the cited scheme is in **FY 2026-27.**

In order to meet the present & future load requirement, to address the overloading problems, considering space constraints, and to enhance system reliability and stability after detailed deliberation and discussion, the committee recommended the scheme for submission to GCC for approval .

Agenda Point No. 12:

Scheme to convert AIS to GIS at 132 kV Harsool , 132 kV Jalna MIDC and 132 kV Jangamwadi substations under EHV O&M Zone, Chhatrapati Sambhajinagar.

The MSETCL representative placed before the MTC a proposal for a scheme for "scheme to convert AIS to GIS at 132 kV Harsool, 132 kV Jalna MIDC, and 132 kV Jangamwadi substations under EHV O&M Zone, Chhatrapati Sambhajinagar."

The MSETCL representative submitted that all the substations included in the DPR have been in operation for more than 35 years. Their equipment has exceeded its service life. Additionally, the lack of space for a new bay makes it difficult to accommodate MSEDCL's growing demand. Securing land for a new substation in urban areas is both challenging and costly. Therefore, converting AIS to GIS is proposed as a strategic solution to optimize space, reduce costs, and enhance capacity, ensuring a resilient and future-ready power distribution system.

MSETCL representative explained scope of works, as follows:

132/33/11kV Harsool Substation

1. 3 x 33kV GIS T/F LV incomer bays, 10 x 33kV GIS Line bays for O/G feeder bays, 3 x 33kV GIS PT bays, 2 x 33kV GIS bus sectionaliser bay & 2 x 33kV GIS Line bays as Station T/F bays. Total No. of 33kV Bays- 20
2. SITC of 33/0.4kV, 200kVA Station T/Fs.
3. SCADA for all 33kV GIS bays and all associated civil works

132/33/11kV MIDC Jalna Substation

1. 132 kV GIS with :- 6 nos. of Line Bay, 5 nos. of PTR Bays, 2 nos. of PT and 2 nos. of Bus- Section Bay. Total No. of 132kv Bays – 15 Nos.
2. 33kV GIS With :- 14 nos. of Line Bay, 5 nos. of PTR Bays, 2 nos. of PTR HV Bays, 3 nos. of PT and 2 nos. of Bus- Section Bay Total No. of 33kV Bays - 26
3. 11 kV GIS With :- 11 nos. of Line Bay, 2 nos. of PTR LV Bays, 2 nos. of PT and 1 nos. of Bus- Section Bay Total No. of 11kV Bays - 16
4. Dismantling of all the equipment (132/33/11 kV) along with support structure and Bus-Bar.

132/33/11kV Jangamwadi substation

1. Supply, Erection, Testing and Commissioning of 33kV GIS with :- 12 nos. of Line Bay, 2 nos. of PTR LV Bays, 2 nos. of PT and 1 nos. of Bus- Section Bay. Total No. of 33kV Bays - 17
2. Supply, Erection, Testing and Commissioning of 11kV GIS with :- 10 nos. of Line Bay, 2 nos. of PTR LV Bays, 2 nos. of PT and 1 no. of Bus- Section Bay. Total No. of 11kV Bays- 15.
3. Dismantling of all the equipment (33kV & 11kV) along with support structure and Bus-Bar.

The Estimated cost of the scheme is **₹ 116.78 Cr**. The scheduled completion year of said scheme is **FY 2026-27.**

In order to accommodate additional bays to meet MSEDCL urban load requirements, taking into consideration the space constraint in the existing substation , the upgrading of technology , the reduction in maintenance, and the enhancement of the reliability of the system , after detailed deliberation and discussion, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 13:

LE scheme to convert the AIS to GIS at 132 kV Katol S/s and 33 kV level at 220 kV Kalmeshwar, 220 kV Kanhan, 132 kV Mauda substations under EHV O&M Division Nagpur under Nagpur Zone.

The MSETCL representative placed before the MTC a proposal for an LE scheme to convert the AIS to GIS at 132 kV Katol S/S and 33 kV level at 220 kV Kalmeshwar, 220 kV Kanhan, and 132 kV Mauda substations under EHV O&M Division Nagpur under Nagpur Zone.

The MSETCL representative submitted that all the substations included in the DPR have been in operation for more than 35 years. Their equipment has exceeded its service life. Additionally, the lack of space for a new bay makes it difficult to accommodate MSEDCL's growing demand. Securing land for a new substation in urban areas is both challenging and costly. Therefore, converting AIS to GIS is proposed as a strategic solution to optimize space, reduce costs, and enhance capacity, ensuring a resilient and future-ready power distribution system.

MSETCL representative explained scope of works for following S/s:

220/132/33 kV Kalmeshwar

3 Nos. of Transformer 33 kV LV bays, 16 Nos. of 33 kV Feeders, 6 Nos. 33 bay for Bus Sectionalizer, PT & Station T/f.

220 kV Kanhan

2 Nos. of Transformer 33 kV LV bays, 11 Nos. of Feeders, 5 Nos. 33 bay for Bus Sectionalizer, PT & Station T/f.

132 kV Mauda

3 Nos. of Transformer 33 kV LV bays, 14 Nos of 33 kV Feeders, 6 Nos. 33 bay for Bus Sectionalizer, PT & Station T/f.

132 kV Katol

4 Nos. T/F HV bays , 3 Nos of Transformer LV bays, 8 no. of 132 kV bays for line, Bus coupler, PT, 20 no. of 33 kV bays for feeders, cap. bank and Stn. TF, bus sectionalizer, PT.

The Estimated cost of the scheme is **₹ 129.72 Lakh**, The Scheduled commissioning year of said scheme is **FY 2026-27.**

In order to accommodate additional bays to meet MSEDCL urban load requirements, taking into consideration the space constraint in the existing substation , the upgrading of technology , the reduction in maintenance, and the enhancement of the reliability of the system , after detailed deliberation and discussion, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 14:

Scheme of conversion of AIS to GIS of 22 kV level at 220kV Bhosari 1 S/S,22 kV level at 220kV Chinchwad-I S/S and 22kV and 11 kV level at 132kV Ganeshkhind S/S

MSETCL representative placed before the MTC a proposal for "Scheme of conversion of AIS to GIS of 22 kV level at 220kV Bhosari 1 S/S,22 kV level at 220kV Chinchwad-I S/S and 22kV and 11 kV level at 132kV Ganeshkhind S/S"

MSETCL representative submitted that all the substations included in the DPR have been in operation for more than 35 years. Their equipment has exceeded its service life. Additionally, the lack of space for a new bay makes it difficult to accommodate MSEDCL's growing demand. Securing land for a new substation in urban areas is both challenging and costly. Therefore, converting AIS to GIS is proposed as a strategic solution to optimize space, reduce costs, and enhance capacity, ensuring a resilient and future-ready power distribution system.

MSETCL representative explained scope of works for following S/s:

220 kV Bhosari I

Total Bays to be Converted: 53 Nos. (22kV AIS to 22kV GIS)

Bus Couplers: 5 Nos.Outgoing Feeders: 36 Nos.. T/F LV Incomer Feeders: 6 Nos..Potential Transformer (PT) Bays: 6 Nos.

220 kV Chinchwad I

Replacement of 52 Nos. of 22kV AIS bays with 22kV GIS bays , Replacement of existing battery sets with a 220V DC system and Upgrading old Control & Relay (C&R) Panels with BCU-based C&R panels in the new control room.

132 kV Ganeshkhind

11kV GIS (Total: 26 Bays)---Transformer LV Bays: 3 Nos.,11kV Outgoing Feeder Bays: 16 Nos.,11kV Bus Section Bays: 2 Nos.,11kV PT Bays: 3 Nos.,5MVAR Capacitor Bay: 1 No.,Station Transformer Bay: 1 No.

2. Conversion to 22kV GIS (Total: 22 Bays)--- Transformer LV Bays: 2 ,Nos. 22kV Outgoing Feeder Bays: 9 Nos. 22kV Bus Section Bay: 1 No. 22kV PT Bays: 2 Nos. 5MVAR Capacitor Bay: 1 No. Station Transformer Bay: 1 No. Spare Feeders on Existing Transformer: 6 Nos.

The Estimated cost of the scheme is **₹ 181.69 Lakh**. The above scheme will be commissioned in **FY 2026-27.**

In order to accommodate additional bays to meet MSEDCL urban load requirements, taking into consideration the space constraint in the existing substation , the upgrading of technology , the reduction in maintenance, and the enhancement of the reliability of the system , after detailed deliberation and discussion, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 15:

LE scheme to convert AIS to GIS of 100kV level with establishment of 220kV level at 100/22 kV Vasai S/S, 22kV level at 220/22 kV Nalasopara S/S and 220/100kV level at 220/100/22kV Kandalgaon S/S under EHV PC O&M Zone, Vashi.

MSETCL representative placed before the MTC a proposal of "LE scheme to convert AIS to GIS of 100kV level with establishment of 220kV level at 100/22 kV Vasai S/S, 22kV level at 220/22 kV Nalasopara S/S and 220/100kV level at 220/100/22kV Kandalgaon S/S under EHV PC O&M Zone, Vashi".

MSETCL representative submitted that all the substations included in the DPR have been in operation for more than 35 years. Their equipment has exceeded its service life. Additionally, the lack of space for a new bay makes it difficult to accommodate MSEDCL's growing demand. Securing land for a new substation in urban areas is both challenging and costly. Therefore, converting AIS to GIS is proposed as a strategic solution to optimize space, reduce costs, and enhance capacity, ensuring a resilient and future-ready power distribution system.

MSETCL representative explained scope of works:

220/100/22 kV Vasai S/S & 100/22 kV Vasai substation

Elimination of 100/22 kV Vasai S/S with establishment of new 220kV GIS (4 lines + 2 Interconnector & 4 T/F between 220 kV AIS to 220 kV GIS) in 100/22 kV Vasai S/S Switchyard & establishment of new 100kV GIS (2 Line Bay for Railway+2 line bay for 220/100 kV ICT LV Bay) in 220/100/22 kV Vasai S/S under EHV O&M Division, Boisar.

220/22 kV Nalasopara

Supply, Erection, Testing and Commissioning of 51 nos. of 22 kV GIS bays (i.e., 7 no. of T/F LV Bays, 28 nos. of Feeder Bays, 7 no. of PT bay, 7 no. of Bus Coupler Bay and 2 no. of Tie Bay for connecting existing GIS to new GIS scheme) at 220/22 kV Nalasopara S/S under EHV O&M Division Boisar.

220/100 kV Kandalgaon substation

Conversion of existing AIS 220/100 kV bays into GIS bays for 220 kV (16 nos.)- 9 no., feeder bays, ICT HV bay-2 no., TF HV bay- 2 nos., PT bay- 2 nos., Bus coupler bay- 1 no., 100 kV bays (Total 9 nos.), feeder bay – 4 nos., ICT LV bay – 2 no., PT bay- 2 no., Bus coupler bay- 1 no.

The Estimated cost of the scheme is **₹ 370.01 Lakh**. The schedule year of commissioning of the above scheme is **FY 2026-27.**

In order to accommodate additional bays to meet MSEDCL urban load requirements at Vasai & Nalasopara, taking into consideration the space constraint in the existing substation , the upgrading of technology at the old Kandalgaon substation, the reduction in maintenance, and the enhancement of the reliability of the system , after detailed deliberation and discussion, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 16:

Supply, Installation & Commissioning of ±200 MVAR STATCOM along with 400kV Outdoor GIS bay with BCU at 400kV Dhule S/s & allied works at 400kV Dhule S/s under Nashik Zone.

MSETCL representative placed before the MTC a proposal of "Supply, Installation & Commissioning of ±200 MVAR STATCOM along with 400kV Outdoor GIS bay with BCU at 400kV Dhule S/s & allied works at 400kV Dhule S/s under Nashik Zone".

MSETCL representative explained that STU has entrusted the work to VJTI, Mumbai for "Transient Stability Studies and Reactive Power Management Studies using Variable Reactive Power support (STATCOM/SVC) for planning studies of Intra State Transmission System (InSTS) network.

MSETCL representative highlighted that VJTI has proposed following work-

(a) Supply, Installation & Commissioning of ±200 MVAR STATCOM at 400kV Dhule S/s under Nashik Zone along with following works-

i) 1x125 MVAr MSC at 38.5 kV

ii) Control of existing 1x125 MVAr & 1x80 MVAr Bus Reactor by STATCOM controller.

MSETCL representative added that STATCOM is included in the STU plan for the year 2027-28.

MSETCL representative highlighted scope of work, as below:

A. Supply & ETC of 400kV Outdoor GIS Bay

a) 400kV Outdoor GIS bay with BCU at 400kV Dhule S/s

b) Interconnecting with existing 3 bus arrangement using bus duct at 02 side of bus

c) Interconnection with STATCOM with 400kV Bus duct (Max. 100 mtr)

d) Connectivity for SCADA -400kV GIS bay, BCR, C&R panels to be interconnected with existing SCADA system for data acquisition & control using Optic Fiber cable.

e) Bushing for connecting bus duct with overhead conductor whenever required, with other equipment, bushing etc.

f) Civil works

B. Supply & ETC of ±200 MVAr or 2x100MVAr STATCOM

a)Installation of STATCOM includes

i)Key STATCOM equipment (Converter, Cooling System, Coupling Transformer, Air Core Reactor, AC Capacitor & STATCOM Control System)

b) Civil works alongwith allied works

c) Supply & ETC of 1x125 MVAr MSC at 38.5 kV

d) Control of existing 1x125 MVAr & 1x80 MVAr Bus Reactor installed at 400kV Dhule S/s through STATCOM controller

MSETCL representative highlighted advantage of STATCOM, as follows:

1) Improved Voltage Stability

STATCOM can provide dynamic reactive power compensation, which helps maintain voltage levels within desired limits, improving the overall voltage stability of the grid.

It can react very quickly to voltage fluctuations and disturbances, reducing the risk of voltage collapse in the power system.

2) Fast Response Time

STATCOM has a fast response time compared to traditional devices like SVC (Static Var Compensator). It can react within milliseconds, making it suitable for stabilizing systems in real-time under transient conditions.

3) Support for Dynamic and Steady-State Operations

STATCOM offers both dynamic and steady-state reactive power support. It can supply or absorb reactive power depending on the needs of the grid, providing flexibility in both normal and fault conditions.

4) Reduced Transmission Losses

By maintaining optimal voltage levels and improving power factor, STATCOM can reduce transmission losses and improve the efficiency of the power system.

5) Improved Power Quality

It helps reduce voltage flicker and improves the overall power quality by providing reactive power support, thus ensuring that sensitive industrial equipment operates more efficiently.

6) Enhanced Transmission Capacity

By controlling the voltage and reactive power, STATCOM can increase the effective transmission capacity of the existing power lines, allowing more power to flow through the same infrastructure without overloading it.

The Estimated cost of the scheme is **₹ 443.21 Crore**. The schedule year of commissioning of the above scheme is **FY 2027-28.**

It has been noted that the location & sizing of STATCOM is as per the joint studies conducted by STU & VJTI for transient stability studies and reactive power management studies using variable reactive power support for the Maharashtra Transmission Network, envisaging the benefits of LVRT in the RE-rich area, voltage stability, dynamic reactive compensation, and enhancing system stability. After detailed deliberation and discussion, the committee recommended the submission of the scheme to the GCC for approval. Further, the committee, in view of the cost of the scheme being more than 200 Cr, deliberated on the implementation methodology of the above scheme. It was discussed that as the above scheme is to be implemented on the existing assets of MSETCL, implementation of the same through the TBCB route may result in non-delineation of assets and interface issues, and thus the committee decided to recommend the scheme to be implemented through RTM and recommend the same to GCC. The committee further opined that the relevant process of prior MERC approval/appraisal to Empowered Committee as defined under MYT Regulation 2024 shall be followed by STU.

Agenda Point No. 17:

Supply, Installation & Commissioning of ±300 MVAR STATCOM along with 400kV Outdoor AIS bay with BCU at 400kV Lonikand-II S/s & allied works at 400kV Lonikand-II S/s under Pune Zone.

MSETCL representative placed before the MTC a proposal for "Supply, Installation & Commissioning of ±300 MVAR STATCOM along with 400kV Outdoor AIS bay with BCU at 400kV Lonikand-II S/s & allied works at 400kV Lonikand-II S/s under Pune Zone.

MSETCL representative explained that STU has entrusted the work to VJTI, Mumbai for "Transient Stability Studies and Reactive Power Management Studies using Variable Reactive Power support (STATCOM/SVC) for planning studies of Intra State Transmission System (InSTS) network.VJTI has proposed following work-

Supply, Installation & Commissioning of ±300 MVAR STATCOM at 400kV Lonikand-II S/s under Pune Zone along with following works- i) 2x125 MVAr MSC and 1x125 MVAr MSR STATCOM is included in the STU plan for the year 2027-28.

MSETCL representative explained scope of work:

A. Supply & ETC of 400kV Outdoor AIS Bay

a) 400kV Outdoor AIS bay with BCU at 400kV Lonikand-II S/s

b) Interconnecting with existing 1& half bus arrangement using bus duct at 02 side of bus

c) Interconnection with STATCOM with 400kV Bus duct (Max. 150 mtr)

d) Connectivity for SCADA -400kV AIS bay, BCR, C&R pa nels to be interconnected with existing SCADA system for data acquisition & control using Optic Fiber cable.

e) Bushing for connecting bus duct with overhead conductor whenever required, with other equipment, bushing etc.

f) Civil works

B. Supply & ETC of ±300 MVAr STATCOM

a)Installation of STATCOM includes

i)Key STATCOM equipment (Converter, Cooling System, Coupling Transformer, Air Core Reactor, AC Capacitor & STATCOM Control System)

b) Civil works alongwith allied works

a) Supply & ETC of 2x125 MVAr MSC and 1 x 125 MVAr MSR

MSETCL representative highlighted advantage of STATCOM, as follows:

1) Improved Voltage Stability

STATCOM can provide dynamic reactive power compensation, which helps maintain voltage levels within desired limits, improving the overall voltage stability of the grid.

It can react very quickly to voltage fluctuations and disturbances, reducing the risk of voltage collapse in the power system.

2) Fast Response Time

STATCOM has a fast response time compared to traditional devices like SVC (Static Var Compensator). It can react within milliseconds, making it suitable for stabilizing systems in real-time under transient conditions.

3) Support for Dynamic and Steady-State Operations

STATCOM offers both dynamic and steady-state reactive power support. It can supply or absorb reactive power depending on the needs of the grid, providing flexibility in both normal and fault conditions.

4) Reduced Transmission Losses

By maintaining optimal voltage levels and improving power factor, STATCOM can reduce transmission losses and improve the efficiency of the power system.

5) Improved Power Quality

It helps reduce voltage flicker and improves the overall power quality by providing reactive power support, thus ensuring that sensitive industrial equipment operates more efficiently.

6) Enhanced Transmission Capacity

By controlling the voltage and reactive power, STATCOM can increase the effective transmission capacity of the existing power lines, allowing more power to flow through the same infrastructure without overloading it.

The estimated cost of the scheme is **₹ 439.11 Cr.** The cited scheme will commissioned in **FY 2027-28.**

It has been noted that the location & sizing of STATCOM are as per the joint studies conducted by STU & VJTI for transient stability studies and reactive power management studies using variable reactive power support for the Maharashtra Transmission Network, envisaging the benefits of voltage stability, dynamic reactive compensation, and enhancing system stability. After detailed deliberation and discussion, the committee recommended the submission of the scheme to the GCC for approval. Further, the committee, in view of the cost of the scheme being more than 200 cr, deliberated on the implementation methodology of the above scheme. It was discussed that as the above scheme is to be implemented on the existing assets of MSETCL, implementation of the same through the TBCB route may result in non-delineation of assets and interface issues, and thus the committee decided to recommend the scheme to be implemented through RTM and recommend the same to GCC. The committee further opined that the relevant process of prior MERC approval/appraisal to

The Empowered Committee, as defined under MYT regulation 2024, shall be followed by STU.

Agenda Point No. 18:

Scheme of Up-gradation of existing HVDC Control & Protection System to latest version of MACH System of Chandrapur-Padghe HVDC Bipole link.

MSETCL representative placed before the MTC a proposal for Scheme of Up-gradation of existing HVDC Control & Protection System to latest version of MACH System of Chandrapur-Padghe HVDC Bipole link.

MSETCL representative submitted that + 500 kV, 1500 MW Chandrapur – Padghe HVDC Bipole project link, was established in 1999 by M/s ABB Ltd, M/s BHEL. HVDC system is in service from last 25 years. Very vital link in Western Regional Grid and continuous availability of this link ensures system stability & reliability. Existing system is of old design/version based on Single Board Computer (SBC) concept and is based on DOS system which is in operation from last 25 years. Incidents of failure of cards of Control & Protection System are taking place due to ageing. Spares & Services for old system are not available due to technology obsolence. Due to non availability of spares, the operation of HVDC poles gets hampered. From 2014 onwards about 21 nos. of unwarranted trippings occurred due to failure of cards Considering above and to keep pace with technological developments, the existing Control & protection system at both the HVDC terminal stations need to be replaced by the state of art new MACH system.

MSETCL representative highlighted advantage of new Natch System :

(a) A redundant Modular Advance Control & Protection System for HVDC (MACH) including main computer system, modular I/O system and integrated HMI system is available now a days & is a substitute for old Control & Protection System.

(b) By using MACH Main Computers and Modular I/O, long life length of the system can be guaranteed

(c) Compact and flexible I/O gives a very simple installation in existing control cubicles with a minimum of changes needed in the existing wiring.

(d) No forced air cooling is required for the equipment, which is unique for a high performance system like the MACH system.

(e) All control and protection functions required will be included in the redundant MACH systems; BCP (Bipole Control and Protection), PCP (Pole Control and Protection) , AXC (Auxiliary Control)In New MACH system, failure rate is almost negligible as cards are not used.

(f) In case fault occurs , it is easy to trace the fault,

(g) services are available in India.

(h) very advanced state-of-art platforms having numerous benefits over existing MACH system.

MSETCL representative explain brief scope of work and submitted that Up-gradation of existing Control & Protection System of Chandrapur – Padghe HVDC Bipole link to latest version at Chandrapur- Padghe HVDC Terminal Stations covering following Control & Protection functions.

- ✓ Station Control & Monitoring
- ✓ Bipole Control and Protection
- ✓ Pole Control & Protection
- ✓ Converter Transformer Protection

- ✓ AC Filter Protections
- ✓ Valve Control
- ✓ Valve Cooling control & Protection
- ✓ Transient Fault Recorders.
- ✓ DC Line fault locator
- ✓ Cyber security
- ✓ Up-gradation of FOX 515 communication system
- ✓ System studies of Chandrapur-Padghe HVDC System
- ✓ Reverse Power functionality (Padghe- Chandrapur)

The estimated cost of the scheme is **₹ 510.69 Cr.**. The scheduled completion year for said scheme is **2027-28.**

MTC noted that the present control and protection system at the HVDC Chandrapur-Padghe link has already outlived its service life and is facing issues in obtaining spares due to technological obsolescence. This aspect is affecting the availability & reliability of the crucial HVDC link, thereby jeopardizing the system stability. In view of the above, after detailed deliberation, the committee opined that considering the importance of the vital HVDC link in the InSTS network, there is an urgent need for upgrading and thus recommended the scheme for submission to the GCC for approval. Further, although the above scheme cost is above the threshold limit, the same is an upgrade of existing assets of MSETCL. The scheme is recommended to be implemented through the RTM route by MSETCL following the relevant provisions of MYT 2024 regulations and selection criteria guidelines issued by STU.

Agenda Point No. 19:

The scheme of modification in BR No. 170/20 Dt.17.01.2025 for revision in the scheme of Installation of New 2x80 MVAR, 400kV line Reactors at 400kV Kumbhargaon (Nanded) as Switchable Line Reactors for 400kV Kumbhargaon-Chandrapur CKt-1 & Ckt-2 line with allied Bay equipment at 400kV Kumbhargaon S/s (Dist. Nanded) under Chhatrapati Sambhaji Nagar zone.

MSETCL representative placed before the MTC a proposal for "The scheme of modification in BR No. 170/20 Dt.17.01.2025 for revision in the scheme of Installation of New 2x80 MVAR, 400kV line Reactors at 400kV Kumbhargaon (Nanded) as Switchable Line Reactors for 400kV Kumbhargaon-Chandrapur CKt-1 & Ckt-2 line with allied Bay equipment at 400kV Kumbhargaon S/s (Dist. Nanded) under Chhatrapati Sambhaji Nagar zone."

MSETCL representative submitted that 400 kV Kumbhargaon Substation (Dist. Nanded) is very vital sub-station under EHV O&M Circle Parli. The total installed capacity of this sub-station is 1,002 MVA, the details of ICTs in service are as below:

i) 400/220kV, 501 MVA ICT-I
ii) 400/220kV, 501 MVA ICT-II

400kV Kumbhargaon sub-station (Dist. Nanded) is one of the major grid-connected sub-station connecting 400kV Chandrapur Ckt-1 (277 KM) & 400kV Chandrapur Ckt-2 (301 KM) and 400kV Girwali Ckt-1 (160 KM) & 400kV Girwali Ckt-2 (163 KM). Also 220kV Waghala Ckt-1 & Ckt-2, 220kV Jalkot Ckt-1 & Ckt-2, 220kV Krishnur Ckt-1 & Ckt-2 and 220kV Bhokar Ckt-1 & Ckt-2 & caters most of the load of Nanded District.

400kV Kumbhargaon SS (Dist. Nanded) being a major grid connected sub-station, having long length 400kV lines, there is the issue of over voltage. As per MERC Grid Code-2020, Part-C

(Operating Code), Sr. No 37.13, the prescribed limits for maintaining bus voltage at 400kV bus is ±5% i.e., 380kV to 420kV. However, is seen that the limits of over voltage are crossed at 400kV Kumbhargaon SS many times.

System study was carried out by STU. Wherein reactor at 400 KV Kumbhargaon substation has been recommended.

This scheme was put before 12th MTC Meeting dated 27.01.2025 for recommendations/ approval as agenda point No 7 with , however after deliberations the committee directed MSETCL to explore the feasibility of switchable Reactor considering the operational aspects and resubmit he proposal for approval of MTC. Subsequently, the scheme was also discussed in 11th GCC Meeting dated 29.01.2025 as agenda point No 06, & after detailed deliberation and discussion. GCC referred back the scheme to MTC for reverification.

So as per the suggestions of 12th MTC Meeting dated 27.01.2025 & 11th GCC Meeting dated 29.01.2025; MSETCL verified the scheme. The possibility of placing switchable line reactor arrangement at 400kV Kumbhargaon SS has been explored at field level by making some space adjustments & layout with special arrangement has been prepared in consultation with the Design section CO Mumbai.

The estimated cost of the scheme is **₹ 3766.05 Lakh**. The scheduled completion year for said scheme is **2025-26.**

MTC noted that the above scheme was discussed in detail during the 11th GCC, and it was directed to convert the scheme to switchable line reactors instead of the proposed fixed-type line reactor for operational benefits. Based on the above directives, the scheme is now reproposed by MSETCL after conversion to switchable line reactors. After detailed deliberation, the committee recommended the scheme for submission to the GCC for approval.

Agenda Point No. 20:

Construction of 400 kV Double Circuit line on monopole from GT unit 11 & unit 12 (MSPGCL) to 400 kV Koradi substation (MSETCL)-1.2 km along with associated bays

MSETCL representative placed before the MTC a proposal for Construction of 400 kV Double Circuit line on monopole from GT unit 11 & unit 12 (MSPGCL) to 400 kV Koradi substation (MSETCL)-1.2 km along with associated bays

MSETCL representative highlighted objective of scheme as follows:

(a) To evacuate the power from upcoming Generation unit
(b) To start up power arrangement for MSPGCL's Proposed 2x 660 MW Koradi Project.
(c) To meet the power demand of Maharashtra State.

MSETCL representative submitted benefits of above scheme as follows:

A) Power from upcoming Generation unit at Koradi TPS will be evacuated.
B) Power Demand of Maharashtra State will be catered.

MSETCL representative added that this Scheme approved by MSETCL Board BR.No. 172/25 dated 04.04.2025 . MSETCL representative submitted scope of work as follows:

I) Substation portion: -Part-A-1

a) Construction of 3 No's of 400kV line bay within existing 400kV Bus for pro-posed 2 x 660 MW; Unit- 11 & 12 coal based Thermal Power Plant of M/s MSPGCL at 400/220kV Koradi-I S/stn. alongwith shifting of 1 No's of 400kV line bay at 400/220kV Koradi-I S/stn.

b) Dismantling of 3 No's of 400kV line bays of at 400/220kV Koradi-I S/stn.
c) Dismantling of 2 No's of Station transformer bays at 400/220kV Koradi-I S/stn & construction of 02 No's of bays with all allied civil work at 400/220kV Koradi-I S/stn.
d) The integration of Existing scheme considering Configuration of Bus bar with existing BBR & Additional bay units/input modules/trip relays etc in order to integrate the new bay in the existing Bus bar protection scheme.

- II) Line portion:-Part-A2

a) Construction of 400kV DC (Twin conductor) O/H Tr. line using Monopole tower for proposed 2 x 660 MW; Unit-11 & 12 coal based Thermal Power Plant of M/s MSPGCL up to GT-5 & GT-6 bay at MSETCL's 400/220kV Ko-radi-I S/stn. The 400kV GT-05 bay is available due to scrapping of Generation unit No.05 & 400kV GT-06 bay will be made available by shifting of GT-06 bay to GT-07 bay at 400/220kV Koradi-I S/stn as Generation unit No.06 is in service. Route length:-693.72Mtr; Total No's of Tower:-07 No's (Monopole tower).
b) Construction of 400kV SCDC (Twin conductor) O/H Tr. line using Monopole tower for proposed 2 x 660 MW; Unit-11 & 12 coal based Thermal Power Plant of M/s MSPGCL for shifting of connectivity of existing GT-6 unit from 400kV GT-6 bay to GT-7 bay on 400kV level at MSETCL's 400/220kV Koradi-I S/stn. Route length: 273.91Mtr; Total No's of Tower:- 02 No's (Mono-pole tower).
c) Construction of 220kV Tr. line using UG cable from proposed Station T/F of generation unit-11 to 220kV bay-I at 400/220kV Koradi-I S/stn. The Route length: 331.0Mtr.
d) Construction of 220kV Tr. Line using UG cable from proposed Station T/F of generation unit-12 to 220kV bay-II at 400/220kV Koradi-I S/stn. The Route length: -312.0Mtr.
MSETCL representative highlighted that Government of Maharashtra has approved this project vide GR dated 01.12.2023. MERC have accorded in principle approval for 2 x 660 MW Koradi Project vide ref MERC order Case No 230 of 2019 dated 04.09.2019. Maharashtra State Electricity Distribution Company Ltd (MSEDCL) have given in principle consent for long term power purchase vide letter no. CE/PP/MSPGCL/20020 dtd 17.07.2019. MSETCL have approved grid connectivity for proposed vide letter no MSETCL/CO/STU/Thermal/0807/dtd 07.02.2023 & 7910 dtd 10.11.2023. STU carried out the load flow study on date 02.04.2025.

The Estimated cost of the scheme is **Rs. 72.62 Cr.** The scheduled year of completion for the cited scheme is **FY 2025-26.**

MTC noted that the above scheme is proposed for evacuation and start-up power for MSPGCL's upcoming 2x 660 MW Koradi Project, for which the grid connectivity has been granted by STU. After detailed deliberation , the committee recommended the scheme for submission to the GCC for approval.

Agenda Point No. 21:

Establishment of 220/33 kV Additional Butibori Substation, Dist. Nagpur

MSETCL representative placed before the MTC a proposal for Establishment of 220/33 kV Additional Butibori Substation, Dist. Nagpur.
MSETCL representative highlighted objective of scheme:

- To cater the MIDC load in Butibori MIDC area, Nagpur
- To cater the future upcoming load of Butibori area.

MSETCL representative highlighted scope of work:

- ✓ 2 x 50 MVA, 220/33 kV TFs
- ✓ LILO on existing 220 kV Butibori III-Purti Ckt - 6.5 Km

- ✓ 8 X 33 kV outlets

The Estimated cost of scheme is ₹ **119.31 Cr.**

MTC noted that MSEDCL has received a load requirement from MIDC for their upcoming industrial area in the Additional Butiburi area. Based on which MSEDCL has requested MSETCL/STU to establish an EHV substation in the area to cater to the load of upcoming EHV consumers for which the applications have been received by them. Further, MIDC has also earmarked and handed over the required land to MSETCL. Thus, in view of fulfilling the present & future requirements of MSEDCL demand in the Butibori area and enhancing system reliability, after detailed deliberation and discussion, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 22:

LILO on 100 kV Mohane-Ambernath for 220 kV Jambhul Substation.

MSETCL representative placed before the MTC a proposal for "LILO on 100 kV Mohane - Amberath Line at 220 kV Jambhul Subsation".

MSETCL representative submitted that there are constraints of overloading of Padghe-Mohane-Ambernath 100kV D/C line under contingency. In case, if loading of 100 kV Padghe-Mohane line and Padghe-Ambernath line is increased the entire load will not shift on any other line. Due to this both 100 kV Ambernath s/s and 100 kV Mohane s/s goes into dark, hence N-1 criteria cannot be fulfil.

MSETCL representative highlighted that Presently, 100 kV Ambernath s/s & 100 kV Mohone s/s arte having single 220 kV source from 400/220 kV Padghe s/s. There are constraints of overloading of Padghe-Mohane-Ambernath 100kV D/C line under contingency. In case, if loading of 100 kV Padghe-Mohane line and Padghe-Ambernath line is increased the entire load will not shift on any other line. Due to this both 100 kV Ambernath s/s and 100 kV Mohane s/s goes into dark, hence N-1 criteria cannot be fulfil.

MSETCL representative added that work of replacement of existing 0.3 ACSR Goat conductor with High Performance Conductor (HPC) of 100kV Padgha-Ambernath, 100 kV Padgha-Mohane & 100 kV Mohane-Ambernath lines under EHV PC O&M Zone, Vashi is already approved by BR No 167/23 Dated 08.03.2024.

MSETCL representative submitted that 220 kV Padghe- Jambhul & Padghe- Pal conductor is replaced by HTLS. Further, MSETCL representative mentioned brief scope of work, of scheme as follows:

Construction of LILO on 100 kV Mohane - Ambernath Line for 220/100 kV Jambhul s/s in new corridor – 5 kms

1) 100 kV line bay at 220 kV Jambhul s/s- 02 nos. with contingencies.
2) Construction of LILO on 100 kV Ambernath - Mohone line at 220 kV Jambhul s/s – 5
   i. 100 kV DC line on DC tower - 4 kms
   ii. Underground cable(2500sqmm) - 1 km

MSETCL representative highlighted benefits of scheme as follows:

- Second source alternative to 100 kV Ambernath , 100 kV Mohane s/stns & 220 kV Jambhul S/S.
- Reliability and availability of power supply to consumers of Mohane&Ambernath s/s.
- Utilization of under loaded 1x100 MVA + 125 MVA ICT at Jambhul s/s.
- Network improvement work of Vashi Zone.

MSETCL representative submitted the execution plan as per recived directions in 12th MTC, as follows:

1. **Forest NOC:-**
   - MSETCL appointed M/s Dilip Phatangare & Associates to obtain NOC from Forest Department for the area of 7 Hactor. After verification at site awarded quantity reduced to 3Ha. From 7Ha. After receipt of NOC from Forest ,work can be started in forest area.
2. **ROW:-**
   - Remaining land belong to MIDC, hence there not a ROW issues.
3. **EHV Crossing :-**
   - Using Dwarf Tower, outages will be avoided.Some where Hot line stringing method will be used.
4. **MIDC Permission:-**
   - MIDC permission will require at the time of execution. This office will initiate the procedure fro permission.
5. **Load Management:-**
   - If required ERS system is considered in estimate. The existing line will be shifted on ERS to avoid outages.
6. **Use of HTLS conductor for LILO portion:-**
   - In estimate, HTLS conductor is considered for LILO portion to match the current carrying capacity.

STU representative verified that the approved upgradation of conductor of 100kV Padghe – Ambernath-Mohana circuits is for mitigating the N-1 redundancy in the network while the LILO scheme provides and additional source on 100Kv level. Also the proposed 400kV Ambarnath and up gradation of 110kV Kalyan(TPC-T) to 220kV does not cater to the redundancy requirements fulfilled by the scheme needs of the scheme and therefore the scheme is essential to be executed. The estimated cost of scheme is **₹ 70.27 Cr.** The scheduled commissioning year of scheme is **FY 2026-27.**

MTC noted that the scheme was discussed in the 12th MTC and recommended for approval by GCC along with directions to submit the execution plan for this scheme, considering the hurdles in execution through the forest area.

Further, during the discussions in the 11th GCC, it was directed to verify the scheme in reference to the upgradation of the conductor of 100 kV Padghe –Ambernath–Mohana circuits, which has already been accorded approval, and STU to reverify the scheme in coordination with the establishment of the proposed 400 kV Ambarnath and the upgradation of 110 kV Kalyan (TPC-T) to 220 kV and the utilization of the existing 220 kV Anandnagar.

Taking into consideration the submission of the execution plan by MSETCL and clarification by STU in order to enhance the system reliability after detailed deliberation , the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 23:

Conversion of existing 400 kV Kalwa - Padghe Ckt-I & II SCSC line to DCDC by using Twin HPC conductor.

MSETCL representative placed before the MTC a proposal for Conversion of existing 400 kV Kalwa - Padghe Ckt-I & II SCSC line to DCDC by using Twin HPC conductor.

MSETCL representative submitted that 400/220 kV Kalwa S/S is a major source to cater the load of Mumbai, Mumbai Suburban, Navi Mumbai and part of Thane District areas. There are only two 400 kV source lines to 400 kV Kalwa S/S from 400 kV Padghe S/S and these two SC lines

are on SC towers. 400 kV Kalwa – Padghe Ckt. I and Ckt. II are in service from around 44 years. MSETCL representative highlighted that in case of tripping or major breakdown on any of the circuit, the other circuit gets overloaded & results in critical condition of the Grid. With the implementation of proposed scheme two additional 400 kV sources will be available to 400 kV Kalwa s/s, which will help in catering the increasing load and future load demand of the Mumbai, Mumbai suburban, Navi Mumbai & Thane Urban areas. These additional two sources can be made available by using MSETCL's same line corridor.

MSETCL representative explained that projected load of Mumbai & MMR is 5500 MW. Hence, 400 kV Kalwa-Padghe ckt.-I & II will not be sufficient to cater future load. Additional GIS Substation is proposed at 400kV Kalwa premises. Considering future load growth and grid connectivity issued to various consumers, the available Total Transmission Capacity (TTC) of transmission system of MSETCL serving Mumbai region needs to be strengthened. With the completion of the proposed works, reliability of the supply will be increased due to increase in the transmission capacity, Overloading of Sub-stations & lines can be eliminated and future load growth can also be met. The execution of proposed line work is possible only after completion of replacement of existing conductor by HPC conductor of 400kV Kalwa-Padghe ckt-I & II (DoC Ckt-I: 14.01.2025 and DoC Ckt-II: 28.01.2023).

MSETCL representative explained Scope of work as follows:

1) Conversion of existing SCSC 400 kV Kalwa-Padghe ckt-I into DCDC using the same corridor by using HPC Conductor – 30.371 kms - formation of 400 kV Kalwa-Padghe DCDC line ckt-III.
2) Conversion of existing SCSC 400 kV Kalwa-Padghe ckt-II into DCDC using the same corridor by using HPC Conductor – 30.679 kms. & replacement of ACSR conductor of 22.82 kms of existing DCDC line by HPC from Padghe end - formation of 400 kV Kalwa-Padghe DCDC line ckt-IV.

MSETCL representative explained benefits as follows:

1. Mumbai Metropolitan Region System Strengthening.
2. To bring additional source to 400kV Kalwa S/S.
3. To enhance loading capacity of 400kV Kalwa – Padghe corridor.
4. To increase reliability and quality of supply.
5. To save transmission loss at 400kV level.

The said scheme is recommended in 12th MTC meeting Date: 27.01.2025 agenda Pt. 18. GCC opined that existing Kalwa – Padgha Tr. Lines capacities are recently upgraded. As such, reutilization of the same corridor for the proposed scheme will result in compromising the enhanced capacity for execution period. The committee member suggested that the comparison of the present scheme vis-à-vis utilization 220kV Nashik – Padghe circuit by conversion of multi circuit in respect to utilisation of capcity, ease of execution and cost needs to be to be verified and presented to the committee. The committee also opined that in view of the criticality of scheme for Khavda evacuation STU STU should explore the possibility of execution of scheme through TBCB considering a new corridor formation. After detailed deliberation and discussion, GCC referred back to MTC for re-verification.

MSETCL representative submitted various hurdles/issues for execution of this scheme, in front of MTC.

Estimated cost of this scheme is ₹ **962.66 Cr.**

In the 11th GCC, it was directed to present before the committee a comparison of the present scheme vis-à-vis the alternate arrangement of utilization of 220 kV Padghe-Nasik circuits by conversion of multicircuits in respect to utilization of capacity, ease of execution,

and cost. However, the presentation by MSETCL did not specify the above points, and therefore the committee opined that MSETCL should revert back and make a detailed presentation considering the above points in the ensuing MTC for further action in this regard.

TPC-T Schemes

Agenda Point No. 24:

Installation of new 220 kV/22 kV RSS at Kailash Nagar, Wagle estate, Thane

TPC-T representative placed before the MTC a proposal for "Installation of new 220 kV/22 kV RSS at Kailash Nagar, Wagle estate, Thane".

TPC-T representative highlighted scope of work for scheme as follows:

- LILO of 220 kV Salsette – Borivali line by using corridor of existing 110 kV Salsette-Kolshet line.
- 220 kV GIS (07 bays including PTs) and 22 kV GIS (43 bays including PTs) along with Protection, Communication and Automation.
- 220 kV / 22 kV, 2X125 MVA Transformers & with space provision for additional 125 MVA Transformer

TPC-T representative explained that Hon'ble chairman & MD of MSEDCL has accorded the approval for erection of new Kailas Nagar EHV Substation at Wagle estate, Thane by M/s Tata Power. The proposal for the same was submitted on the Director(operations) MSETCL on 14.11.2024.On 20th Dec-2024, STU requested technical feasibility for establishment of 220/22kV Kalilash Nagar station at Wagle estate, Thane. Subsequently, TPCT has submitted technical feasibility for the same on 02.01.2025 with feasibility for 220 kV substation instated 110 kV station as directed in 10th MTC.

TPC-T representative further added that Joint load flow study completed with STU on 13.04.2025 as advised in 12th MTC. Detail tower wise survey completed by TPC-T & with minimum towers line will be erected. Existing 110 kV Salsette-Kolshet line COD is 1970 & Wildlife forest act was published in 1980.Hence as per communication by forest office, for proposed line new permission is not essential. Permission for re-orientation of existing line will be provided by forest office.

TPC-T representative highlighted that this scheme will be executed in two parts :

(a) Upgradation of existing 110 kV Salsette Kolshet corridor to 220 kV alongwith multi circuit towers.

(b) Installation of 220 / 22 kV RSS at Kailash Nagar, Wagale Estate, Thane.

STU representative submitted that presently LILO of 220 kV Salsette-Borivali S/c line at Kailashnagar may be executed. However, as per future load growth and prospect of interconnection with other 220 kV S/s, 2nd LILO of 220 kV Salsette-Borivali line is also proposed and hence, provision of the same may be kept at Kailashnagar.

The Estimated cost of the scheme: (a) Installation of 220 kV / 22 kV RSS at Kailash Nagar, Wagale Estate, Thane **: ₹ 190 Cr. (Excluding Land and RI Cost),** (b) Upgradation of existing 110 kV Salsette Kolshet corridor to 220 kV with multi circuit towers: **₹ 185 Cr.** The scheduled year of completion for the cited scheme is **FY 2026-27.**

MTC noted that, based on its suggestion, the earlier proposal of 110/22kV substation discussed during the 10th MTC meeting has been revised to 220/22kV and validated through joint studies of STU & TPC-T. The source to the above substation is through the LILO of 220 kV Salsette-Borivali S/c line at Kailashagar with the upgradation of the existing 110 kV Salsette-Kolshet corridor to 220 kV along with multi-circuit towers.

MTC also noted that the cost of the project for the establishment of a 220/22 kV RSS at Kailash Nagar along with the LILO section is ₹ 190 Cr. (excluding land and RI cost) and therefore is below the threshold limit of 200 Cr specified in MYT regulations for implementation through TBCB .

Also, for the source lines to the substation, the upgrading of the existing 110 kV Salsette Kolshet corridor to 220 kV along with multicircuit towers at a cost of ₹ 185 Cr. is an upgradation of the existing assets, and below threshold limit of 200 Cr specified in MYT regulations for implementation through TBCB.

In view of the requirement to fulfill present & future load demand of Discom and enhance system reliability after detailed deliberation , the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 25:

Upgradation of existing 110 kV Parel S/s by creation of 220 kV level

TPC-T representative placed before the MTC a proposal for "Upgradation of existing 110 kV Parel S/s by creation of 220 kV level".

TPC-T representative highlighted necessity of proposed scheme and submitted that the 110 kV Parel RSS is having Transformation capacity is 515 MVA. As per CEA's substation planning criteria maximum Transformation capacity at 110 kV level is 500 MVA. The existing firm transformation capacity @ 33 kV bus is 150 MVA & 33kV peak load is 130 MVA and is not adequate to cater load demand BEST & TPC-D. BEST has applied for 33 kV load @ 119 MVA. TPC-D has applied for 33 kV load @ 90 MVA. Hon'ble MERC has opined to upgrade existing 110 kV Stations to 220 kV level in view of long-term transmission planning. Hence, to meet the existing and future load requirement it will be necessary to augment the existing 110 kV Parel RSS to 220 kV level.

TPC-T representative submitted scope of work, for proposed scheme:

- ✓ Source lines : As approved by MERC, 220 kV Parel-Mahalaxmi line (7 Ckt km) is already commissioned in view of 220 kV Parel. Commissioning of 220 kV Trombay-Parel-1 & 220 kV Trombay Parel-2 using existing RoW of TPC-T lines.
- ✓ Installation and commissioning of 220 kV 07 bay GIS.
- ✓ Installation and commissioning of 1X 250 MVA 220 kV / 110 kV / 33 kV ICT & 1X 125 MVA 220 kV/ 33 kV Transformer with future provision for additional 125 MVA power Transformer
- ✓ Installation and commissioning of 33 kV GIS bus sections

STU representative highlighted that proposed 220 kV interconnection with existing 110 kV system will lead to increase in fault level. Therefore, in view of controlling fault level at 110 kV level proposed 220 kV and existing 110 kV system should be kept segregated.

TPC-T representative added that proposed 220 kV / 110 kV / 33 kV ICT can be kept open at 110 kV level. Hence proposed 220 kV and existing 110 kV system will remain separate. Further, 110 kV source from proposed 220 kV will be available and can be taken into service in case of any contingency on 110 kV system.

The Estimated cost of the scheme is **₹ 400 Cr.** The scheduled year of commissioning of said scheme is **FY 2026-27.**

MTC opined that although the above scheme cost is above the threshold limit, the scheme consists of the creation of a voltage level in an existing TPC-T substation and is thus recommended to be implemented through the RTM route by TPC-T following the relevant provisions of MYT 2024 regulations and selection criteria guidelines issued by STU.
In view of the requirement to fulfill present & future load demand and enhance system reliability, after detailed deliberation, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 26

Installation of outdoor 110 kV GIS at Salsette RSS

TPC-T representative placed before the MTC a proposal for the "Installation of outdoor 110 kV GIS at Salsette RSS.

TPC-T representative submitted necessity of the scheme:

(a) Existing 110 kV AIS Bus Sec-II & Bus Sec-IV outage constraints due to 110 kV Central Railway feeders Isolator is not rated for breaking charging current.
(b) 110 kV Transfer breaker facility for load changeover in not available for 110 kV Bus Zone-II (i.e 110 kV Bus-IV & 110kV Bus-V)
(c) Presently 110 kV Central railway-1 & 2 feeders is not having 110 kV breaker at source end (110 kV AIS)
(d) Existing 110 kV outdoor GIB's for 110 kV Central Railways-1 & 2 is not having bus couple facility. During outage of one of the 110kV central Railway feeder, bus coupler at railway end is being closed. This leads high circulating current due to parallel operation of 110 kV Salsette AIS & 110 kV Central railways AIS.
(e) Existing 110kV bus extension for addition of proposed 110 kV, 40 MVAR capacitor bank is not possible to space constraints.

TPC-T representative explained brief scope of work, for scheme:

- ✓ Installation & commissioning of 110kV 08 no's of GIS bays
- ✓ 110 kV 02 bays for Tie bays from AIS to GIS
- ✓ 110 kV 02 bays for Tie bays from Central Railway feeders.
- ✓ 110 kV 01 bays for ICT-3 & 01 bay for 30 MVA DT-4.
- ✓ Installation and commissioning of 110 kV Protection & Automation system.

TPC-T representative mentioned that this scheme is Non-DPR scheme. The Estimated cost of the scheme is **₹ 22 Cr.** The scheduled commissioning year for the cited scheme is **FY 2025-26.**

MTC opined that the present configuration faces reliability issues as the transfer breaker facility is not available in Zone II and no CB is available for CR feeders 1 & 2 at the source end. The proposed scheme will provide resolution to the same and enhance reliability. Further, the scheme is also essential for the bay provision of the proposed capacitor bank. Thus, after detailed deliberation, the committee recommended the scheme for submission to the GCC for approval.

Agenda Point No. 27

Installation of 110 kV 40 MVAR Capacitor bank at Salsette RSS

TPC-T representative placed before the MTC a proposal for the "Installation of 110 kV 40 MVAR Capacitor bank at Salsette RSS".

TPC-T representative submitted that As per CEA Transmission planning criteria voltage band for 110 kV system is 123 kV to 99 kV. At TPC-T Salsette RSS, Low voltage is observed on 110kV side. The low voltage complaint for peak hours (9:00 Hrs. to 11:00 Hrs. and 15 Hrs. to 16 Hrs.) is being raised by EHV consumers. To address the voltage complaints of EHV consumers, TPC-T proposed to install 110kV 40 MVAR capacitor bank at Salsette RSS.

TPC-T representative highlighted scope of works for scheme as follows:

- Installation & commissioning of 110kV 40 MVAR capacitor bank
- 110 kV GIS bay for capacitor bank

TPC-T representative mentioned that this scheme is Non-DPR scheme. The Estimated cost of the scheme is **₹ 2 Cr.** The scheduled commissioning year for the cited scheme is **FY 2025-26.**

In order to provide adequate reactive compensation and resolve the low voltage problem, after detailed deliberation, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 28:

Upgradation of existing OPGW by 96 core OPGW for 110 kV Parel-Mankhurd and 110 kV Waghivali-Chembur line

TPC-T representative placed before the MTC a proposal for "Upgradation of existing OPGW by 96 core OPGW for 110 kV Parel-Mankhurd and 110 kV Waghivali-Chembur line".

TPC-T representative explained that Existing 110 kV Parel-Mankhurd lines OPGW is more than 20 years old. Lines is having 24 Core OPGW. 4 nos core used for line protection relays; 6 no's cores are damaged due to ageing & 14 nos core leased to telecommunication vendor. 110 kV Waghivali-Chembur line is not having OPGW. Only guard wire is present on this line. TPC-T is in discussion with other telecommunication vendors for fiber lease agreement. Addition of 96 Core OPGW on these lines will facilitate data center & telecommunication vendors to utilize the fiber for their use. In view of effective utilization transmission assets, it is proposed to upgrade existing 24 core OPGW of 110 kV Parel-Mankhurd to 96 core & new 96 core OPGW on 110kV Waghivali-Chembur line.With this revenue will be @ 5 Cr which will reduce TPC-T ARR.

TPC-T representative highlighted brief scope of work as follows:

- Installation & Commissioning of 96 Core OPGW

Chairman, MTC informed that STU is in the process of preparing Communication plan for Maharashtra State, in line with STU Transmission plan which would require inputs from all transmission licensees and shall cater to the long term requirement of Transmission licensees and SLDC.

This scheme is Non-DPR. The Estimated cost of the scheme is **₹ 15 Cr.** The scheduled commissioning of the cited scheme is in **FY 2025-26.**

As proposed by TPC-T, the up-gradation of OPGW is as per the system requirements, and after detailed deliberation and discussion, the committee has taken note and recommended the scheme for submission to GCC for approval. Further , MTC directed STU to initiate the process for preparing the communication plan for Maharashtra state immediately.

Agenda Point No. 29:

220/33 kV, 1X 125 MVA Power Transformer installation at Mahalaxmi RSS to meet discom load demand

TPC-T representative placed before the MTC a proposal for the 220/33 kV, 1X 125 MVA Power Transformer installation at Mahalaxmi RSS to meet discom load demand.

TPC-T representative submitted necessity of work as below:

- At Mahalaxmi RSS, 33 kV bus transformation capacity is 275MVA (2X75MVA & 1X125MVA)
- Existing 33 kV peak Load is @ 160 MVA against firm capacity @ 150 MVA i.e. 106 %
- TPC-D has a load requirement of @ 50 MVA (5 feeders) & BEST has requested load demand of 40 MVA (04 feeders)
- With TPC-D & BEST load demand of 90 MVA, Additional 110/33kV 125 MVA Power Transformer is being proposed.

. TPC-T representative explained brief scope of work, as below:

- Installation & commissioning of 110/33 kV 125 MVA Power Transformer
- 110 kV & 33kV GIS bay for Power Transformer
- Protection & Automation system for Power Transformer.

TPC-T representative submitted that this Scheme come under Non-DPR category. The estimated cost of scheme is **₹ 23 Crore**. The scheduled commissioning of the cited scheme is in **FY 20227-28.**

In order to meet the present & future load requirement, N-1 compliance, and to enhance system reliability after detailed deliberation , the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 30:

Augmentation of existing 110/33 kV 90 MVA Power Transformers to 110/33 kV 125 MVA Power Transformers at Versova RSS

TPC-T representative placed before the MTC a proposal for the "Augmentation of existing 110/33 kV 90 MVA Power Transformers to 110/33 kV 125 MVA Power Transformers at Versova RSS". TPC-T representative submitted that at Versova RSS, 33 kV bus transformation capacity is 180 MVA (2X90MVA). Existing 33 kV peak Load is @ 97 MVA against firm capacity @ 90 MVA i.e. 107 %. TPC-D has a load requirement of @ 20 MVA (3 feeders) for upcoming discom load. With TPC-D load demand, the peak load at Versova RSS will be 117 MVA. Hence to cater existing & future load demand, Augmentation of exsising 2X90 MVA Power Transformers to 2X125 MVA Power Transformer is being proposed by TPC-T.

TPC-T representative explained brief scope of work for scheme:

- Augmentation existing 110 kV /33 kV, 2X90 MVA Power Transformers with 110 / 33 kV, 2X125 MVA Transformer at Versova RSS.
- Installation & commissioning of 33 kV incomers rated for 125 MVA Power Transformer.

The CE, STU opined that 110 kV / 33 kV, 02 X 90 MVA Power Transformers should be utilized in the system. Therefore, MTC directed TPC-T to finalize utilization plan for 110 kV / 33 kV, 02 X 90 MVA Power Transformers after augmentation with 110 / 33 kV, 02 X 125 MVA Transformer.

Estimated cost of scheme is **₹ 40 Crore**. The scheduled commissioning of the cited scheme is in **FY 2026-27.**

In order to meet the present & future load requirement, N-1 compliance, and to enhance system reliability after detailed deliberation and discussion, the committee recommended the scheme for submission to GCC for approval. Further, MTC directed TPC-T to finalize the utilization plan for 110 kV / 33 kV, 02 X 90 MVA Power Transformers after augmentation with 110 / 33 kV, 02 X 125 MVA Transformers and submit the same to MTC.

Agenda Point No. 31:

Procurement of Emergency Restoration System (ERS) for O/H Transmission lines

TPC-T representative placed before the MTC a proposal for the "Procurement of Emergency Restoration System (ERS) for O/H Transmission lines".

TPC-T representative highlighted that Maharashtra state has faced various storms in past 3-4 years such as Nisarg, taukate, Biparjoy etc. During this period if any transmission tower collapse would lead to interruption of Power supply. TPC-T is having 1000 ckt km overhead section spread over MMR & Raigad district.

TPC-T representative added that ERS is important for reducing the restoration time during any emergency conditions & also it will be used for diversion of transmission line during construction of 220 kV Kalwa-Kayan & 220kV Khoppli-Bhokarpada lines. As per Diaster Management Plan released by CEA, adequate quantity of ERS system is to be maintained & utilized by each Transmission utility during disasters & natural calamities.

TPC-T representative submitted benefits of the schem as follows:

- Speed of erection : With ERS, towers can be erected within four hours without any heavy equipment
- Design Flexibility: ERS is made of standard & interchangeable components that makes it easy to erect the structures for site specific conditions.
- Logistics & Deployability : ERS towers are stored in containers. The components are placed securely to ensure quick unpacking & faster erection time.

Estimated cost of scheme is **₹ 8 Crore**. The scheduled completion of the cited scheme is in **FY 2026-27.**

MTC opined that the committee had already approved the ERS scheme for MSETCL during earlier meetings and suggested TPC-T & MSETCL work out an arrangement for sharing the resources as and when required . Such collaboration between the transmission licensees will ensure optimal utilization of such assets.

AEML-T Schemes

Agenda Point No. 32:

220/33 kV GIS EHV S/s at Malad (E)

AEML-T representative placed before the MTC a proposal for "220/33 kV GIS EHV S/s at Malad (E)".

AEML-T representative stated that Between Aarey upto Borivali, over 15 kms, there is no Transmission infrastructure available. Distribution licensee draws long distance 33kV feeders from Aarey, Goregaon, Borivali substation to feed consumer demand in/around Malad (East) – Goregaon (East) area. Existing AEML 220kV Aarey EHV Sub-Station peak load near to its firm capacity, located far away from load points, has been approaching towards its firm capacity.

AEML-T representative submitted brief scope of work, as follows:

Substation Scope:

- 220kV GIS EHV Station at Malad (2 x 125 MVA Capacity).

Cable Connectivity.

- LILO of existing 220kV AEML Aarey – TPC Borivali Line at Loc No. VAB-50 using 220kV underground cable system.
- Associated Civil works

AEML-T representative submitted that scheme was discussed during 5 Yr Plan STU Meeting (dtd 25.05.2021), 2nd MTC, 6th MTC. STU Committee Site visit also done.

AEML-T representative highlighted that AEML-D submitted letters to C.E. STU w.r.t. projected load requirement of Malad/Goregaon-East area and requirement of 220kV Malad EHV Station. Further, AEML-T submitted letter STU requesting necessary arrangements of Transmission infrastructure to cater upcoming load (over 291 MVA) in Malad / Goregaon East area

AEML-T representative added that proposed MSETCL Goregaon Film city EHV S/s work is still not initiated, although the scheme was planned long back. Therefore, AEML-T has submitted proposal for 220/33 kV GIS EHV S/s at Malad (E).

The Estimated cost of the scheme is **₹ 441.78 Crore**. The scheduled commissioning of the cited scheme is in **FY 2025-26.**

MTC opined that the earlier planned Goregaon film city EHV S/S was intended to serve the load requirements of MSEDCL, AEML-D, and TPC-D in the area, and therefore, in view of its cancellation on account of ROW issues, the proposed scheme of 220/33 kV GIS EHV S/S at Malad (E) should also be considering the demand requirements of all three discoms. Further, the cost of the above scheme is above the threshold limit, but the same is already a part of AEML-T's existing license & therefore the scheme is recommended to be implemented through the RTM route by AEML-T following the relevant provisions of MYT 2024 regulations and selection criteria guidelines issued by STU.

In view of the requirement to fulfill present & future Mumbai demand and enhance system reliability, after detailed deliberation, the committee recommended the scheme for submission to GCC for approval.

Agenda Point No. 33:

Upgradation of 220 kV AEML-Chandivali S/s by creation of 400 kV level

AEML-T representative placed before the MTC a proposal for "Upgradation of 220 kV AEML-Chandivali S/s by creation of 400 kV level".

AEML-T representative explained that Currently, Power flow within Mumbai network is **mainly through 220kV / 110kV networ**k. Said network is significantly loaded, as outages for maintenance/augmentation works not so easily granted by SLDC. Estimated Load in Chandivali/Powai/Saki area has been over 1000MW, in view of datacenter load and commercial developments. Existing & upcoming 220kV / 110kV network around appears insufficient to cater to such a volume of load. Considering huge load growth in area, 220kV network will need augmentation by creation of 400kV level, so as to handle huge power demand reliably. In view of above, AEML proposes to upgrade 220kV AEML-Chandivali S/s by creation of 400kV level, with connectivity from 400kV AEMIL Aarey (S/C 6 Km Route Length), with 3X500MVA, 400/220/33kV Transformers, 400kV Reactor at Chandivali. AEML intends to optimize space usage at its existing facilities (Chandivali) to accommodate proposed 400 kV S/s.

AEML-T representative highlighted brief scope of work as follows:

- 400kV S/C U/G 2500 sq mm cable between AEMIL Aarey to Proposed Chandivali.(6 Kms Route length)

- 400kV GIS EHV S/s at Chandivali. (3 x 500 MVA ICT + Reactor)
- 400kV GIS at AEML Aarey
- Associated Civil Works.

The Estimated cost of the scheme is **₹ 644.31 Cr.** The scheduled commissioning of the cited scheme is **FY 2030-31.**

MTC opined that the establishment of 400 kV Chandivali is a part of the new corridor under the STU plan, and now AEML-T has proposed the creation of a 400 kV voltage level at the 220 kV Chandivali AEML-T substation, which is under execution and is expected to be commissioned in 2025-2026. In view of this, it is required that a detailed joint study be carried out by AEML-T & STU in this regard, aligning it with the long-term plan of the new corridor, and AEML-T is directed to present the results in the ensuing MTC for further deliberation.

Agenda Point No. 34:

Installation of 33 kV Board no. 2 at 220 kV BKC EHV substation

AEML-T representative placed before the MTC for "Installation of 33 kV Board no. 2 at 220 kV BKC EHV substation"

AEML-T submitted that On 06.08.2021, The Hon'ble Commission approved AEML-T 220/33kV Sub-station with 2x125 MVA Power Transformers at BKC. The cost of 08 no. of 33kV outlets (Phase -1) was included in 220kV BKC EHV DPR approval. On 12.07.2023, STU allocated Phase -1 (8 nos.) of outlets to AEML-D from AEML-T BKC EHV S/s. On 30.04.2024, STU allocated Phase -2 (8 nos.) of outlets to AEML-D from AEML-T BKC EHV S/s. 220kV BKC EHV Substation was Commissioned on 04.03.2025. 08 nos. of 33kV Out going feeders were constructed and allocated to AEML-D for Phase-1. AEML submitted Commissioning Letter to MERC on 11.03.2025.

AEML-T representative highlighted that scheme is proposed for extension of 33kV Boards at BKC EHV S/s. As per Letter received from STU for Phase -2 Outlet requirement from AEML-T BKC EHV S/s.

AEML-T representative submitted scope of work, as follows:

Supply /Installation /Testing /Commissioning of 8 bays (4 nos. 33kV Bays at each 33kV GIS boards) (4 nos. x 2 nos.).

AEML-T submitted that this is Non-DPR scheme and Estimated cost of scheme is **₹ 9.34 Cr.** The scheduled commissioning year of scheme is **FY 2026-27.**

After detailed deliberation and discussion, the committee opined that in view of the additional feeder requirement at BKC and the above scheme already being a part of the existing license, it therefore recommended the scheme for submission to GCC for approval.

Agenda Point No. 35:

Incorrect Ex. Bus AMR energy meter reading of BTPS 210 MW due to problem in GT-3, R-Ph CT primary side at 132 kV Deepnagar GCR sub-ststion

The MSPGCL representative was not present at the meeting to apprise the issue; however, Chairman MTC stated that this issue does not pertain to MTC and directed them to take up the issue in OCC. The agenda was therefore not discussed.

Agenda Point No. 36:

Installation of BESS at EHV S/s in Mumbai Metropolitan region and other important locations in State of Maharashtra- ***Formation of Committee thereof***

The Member Convener, MTC, submitted that the Joint Study Committee of various stakeholders was formed by STU to verify the requirement of the Grid Connected Battery Energy Storage System (BESS) in the Mumbai region in line with the recommendation of the various committees. Accordingly, a first meeting of Joint Study Committee members was held on dtd.03.04.2025 at 4001220kY Vikhroli (KVTL) substation for the finalization of Terms of Reference (TOR) and further discussion of the same. He also requested MTC to grant one month to the committee to submit the report. Chairman, MTC directed the member convener to convene further meetings of the committee at the earliest and expedite the submission of the report within one month for consideration of MTC during the ensuing meeting.

Member Convener, MTC offered the vote of thanks to all the MTC members and other participants and concluded the 13th MTC Meeting.

8.5.25

Chairperson – MTC
Chief Engineer (STU)