



MAHARASHTRA STATE ELECTRICITY TRANSMISSION COMPANY LIMITED
(CIN NO U40109MH2005SGC153646)

Name of Office : Chief Engineer (State Transmission Utility)
Office Address : 4th floor / 'A' Wing, Prakashganga, MSETCL, Plot C -19, E - block, BKC, Bandra (E), Mumbai - 400051.
Contact No. : (022) 2659 5176 (O), (P) (022) 2659 5175, fax: 022-26591222
E-Mail Id : cestu@mahatransco.in
Website : www.mahatransco.in

MSETCL/CO/STU/Sys/MTC/

No - 2898

Date: 13 0 APR 2024

To,
As per mailing list

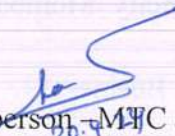
Sub: Minutes of 9th Maharashtra Transmission Committee (MTC) meeting held on 13 March, 2024.

Please find enclosed herewith minutes of the 9th Maharashtra Transmission Committee (MTC) meeting held on 13 March, 2024 at 11:00 Hrs. This meeting was hosted by TATA Power, at Kolshet Receiving Station, Thane.

It is to be noted that the minutes of above meeting is 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	SLDC	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 9th Maharashtra Transmission Committee (MTC) Meeting held on 13 March, 2024 at TATA Power, Kolshet Receiving Station, Thane.

The 9th Maharashtra Transmission Committee (MTC) was held on *13 March, 2024* at TATA Power, Kolshet Receiving Station, Thane. The Chief Engineer (STU), The Chairman of the MTC presided over the meeting. Representatives of MSETCL, TPC-T, AEML-T attended meeting physically while the representative of Central Railway attended meeting through VC Link. The representatives of MSPGCL & BEST undertaking Ltd did not attend the meeting.

On the onset Superintending Engineer (STU), The Member Convener of MTC welcomed all the MTC members present & other participants in the 9th MTC meeting.

After brief introduction of the participants, Member Convener of MTC informed that the minutes of the 8th MTC meeting held on 19 Oct, 2023 were circulated to all the members vide STU Letter No. 809 Dated 22 Nov, 2023. However, no comments are received from members and hence requested to conform the MOM of the 8th MTC Meeting. With the consent of the members present the Minutes of 8th MTC meeting held on 19 Oct, 2023 are confirmed. The matter deliberated in the meeting as per the agenda item is as below:

Agenda Point No. 1:

Replacement of 2 x 25 MVA, 110/33 kV T/F by 2 x 50 MVA, 110/33 kV T/F at 110 kV Savlaj S/S under EHV PC O&M zone Karad

MSETCL representative placed before MTC a proposal for Replacement of 2 x 25 MVA 110/33 kV T/F by 2 x 50 MVA, 110/33 kV T/F at 110 kV Savlaj S/S under EHV PC O&M zone Karad

MSETCL representative stated that 110/33 kV Savlaj S/s, commissioned on 04.12.2007, having installed capacity of 110kV Savlaj is 50 MVA consisting of 2 nos of 2X25 MVA, 110/33 kV T/Fs. 31 MW injection is observed at 110/33 kV Savlaj S/s, based on MSEDCL data of Cluster-11 & Cluster-12. As a result, during the N-1 contingency of 1x25 MVA, 110/33 kV transformer at 110 kV Savlaj S/s, the remaining 25 MVA transformer will be loaded beyond its rated capacity. MSEDCL has informed additional load demand of approx. 26.85 MVA on nearby 33 kV MSEDCL s/stn in order to meet future agriculture and irrigation loading requirements. It was also informed that space is not available for an additional 1X25 MVA, 110/33 kV T/F at 110 kV Savlaj S/s, hence augmentation by replacement of 2X 25 MVA, 110/33 kV T/Fs by 2 X 50 MVA 132-110/33 kV T/Fs are proposed to meet present and future demand.

After detailed deliberation and discussion, the committee recommended the said proposals of “Replacement of 2 x 25 MVA 110/33 kV T/F by 2 x 50 MVA, 110/33 kV T/F at 110 kV Savlaj S/S under EHV PC O&M zone Karad” for submission to GCC for approval.

Agenda Point No. 2:

Providing additional 1X50MVA, 132-110/33 kV T/F along with HV & LV bays at 110kV Kavathe Mahakal S/s under EHV division, Sangli under Karad Zone

MSETCL representative placed before the MTC a proposal for providing additional 1X50MVA, 132-110/33 kV T/F along with HV & LV bays at 110kV Kavathe Mahakal S/s under EHV division, Sangli under Karad Zone. It was informed that that 110kV Kavathe Mahakal Substation is commissioned in year 2010. The

total installed capacity of 110kV Kavathe Mahankal Substation is 100 MVA (i.e. 2X50 MVA 110/33kV Power Transformers). Additional Load demand of 15 MVA & 03 Nos. of new proposed 33/11 kV Substations with 5 MVA capacity each is submitted by MSEDCL Dn, Kavathe Mahanakal

In case of tripping/outage on 1 No. of T/F load cannot managed on other T/F i.e. the substation does not fulfil the (N-1) criteria This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojna (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance.

After detailed deliberation and discussion, the committee recommended the said proposals of Scheme of Providing additional 1X50MVA, 132-110/33 kV T/F along with HV & LV bays at 110kV Kavathe Mahakal S/s under EHV division, Sangli under Karad Zone for submission to GCC for approval.

Agenda point no. 3:

Replacement of 1 x 25 MVA 132/33 kV T/F by 1 x 50 MVA, 132/33 kV T/F at 132 kV Kudal S/S under EHV PC O&M zone Karad

MSETCL representative placed before MTC the proposal for replacement of 1 x 25 MVA 132/33 kV T/F by 1 x 50 MVA, 132/33 kV T/F at 132 kV Kudal S/S under EHV PC O&M zone Karad

MSETCL representative informed that 132 kV Kudal S/s has 02 Nos of 132/33 kV T/fs one with a capacity of 50 MVA and the other with a capacity of 25 MVA. The maximum load at the Kudal substation has reached 36.93 MVA (33.99 MW) in May 2023. Further, there is additional demand from MSEDCL for two new 33 kV feeders (33 kV Adeli and 33 kV MIDC Kudal) along with supply for the Airport Chipi through the 33 kV Malwan feeder.

During peak load the 25 MVA T/F is insufficient to meet load demand. 25 MVA T/F Peak observed during 2022-23 is 82.56% and 50 MVA T/F is 63.54%. In case of tripping of 50MVA Transformer, another 25MVA transformer cannot feed the complete load. Thus the substation is presently N-1 non-compliant. Considering the present non N-1 compliant & additional feeder requirement from MSEDCL it is necessary to replace the existing 25 MVA T/f by 50 MVA T/f.

After detailed deliberation and discussion by members, the committee recommended the above proposal of Scheme of Replacement of 1 x 25 MVA, 132/33 kV T/F by 1 x 50 MVA, 132/33 kV T/F at 132 kV Kudal S/S under EHV PC O&M zone Karad for submission to GCC for approval.

Agenda Point No. 4:

Providing additional 1X50 MVA, 132-110/33 kV T/F at 110 kV Sankh S/s under EHV O&M Division, Sangli.

MSETCL representative placed before MTC the proposal for additional 1X50 MVA, 132-110/33kV T/F along with HV & LV Bays at 110kV Sankh S/s under EHV (O&M) Division, Sangli.

MSETCL representative explained that 110kV Sankh Substation caters the RURAL & agricultural load through 2X50MVA, 110/33kV T/Fs. Present peak loading for TF-1 is 58.32 MVA & 57.80 MVA for TF-2. During outage/tripping of either of the T/F, load cannot managed on other T/F i.e. not satisfying (N-1)

criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above, the scheme of addition of 1X50MVA, 132-110/33kV T/F is proposed at 110kV Sankh S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Providing additional 1X50 MVA, 132-110/33 kV T/F at 110 kV Sankh S/s under EHV O&M Division, Sangli for submission to GCC for approval.

Agenda Point No. 5:

Providing additional 1X25 MVA, 132-110/11 kV T/F at 110 kV Rethare S/s under EHV O&M Division, Karad

MSETCL representative placed before the MTC a proposal for Scheme of Providing additional 1X25 MVA, 132-110/11 kV T/F at 110 kV Rethare S/s under EHV O&M Division, Karad

MSETCL representative explained that 110kV Rethare Substation was commissioned in the year 2017. 110kV Rethare S/s caters Rural & Agricultural load through a single T/F of capacity 25 MVA, 110/11 kV. Being a single transformer substation, the 110kV Rethare substation does not satisfy (N-1) criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above, the scheme of addition of 1X25MVA, 132-110/11kV T/F is proposed at 110kV Rethare S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Providing additional 1X25 MVA, 132-110/11 kV T/F at 110 kV Rethare S/s under EHV O&M Division, Karad, for submission to GCC for approval.

Agenda Point No. 6:

Replacement of 1 X 25 MVA, 132/33 kV T/F by 1 X 50 MVA, 132/33kV T/F at 132 kV Dahiwadi S/s under EHV O&M Division, Karad.

MSETCL representative placed before the MTC a proposal for Scheme of Replacement of 1 X 25 MVA, 132/33 kV T/F by 1 X 50 MVA, 132/33kV T/F at 132 kV Dahiwadi S/s under EHV O&M Division, Karad.

MSETCL representative explained that 132kV Dahiwadi Substation was commissioned in the year 2010. 132kV Dahiwadi S/s caters to Rural & Agriculture load through 50 MVA, 132/33 kV T/F & 25 MVA, 132/33 kV T/F. During outage/tripping of 50 MVA, 132/33 kV T/F the total load cannot be managed on 25 MVA, 132/33 kV T/F i.e. not satisfying (N-1) criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance.

In view of above, the scheme of replacement of 1X25MVA, 132/33kV T/F by 1X50MVA, 132/33kV T/F are proposed at 132kV Dahiwadi S/s

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Replacement of 1 X 25 MVA, 132/33 kV T/F by 1 X 50 MVA, 132/33kV T/F at 132 kV Dahiwadi S/s under EHV O&M Division, Karad, for submission to GCC for approval.

Agenda Point No. 7:

Scheme of Providing additional 1 X 50 MVA, 132/33 kV T/F along with HV and LV bays, 132kV bus extension (twin bus conductor), 33 kV bus extension (Twin bus conductor), 1 No of 33 kV feeder bay, 1 No of 33kV PT bay and 1 No. of station transformer bay at 132 kV Besa S/s under R.S ring main division Nagpur.

MSETCL representative stated that the 132kV Besa Substation was commissioned in the year 1987. 132kV Besa substation caters to the load of Nagpur Urban and rural area through 3 nos. of 50 MVA T/F. Maximum loading on all the T/Fs is above 80 % of installed capacity. The proposed scheme fulfills the augmentation scheme criteria. During outage/Breakdown of either of the T/F, load is not managed on other T/F i.e. not satisfying (N-1) criteria. Considering the present loading condition, outage constraints and to satisfy N-1 criteria, the addition of T/Fs is proposed at 132kV Besa S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Providing additional 1 X 50 MVA, 132/33 kV T/F along with HV and LV bays, 132kV bus extension (twin bus conductor), 33 kV bus extension (Twin bus conductor), 1 No of 33 kV feeder bay, 1 No of 33kV PT bay and 1 No. of station transformer bay at 132 kV Besa S/s under R.S ring main division Nagpur, for submission to GCC for approval.

Agenda Point No. 8:

Scheme for Providing additional 1 X 50 MVA 132/33 kV T/F along with HV and LV bays, 33 kV bus extension (Twin bus conductor) and 1 No of 33kV feeder bay at 132 kV Mankapur S/s under R.S ring main division Nagpur.

MSETCL representative placed before MTC a proposal for Scheme for Providing additional 1 X 50 MVA 132/33 kV T/F along with HV and LV bays, 33 kV bus extension (Twin bus conductor) and 1 No of 33kV feeder bay at 132 kV Mankapur S/s under R.S ring main division Nagpur.

The 132 kV Mankapur Substation was commissioned in the year 1978. 132kV Mankapur Substation caters to the load of the residential, commercial, and industrial center of the area close to Mankapur. Present maximum loading on all the T/Fs is above 80 % of installed capacity. Also, maximum loading on T/F No. 1 has reached 112.88 % of its installed capacity in the last six months from the date of commissioning. During outage/Breakdown of either of the T/F, load is not managed on other T/F i.e. not satisfying N-1 criteria. The proposal fulfills the augmentation scheme criteria. Considering the present loading condition, outage constraints and to satisfy N-1 criteria additional T/F is proposed at 132kV Mankapur S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme for Providing additional 1 X 50 MVA 132/33 kV T/F along with HV and LV bays, 33 kV bus extension (Twin bus conductor) and 1 No of 33kV feeder bay at 132 kV Mankapur S/s under R.S ring main division Nagpur, for submission to GCC for approval.

Agenda Point No. 9:

Scheme of Providing additional 1 X 50 MVA 132/33 kV T/F along with HV and LV bays, 33 kV bus extension (Twin bus conductor) , and 1 No of 33kV feeder bay at 132 kV Pardi S/s under R.S ring main division Nagpur

MSETCL representative placed before the MTC a proposal for Scheme of Providing additional 1 X 50 MVA 132/33 kV T/F along with HV and LV bays, 33 kV bus extension (Twin bus conductor) , and 1 No of 33kV feeder bay at 132 kV Pardi S/s under R.S ring main division Nagpur

MSETCL representative explained that the 132kV Pardi Substation was commissioned in the year 1978. The 132kV Pardi area caters to the load of Nagpur, urban, and rural areas through 33 kV feeders. Average maximum loading on all the T/Fs is above 80 % of installed capacity. During outage/Breakdown of either of the T/F, load is not managed on other T/F i.e. not satisfying N-1 criteria. The proposal fulfills the augmentation scheme criteria. Considering the present loading condition, outage constraints and to satisfy N-1 criteria additional T/F is proposed at 132kV Pardi S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Providing additional 1 X 50 MVA 132/33 kV T/F along with HV and LV bays, 33 kV bus extension (Twin bus conductor) , and 1 No of 33kV feeder bay at 132 kV Pardi S/s under R.S ring main division Nagpur, for submission to GCC for approval.

Agenda Point No. 10:

Scheme of providing additional 3x167MVA, 400/220/33kV ICT along with HV & LV bays and 1x167MVA, 400/220/33kV spare ICT unit for RRS at 400kV Koradi -II S/s under Nagpur Zone.

MSETCL representative placed before the MTC a proposal for scheme of providing additional 3x167MVA, 400/220/33kV ICT along with HV & LV bays and 1x167MVA, 400/220/33kV spare ICT unit for RRS at 400kV Koradi -II S/s under Nagpur Zone. He explained that there are 24 Nos. of 400kV bays and 10 Nos. of 220kV bays at 400/220kV Koradi-II Substation. 400kV lines are connected to 400kV Wardha (PGCIL), 400kV IEPL & 765/400kV S/s Koradi-III (Tidangi).

220kV lines feed supply to 220kV Kaulewada S/s via D/C lines. In addition, the 220kV feeder namely 220kV Uppalwadi D/C, 220kV Mankapur D/C & 220kV Butibori III D/C are proposed to be charged from 400/220kV Koradi-II S/s. Hence, 220kV Ring main of Nagpur city will also be supplied from 400/220kV Koradi-II S/s.

The issue of less Available Transfer Capability (ATC) for drawl of power from Inter State Transmission System (ISTS) Grid was highlighted during the Power Minister's Conference held on dt. 14th & 15th October 2022. Considering, the upcoming load of 220kV Nagpur Ring main through the planned network (i.e 220kV Butibori-III S/s, 220kV Mankapur S/s; 220kV Uppalwadi & Pardi S/stn) there may be a possibility of overloading of existing 2x501MVA 400/220/33KV ICTs at 400/220kV Koradi-II S/s, the said situation has also been taken into consideration at meeting on dt. 18.10.2022 vide L.No. MSETCL/CO/STU/7556 dt. 25.10.2022 and the CE STU requested to initiate the scheme for enhancement of ATC of Maharashtra vides l.no. MSETCL/CO/STU/8567 dt. 02.12.2022.

Hence, considering the above facts & also to meet the future load demand, additional 3X167MVA, 400/220/33kV ICT-III along with HV & LV Bays and with Rapid Restoration System (RRS) of 1X167MVA, 400/220/33kV ICT with spare bay is proposed at 400/220kV Koradi-II S/s.

After detailed deliberation and discussion, the committee recommended the above scheme of Providing additional 3x167MVA, 400/220/33kV ICT alongwith HV & LV bays and 1x167MVA, 400/220/33kV spare ICT unit for RRS at 400kV Koradi -II S/s under Nagpur Zone, for submission to GCC for approval.

Agenda Point No. 11:

Scheme for Replacement of 2 X 25 MVA, 220/33 kV T/F by 2 X 50 MVA, 220/33kV T/F at 220 kV Balapur S/s under EHV O&M Division, Akola.

MSETCL representative placed before the MTC a proposal for Replacement of 2 X 25 MVA, 220/33 kV T/F by 2 X 50 MVA, 220/33kV T/F at 220 kV Balapur S/s under EHV O&M Division, Akola. MSETCL representative explained that the 220kV Balapur Substation was commissioned in the year 2016. 220kV Balapur substation caters to the load of Urban and rural area of Akola, Balapur and Washim District through 2X25 MVA, 220/33 kV T/Fs. The maximum loading on T/F No.2 is above 85 % of installed capacity. Maximum loading on existing feeders along with feeders name from 220 kV Balapur S/s:

Sr.No	Name of 33 kV feeder	Max load reached in MVA		
		2020-21	2021-22	2022-23
1	Ambuja Feeder	1.875	1.35	1.875
2	Kanheri Feeder	4.375	4.375	5.52
3	Hatrun Feeder	3.75	9.79	10.31
4	Ridhora Feeder	2.60	9.51	10.20
5	Balapur Feeder	13.85	16.14	16.66
		26.45	41.17	44.56

He further mentioned that during outage/tripping of either of the T/F, load cannot managed on other T/F i.e. not satisfying (N-1) criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. Due to space constraint of 220kV Balapur S/s, addition of T/F is not possible hence the replacement of T/Fs is proposed. In view of above, the scheme of replacement of existing 2x25 MVA T/Fs by 2X 50 MVA T/Fs is proposed at 220kV Balapur S/s.

After detailed deliberation and discussion, the committee recommended the above Scheme for Replacement of 2 X 25 MVA, 220/33 kV T/F by 2 X 50 MVA, 220/33kV T/F at 220 kV Balapur S/s under EHV O&M Division, Akola, for submission to GCC for approval.

Agenda Point No. 12:

Scheme for Replacement of 2 X 25 MVA, 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132 kV Patur S/s under EHV O&M Division, Akola.

MSETCL representative placed before the MTC a proposal for Scheme for work of LILO arrangement of 132kV Deepnagar-Muktainagar line along with 132kV bays at Varangaon substation under EHV O&M Dn. Jalgaon under EHV O&M Circle, Bhusawal.

MSETCL representative explained that the 132 kV Patur Substation was commissioned in the year 2010. 132kV Patur Substation caters to the load of the Urban and rural area of Patur Tehsil and nearby rural areas through 2X 25 MVA, 132/33 kV T/Fs. At present maximum loading on both the T/Fs is above 80 % of installed capacity. The proposed scheme fulfills the augmentation scheme criteria. Also during outage/tripping of either of the T/F, load cannot managed on other T/F i.e. not satisfying (N-1) criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. Due to space constraint of 132kV Patur S/s, addition of T/F is not possible hence the scheme of replacement of existing 2X 25MVA 132/33 kV T/Fs by 2x 50MVA 132/33 kV T/Fs are proposed at 132kV Patur S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme for Scheme for Replacement of 2 X 25 MVA, 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132 kV Patur S/s under EHV O&M Division, Akola, for submission to GCC for approval.

Agenda Point No. 13:

Replacement of 2 X 25 MVA, 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132 kV Murtizapur S/s under EHV O&M Division, Akola.

MSETCL representative placed before the MTC a proposal for Scheme for Replacement of 2 X 25 MVA, 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132 kV Murtizapur S/s under EHV O&M Division, Akola. He added that 132kV Murtizapur Substation was commissioned in the year 2016.2. The 132kV Murtizapur S/s caters to the load of urban, rural, MIDC and solar generation area of Murtizapur Tehsil.

The maximum loading on T/F No.2, of S/s, is above 90 % of installed capacity. During outage/tripping of either of the T/F, load is not managed on other T/F i.e. not satisfying (N-1) criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. Due to space constraint of 132kV Murtizapur S/s, addition of T/F is not possible hence the scheme of replacement of existing 2X 25MVA 132/33 kV T/Fs by 2X 50MVA 132/33 kV T/Fs is proposed at 132kV Murtizapur S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 2 X 25 MVA, 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132 kV Murtizapur S/s under EHV O&M Division, Akola, for submission to GCC for approval.

Agenda Point No. 14:

Providing additional 1X100MVA, 220/132kV ICT with HV and LV bays at 220kV Narangwadi S/S under EHV (O&M) Division, Beed in Aurangabad zone

MSETCL representative placed before the MTC a proposal for Scheme for providing additional 1X100MVA, 220/132kV ICT with HV and LV bays at 220kV Narangwadi S/S under EHV (O&M) Division, Beed in Aurangabad zone.

MSETCL Representative mentioned that 220kV Narangwadi S/s is commissioned on 29.03.2019. 220 kV Narangwadi Substation has 2 nos. of ICTs with a capacity of 100 MVA, 220/132 kV, and 2 nos of power transformers with a capacity of 50 MVA, 220/33kV each. Parts of Osmanabad and Latur district of Marathwada region are fed by the 132kV Bus of 220 kV Narangwadi S/S. He highlighted that 295 MW proposed RE generation is coming up at Narangwadi ss. Considering the future RE generation at 220kV Narangwadi Substation to 132kV bus side, additional ICT is proposed at 220kV Narangwadi S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of providing additional 1X100MVA, 220/132kV ICT with HV and LV bays at 220kV Narangwadi S/S under EHV (O&M) Division, Beed in Aurangabad zone, for submission to GCC for approval.

Agenda Point No. 15:

Providing additional 1X100MVA, 220/132kV ICT with HV and LV bays at 220kV Jalkot S/S under EHV (O&M) Division, Latur in Aurangabad zone

MSETCL representative placed before the MTC a proposal "Providing additional 1X100MVA, 220/132kV ICT with HV and LV bays at 220kV Jalkot S/S under EHV (O&M) Division, Latur in Aurangabad zone.

He stated that 220kV Jalkot S/s is commissioned on 22.10.2019. Presently at 220kV Jalkot S/S, 2 nos. of 100MVA, 220/132kV ICTs are installed. Total 330 MW Solar Generation on 132 kV level, is upcoming in this area. The STU section has carried out load flow studies of Grid Connectivity for the various RE Generation developers. It is observed that further proposed solar projects are not feasible due to the overloading of 1X 100MVA, 220/132kV ICT at Jalkot under N-1 contingency. During load flow study of M/s. Fairsun Renewable Energy Pvt. Ltd. STU has remarked that the solar project can be feasible after enhancement of transformation capacity by an additional 1 x 100 MVA ICT at 220 kV Jalkot S/s. Single ICT during outage/Breakdown of either of the ICTs i.e. not satisfying N-1 criteria. The above-said scheme (220 kV Jalkot S/S) is an identified project proposed for RE evacuation arrangement.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1X100MVA, 220/132kV ICT with HV and LV bays at 220kV Jalkot S/S under EHV (O&M) Division, Latur in Aurangabad zone, for submission to GCC for approval.

Agenda Point No. 16:

Establishment of 33kV Level at 220/132kV Padegaon substation by providing additional 2X50MVA, 220/33kV T/Fs along with 2 x 220 kV AIS bays, 2 x 33 kV GIS Incomer Bay, 8 X 33 kV GIS bays along with PT bays, Bus sectionaliser bay & 2no.of 200KVA, 33/0.4kV station transformer under EHV O&M division, Aurangabad in Aurangabad Zone.

MSETCL representative explained that Chawani Sub-Division of Urban Division – I of MSEDCL is presently fed from 132kV Harsool and 132kV Waluj S/s, which is situated in the vicinity of 220kV Padegaon substation. Also, this area has heavy load growth. These substation feeds industrial, commercial & residential consumers.

Present capacity of 132 kV Harsool S/s is 150 MW, Max Demand is 72.33 MW and future load growth is 105 MW. At 132 kV Waluj S/s the total installed capacity is 150 MW, max demand is 81.55 MW and future load growth is 50 MW.

In addition to that 132/33kV Harsool S/s has total 8 nos. of MSEDCL feeders out of which 33kV Maliwada feeder has length of 36kms. The voltage regulation of this feeder is 15.75%. Also length of 33kV Nakshtrawadi feeder emanating from 132/33kV Harsool is long. The feeder feeds water works of Amravati Municipal Corporation. Due to long feeder length it is difficult to identify the fault and restore supply within stipulated time during break down. Existing 220/132kV Padegaon S/s is at distance of 7.55 kms from 132/33kV Waluj S/s & 6.88kms from 132kV Harsool S/s.

After establishment of 33kV voltage level at 220/132kV Padegaon S/s, total 8 nos. of MSEDCL S/s (4 nos.- Padegaon, Samadhan colony, Golwadi & Waluj Mahanagar will shift from 132kV Waluj S/s & 4 nos.- Power House, Chawani, University & Maliwada from 132kV Harsool S/s.) will shift on 220kV Padegaon S/s.

After cited Establishments, the length of 33kV feeders i.e. 33kV Maliwada & 33kV Chawani will get reduced. This will result in improvement of voltage regulations of long length feeder & will resolve low voltage problem of feeders. Thereby consumers will get reliable & quality power supply.

There is no sufficient space available for 33kV AIS feeder bays as well as T/F LV bays, nearby existing control room of 220/132kV Padegaon S/s however suitable space for GIS bays is available near existing control room. Further this place is nearer to existing 33kV Bus made for auxiliary supply of 220kV Padegaon S/s (As no station T/F for auxiliary supply & presently S/s auxiliary supply obtained from MSEDCL 33kV lines).

As such, to fulfill the future demand of MSEDCL and thereby reducing the future loading of 132kV lines of 220/132kV Padegaon S/s and to improve the voltage regulation, establishment of 33kV voltage level is proposed at 220/132kV Padegaon S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Establishment of 33kV Level at 220/132kV Padegaon substation by providing additional 2X50MVA, 220/33kV T/Fs along with 2 x 220 kV AIS bays, 2 x 33 kV GIS Incomer Bay, 8 X 33 kV GIS bays along with PT bays, Bus sectionaliser bay & 2no.of 200KVA, 33/0.4kV station transformer under EHV O&M division, Aurangabad in Aurangabad Zone, for submission to GCC for approval.

Agenda Point No. 17:

Providing additional 1x200MVA, 220/132kV ICT along with Hybrid Switchgear HV & LV bays at 220kV Jalna S/s under Aurangabad Zone.

MSETCL representative placed before the MTC a proposal for providing additional 1x200MVA, 220/132kV ICT along with Hybrid Switchgear HV & LV bays at 220kV Jalna S/s under Aurangabad Zone.

MSETCL representative added that the Jalna MIDC is hub for steel industries which is growing continuously. Due to this rising industrialization, the demand for electricity is also rising. The power to this is supplied by MSETCL's substations i.e. from 220kV Jalna Substation and 132kV Jalna Substation through the express feeders at 132 kV and 33 kV level. At present, 220kV Jalna Substation has total capacity of 600MVA which includes 3x200 MVA, 220/132kV ICTs. The average maximum load on each ICT has reached about 60% of its capacity.

Further, the feasibilities to 6 nos. of new EHV consumer for total load of 190MVA have been issued from 220kV Jalna Substation. The details are as follows:

M/s. Gajkesari Steels & Alloys Pvt. Ltd.	- 35 MVA
M/s. Geetai Steels Pvt. Ltd.	- 35MVA
M/s. Rathi Steels Metal	- 35 MVA
M/s. Shree Om Rolling Mills	- 20 MVA
M/s. Matsyodari Steel and alloy Pvt. Ltd.	- 30 MVA
M/s. Rajuri Steels and TMT Bars	- 35 MVA

Also, the feasibilities for load enhancement in contract demand to existing EHV consumers are received for total load of 75MVA, out of which feasibilities for load of 67MVA have been issued. The details are as follows:

- i. M/s. Om Sai ram Steel & Alloy Pvt. Ltd. load enhancement from existing 46 MVA to 75 MVA i.e. load enhancement of 29MVA.
- ii. M/s. Bhagalaxmi Rolling Mills Pvt. Ltd. load enhancement from existing 68 MVA to 106 MVA i.e. load enhancement of 38MVA
- iii. M/s. SRJ Steels Pvt. Ltd. load enhancement from existing 68 MVA to 76 MVA i.e. load enhancement of 08 MVA (feasibility is under process)

Therefore, the total expected load at 220kV Jalna Substation is as follows:

- i) Existing Max load on all three ICTs : 348 MVA
- ii) Feasibility issued for new consumers: 190 MVA
- iii) Feasibility issued/in-process for load enhancement of existing consumer : 75 MVA

TOTAL EXPECTED LOAD : 613 MVA

Further, it is to mention that the scheme was earlier forwarded to STU for system study. STU had stated that work of provision of additional ICT will be reviewed after the shifting of load of Jalna substation on the adjoining substation . However with the newly emerged scenario even after load shifting & spur of steel industry demand in the region additional ICT is proposed to be installed at 220kV Jalna substation to cater to the demand reliably.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1x200MVA, 220/132kV ICT along with Hybrid Switchgear HV & LV bays at 220kV Jalna S/s under Aurangabad Zone, for submission to GCC for approval.

Agenda Point No. 18:

Providing additional 220/132kV, 1 X 100 MVA ICT at 220 kV Paranda S/stn Dist Beed Under EHV O&M Division Beed Under EHV PC O&M zone Chhatrapati Sambhajinagar

MSETCL representative placed before the MTC a proposal for Providing additional 220/132kV, 1 X 100 MVA ICT at 220 kV Paranda S/stn Dist Beed Under EHV O&M Division Beed Under EHV PC O&M zone Chhatrapati Sambhajinagar.

MSETCL representative stated that 220 kV Paranda Substation is commissioned in the year 2012. Presently at 220 kV Paranda S/S, 2 nos. of 100MVA, 220/132 kV ICTs and 02 nos. of 50MVA Power Transformers (2x50MVA, 220/33kV Transformer) are installed i.e. the total installed capacity of the Substation is 300 MVA. Both T/Fs are operating in parallel.

This substation feeds the urban, rural, and agricultural load of partly Osmanabad, Beed, and Solapur districts. Over the time, the demand for electrical power in the serving area of the above-mentioned substations is increasing due to factors like an increase in agricultural load, industrial expansion, urbanization, etc. By augmenting, the capacity of the ICTs allows it to handle a larger load, ensuring that it can meet the growing demand. The 220/132kV ICTs feed to the 132kV Bus of 220kV Paranda Substation, which further feeds to part of Osmanabad, Beed, Solapur, and Ahmednagar Districts through various Substations viz. 132kV Bhoom, 132kV Kallam, 132kV Kallamb Road TSS (Railway), 132kV Kharda, 132kV Kurdwadi, 132kV Kaij through 132kV Kallamb & now newly charged(07.09.2023) 132kV Ashti Substation through Kharda Link

As Osmanabad and Beed are identified as RE Prone areas, the demand for RE power evacuation is ever increasing. As the demand for renewable energy sources like wind and solar power increases, the ability to handle intermittent and variable power generation becomes crucial. Maximum loading on both the ICTs is 80 % of installed capacity.

During an outage/Breakdown of either of the ICTs, load is not managed on other ICT i.e. not satisfying N-1 criteria. Hence considering the present loading condition, RE evacuation ,future load, outage constraints and to satisfy N-1 criteria replacement of T/fs is proposed at 220 kV Paranda S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 220/132kV, 1 X 100 MVA ICT at 220 kV Paranda S/stn Dist Beed Under EHV O&M Division Beed Under EHV PC O&M zone Chhatrapati Sambhajinagar, for submission to GCC for approval.

Agenda Point No. 19:

Scheme of Providing additional 1X50 MVA, 132/33 kV T/F at 132 kV Soygaon S/s under EHV O&M Division, Aurangabad.

MSETCL representative placed before the MTC a proposal for Scheme of Providing additional 1X50 MVA, 132/33 kV T/F at 132 kV Soygaon S/s under EHV O&M Division, Aurangabad.

MSETCL representative stated that the 132kV Soygaon Substation was commissioned in the year 2012. 132kV Soygaon substation caters to the load of rural and agricultural load of Soygaon Taluka in Chhatrapati Sambhaji Nagar District through 2X25 MVA, 132/33 kV T/Fs. The maximum loading on both the T/fs are above 45 % of installed capacity. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance.. In view of above, the scheme of addition of 50 MVA, 132/33kV T/F is proposed at 132kV Soygaon S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme of Providing additional 1X50 MVA, 132/33 kV T/F at 132 kV Soygaon S/s under EHV O&M Division, Aurangabad, for submission to GCC for approval.

Agenda Point No. 20:

Providing additional 1X50 MVA, 132/33 kV T/F at 132 kV Sillod S/s under EHV O&M Division, Aurangabad.

MSETCL representative placed before the MTC a proposal for Providing additional 1X50 MVA, 132/33 kV T/F at 132 kV Sillod S/s under EHV O&M Division, Aurangabad.

MSETCL representative highlighted that this substation was commissioned in the year 1985. 132kV Sillod Substation caters to the load of the Urban, Rural & AG load through 2X 50 MVA, 132/33 kV T/Fs. Present maximum loading on both the T/Fs is about 70 % of installed capacity. During outage/tripping of either of the T/F, load can not managed on other T/F i.e. not satisfying (N-1) criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above, the scheme of addition of 50 MVA, 132/33kV T/F is proposed at 132kV Sillod S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1X50 MVA, 132/33 kV T/F at 132 kV Sillod S/s under EHV O&M Division, Aurangabad, for submission to GCC for approval.

Agenda Point No. 21:

Replacement of 2 X 25 MVA, 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132 kV Mantha S/s under EHV O&M Division, Jalna.

MSETCL representative placed before the MTC a proposal for Establishment of 400 / 220 kV Nandagaon Peth Substation and associated Lines, District Amravati under EHV O&M Circle Amravati.

MSETCL representative stated that the 132kV Mantha Substation was commissioned in the year 2009. The 132kV Mantha S/s caters to the load of MIDC, Urban, Rural & Agriculture area under Jalna District through 2 nos. of 25 MVA, 132/33 kV T/Fs. The maximum loading on both T/Fs are above 50 % of installed

capacity. The 132kV Mantha is situated at high solar pocket region, currently the feasibility of 50 MW solar power generation is issued to M/s Addica Solar power on 132kV level. During outage/tripping of either of the T/F, load is not managed on other T/F i.e. not satisfying (N-1) criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above, the scheme of replacement of T/Fs is proposed at 132kV Mantha S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 2 X 25 MVA, 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132 kV Mantha S/s under EHV O&M Division, Jalna for submission to GCC for approval.

Agenda Point No. 22:

Providing additional 1X50 MVA, 220/33 kV T/F at 220 kV Krushnoor S/s under EHV O&M Division, Nanded.

MSETCL representative placed before the MTC a proposal for Providing additional 1X50 MVA, 220/33 kV T/F at 220 kV Krushnoor S/s under EHV O&M Division, Nanded.

MSETCL representative submitted that the The 220kV Krushnoor Substation was commissioned in the year 2019. This substation is commissioned vide BR NO. 34/4 dtd 04.10.08 through EPC contract. The sanctioned scope of the substation against the BR 34/4 is 2X50 MVA, 220/33kV T/Fs & 1 X 100MVA 220/132kV ICT. But presently only 1 X 25MVA, 220/33 kV T/F was commissioned. The 220kV Krushnoor S/s caters to the load of Krushnoor MIDC and Part of Naigaon Taluka having urban, rural and agriculture load through 1 no. of 25 MVA, 132/33 kV T/F. The maximum loading on T/F is above 75 % of installed capacity.

Considering single T/F substation 220kV Krushnoor is N-1 non compliant. The proposed scheme satisfies the augmentation criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above, the scheme of addition of T/F is proposed at 220kV Krushnoor S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1X50 MVA, 220/33 kV T/F at 220 kV Krushnoor S/s under EHV O&M Division, Nanded for submission to GCC for approval.

Agenda Point No. 23:

Replacement of 2 X 25 MVA, 220/33 kV T/F by 2 X 50 MVA, 220/33kV T/F at 220 kV Bhokar S/s under EHV O&M Division, Nanded.

MSETCL representative placed before the MTC a proposal for Replacement of 2 X 25 MVA, 220/33 kV T/F by 2 X 50 MVA, 220/33kV T/F at 220 kV Bhokar S/s under EHV O&M Division, Nanded.

MSETCL representative stated that the 220kV Bhokar Substation was commissioned in the year 2016. The 220kV Bhokar S/s caters to the Bhokar Taluka having majority of Urban and Agriculture load, major part of rural load through 2 nos. of 25 MVA, 220/33 kV T/Fs. The maximum loading on both T/Fs are more than 75 % of installed capacity. During outage/tripping of either of the T/F, load is not managed i.e. not satisfying (N-1) criteria.

He highlighted the proposed scheme satisfies the augmentation criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above, the scheme of replacement of T/Fs is proposed at 220kV Bhokar S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 2 X 25 MVA, 220/33 kV T/F by 2 X 50 MVA, 220/33kV T/F at 220 kV Bhokar S/s under EHV O&M Division, Nanded, for submission to GCC for approval.

Agenda Point No. 24:

Replacement of 2 X 25 MVA, 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132 kV Umari S/s under EHV O&M Division, Nanded.

MSETCL representative placed before the MTC a proposal for Replacement of 2 X 25 MVA, 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132 kV Umari S/s under EHV O&M Division, Nanded.

MSETCL representative stated that the 132kV Umari Substation was commissioned in the year 1998. The 132kV Umari S/s caters to the Umari Taluka & part of Mudkhed Taluka having majority of Urban and Agriculture load through 2 nos. of 25 MVA, 132/33 kV T/Fs. The maximum loading on both T/Fs are about 70 % of installed capacity. During outage/tripping of either of the T/F, load is not managed i.e. not satisfying (N-1) criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above, the scheme of replacement of T/Fs is proposed at 132kV Umari S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 2 X 25 MVA, 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132 kV Umari S/s under EHV O&M Division, Nanded, for submission to GCC for approval.

Agenda Point No. 25:

Providing additional 1X25 MVA, 132/33 kV T/F at 132 kV Nampur S/s under EHV O&M Division, Nashik

MSETCL representative placed before the MTC a proposal for Providing additional 1X25 MVA, 132/33 kV T/F at 132 kV Nampur S/s under EHV O&M Division, Nashik.

MSETCL representative stated that the 132 kV Nampur Substation was commissioned in the year 1999. 132kV Nampur Substation caters the agricultural load of Nampur Taluka through 1X50MVA, 132/33 kV T/F & 1X25MVA, 132/33 kV T/F. Present maximum loading on both the T/Fs is about 70 % of installed capacity.

During outage/tripping of either of the T/F, load cannot managed on other T/F i.e. not satisfying (N-1) criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance.. In view of above, the scheme of addition of 1X25MVA, 132/33kV T/F is proposed at 132kV Nampur S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1X25 MVA, 132/33 kV T/F at 132 kV Nampur S/s under EHV O&M Division, Nashik, for submission to GCC for approval.

Agenda Point No. 26:

Providing additional 1X25 MVA, 132/33 kV T/F at 132 kV Rashin S/s under EHV O&M Division, Nashik

MSETCL representative placed before the MTC a proposal for Providing additional 1X25 MVA, 132/33 kV T/F at 132 kV Rashin S/s under EHV O&M Division, Nashik

MSETCL representative stated that the 132kV Rashin Substation was commissioned in the year 2012. 132kV Rashin S/s is generation attached substation & caters the agricultural load through 2 nos. of 25 MVA, 132/33 kV T/Fs. The maximum loading on both T/Fs are above 70 % of installed capacity. During outage/tripping of either of the T/F, load is not managed on other T/F i.e. not satisfying (N-1) criteria. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above, the scheme of addition of 1X25MVA, 132/33kV T/F is proposed at 132kV Rashin S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1X25 MVA, 132/33 kV T/F at 132 kV Rashin S/s under EHV O&M Division, Nashik, for submission to GCC for approval.

Agenda Point No. 27:

Replacement of 2 X 25 MVA, 132/33kV by 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132kV Nimbhora S/s under EHV O&M Division, Jalgaon

MSETCL representative placed before the MTC a proposal for Replacement of 2 X 25 MVA, 132/33kV by 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132kV Nimbhora S/s under EHV O&M Division, Jalgaon

MSETCL representative stated that the 132kV Nimbhora Substation was commissioned in the year 1985. 132kV Nimbhora S/s caters to the load of Jalgaon rural & industrial load nearby Raver Taluka through 2 nos. of 25 MVA, 132/33 kV T/Fs. The maximum loading on both T/Fs are above 50% of installed capacity.

This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above, the scheme of replacement of 2X25MVA, 132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs are proposed at 132kV Nimbhora S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 2 X 25 MVA, 132/33kV by 132/33 kV T/F by 2 X 50 MVA, 132/33kV T/F at 132kV Nimbhora S/s under EHV O&M Division, Jalgaon, for submission to GCC for approval.

Agenda Point No. 28:

Replacement of 2 X 25 MVA, 132/33kV by 2 X 50 MVA, 132/33kV T/F at 132kV ECR Deepnagar S/s under EHV O&M Division, Jalgaon.

MSETCL representative placed before the MTC a proposal for Replacement of 2 X 25 MVA, 132/33kV by 2 X 50 MVA, 132/33kV T/F at 132kV ECR Deepnagar S/s under EHV O&M Division, Jalgaon.

MSETCL representative stated that the 132kV ECR Deepnagar Substation was commissioned in the year 1968. 132kV ECR Deepnagar S/s caters load of Bhusawal, Bodwad, Muktainagar, Varangaon & Deepnagar rural through 2 nos. of 25 MVA, 132/33 kV T/Fs.

The maximum loading on both T/Fs are more than 30 % of installed capacity. This scheme is proposed under 'Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above, the scheme of replacement of 2X25MVA, 132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs are proposed at 132kV ECR Deepnagar S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 2 X 25 MVA, 132/33kV by 2 X 50 MVA, 132/33kV T/F at 132kV ECR Deepnagar S/s under EHV O&M Division, Jalgaon, for submission to GCC for approval.

Agenda Point No. 29:

Providing additional 1x25MVA, 132/33kV power transformer along with HV & LV bays along with 33 kV Bus extension at 132kV Janai Substation under EHV (O&M) Division, Baramati

MSETCL representative placed before the MTC a proposal for providing additional 1x25MVA, 132/33kV power transformer along with HV & LV bays along with 33 kV Bus extension at 132kV Janai Substation under EHV (O&M) Division, Baramati

MSETCL representative stated that the 132 kV Janai substation was commissioned in the year 1999 and feeds some parts of the Baramati and Daund Taluka under the Pune District. Presently at 132 kV Janai substation, 2 nos. of 25 MVA, 132/33 kV T/f are installed. The peak load on both T/Fs are more than 70%. During outage/Breakdown of either of the T/f, load is not managed on other T/f i.e. not satisfying N-1 criteria. Hence, considering the present loading condition, outage constraints and to satisfy N-1 criteria additional T/F is proposed at 132kV Janai S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1x25MVA, 132/33kV power transformer along with HV & LV bays alongwith 33 kV Bus extension at 132kV Janai Substation under EHV (O&M) Division, Baramati, for submission to GCC for approval.

Agenda Point No. 30:

Procurement of 06 sets of Emergency Restoration System (ERS) comprising of 10 towers each (Suspension Towers - 6 nos. and Angle Towers - 4 nos.) for MSETCL

MSETCL representative placed before the MTC a proposal for procurement of 06 sets of Emergency Restoration System (ERS) comprising of 10 towers each (Suspension Towers - 6 nos. and Angle Towers - 4 nos.) for MSETCL.

MSETCL Representative further stated that at present, MSETCL is having 2 sets of ERS towers (each set comprising of 7 towers, kept at Amravati and Vashi zone) since 2006. Since then, no procurement has been done for this item.

MSETCL representative informed that the state of Maharashtra has faced various storms in past 3 to 4 years such as Nisarg, Tauktae, Biparjoy etc. During this period if any transmission tower collapse then in order to bring out normalcy of power supply ERS is important and necessary so as to reduce the interruption time. Also these ERS are used for diversion of lines in urban during various project activities without hampering the continuity of the supply through critical lines. As per Disaster Management Plan circulated by CEA, sufficient quantity of ERS system is to maintained & utilized by each transmission utility during disasters & natural calamities.

MSETCL representative further highlighted the benefits of ERS scheme, as follows:

- **Speed of Erection:** With ERS Towers can be erected within four hours, without heavy equipment.
- **Flexibility & Modularity of Design:** ERS is made of standard, interchangeable components that make it straightforward to adapt the structures for site specific situations.
- **Logistics & Deployability:** ERS towers are stored in containers. Smaller Components, fittings and fasteners are stored in boxes and larger components are paced securely and smartly to ensure quick unpacking and faster erection times.

He further added that Locations of ERS will be as follows:

Sr. No.	Particulars	Zone
1	ERS 1	Amravati
2	ERS 2	Ch. Shambhaji Nagar
3	ERS 3	Karad
4	ERS 4	Nagpur
5	ERS 5	Pune
6	ERS 6	Vashi
7	Existing ERS	Vashi
8	Existing ERS	Nasik

Considering all facts & benefits, MSETCL Representative highlighted the necessity of this scheme.

After detailed deliberation and discussion, the committee recommended the above proposal of Procurement of 06 sets of Emergency Restoration System (ERS) comprising of 10 towers each (Suspension Towers - 6 nos. and Angle Towers - 4 nos.) for MSETCL, for submission to GCC for approval.

Agenda Point No. 31:

Replacement of existing conductor of 220kV Jamde -Dondaicha 1 & 2 (Length = 34+34=68 ckm) by High performance/Ampacity conductor under Nashik Zone

MSETCL representative placed before the MTC a proposal for Replacement of existing conductor by High Ampacity conductor of 220kV Jamde -Dondaicha 1 & 2 (Length = 34+34=68 ckm) under Nashik Zone

MSETCL representative stated that t 220kV Jamde s/s is purely Hybrid Generation based s/s commissioned on 23.10.2005 having total capacity of 400MVA. Total sanctioned generation for wind generating feeder is 337 MW & for Solar generating feeder 70MW (total about 400MW). For evacuating this total generation, there are three no. of 220kV lines, namely 220kV Jamde-Valve line, 220kV Jamde-Dondaicha line 1 & 220kV Jamde-Dondaicha line 2. Both 220kV Jamde-Dondaicha circuits are main source lines for 220kV Dondaicha s/s.

220kV Dondaicha s/s is purely load consuming s/s, further 220kV Jamde is also connected to purely generating s/s i.e. 220kV Valve s/s through 220kV S/C line. The total wind generation at 220kV Valve is 157 MW. In this way the total power flow via 220kV Jamde s/s to 220kV Dondaicha is about 557MW/1671Amp (400+157=557MW) through 220kV Jamde Dondaicha Line 1 & 2. Both circuits have 0.4 ACSR zebra conductor having full load capacity of 840A. During the full load condition, if any one circuit gets tripped, then the load on other circuit is unable to be managed, hence the situation for forced generation curtailment for the generating feeder may arise. Hence replacement of existing 0.4 Zebra ACSR conductor by adequate HPC (High Performance Conductor) for 220kV Jamde Dondaicha 1 & 2 is necessary.

Benefits of scheme:

- (a) The Capacity of the said corridor will be increased.
- (b) Criteria of N-1 system compliance will be addressed.
- (c) Load trimming due to tripping will be eliminated.
- (d) Reduction in interruptions/tripping & occurrences..
- (e) Reliability and availability of the system will be improved.
- (f) Life enhancement of existing line.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of existing conductor by High Ampacity conductor of 220kV Jamde -Dondaicha 1 & 2 (Length = 34+34=68 ckm) under Nashik Zone, for submission to GCC for approval.

Agenda Point No. 32:

Replacement of existing conductor of 132KV Satana-Dindori line (Length=80 ckm) by High performance/ampacity conductor under Nashik Zone

MSETCL representative placed before the MTC a proposal for Replacement of existing conductor by High Ampacity conductor of 132KV Satana-Dindori line (Length=80 ckm) under Nashik Zone

MSETCL representative stated that 132KV Satana-Dindori line, existing conductor is 0.2 ACSR panther having current carrying capacity of 395Amp at 65°C. Further Vasaka Co- Generation is attached at 132 kV level to 132kV Satana –Dindori line.

MSEDCL is implementing various schemes for Agriculture & Industrial connections. Additional load of 30 MVA is anticipated in this area as per the rate of load growth of 10% per year in the next three years. He mentioned the following benefits of scheme:

Benefits of the Scheme:

- The Capacity of the said corridor will be increased.
- Criteria of N-1 system compliance will be addressed.
- Load trimming due to tripping will be eliminated.
- Reduction in interruptions/tripping & occurrences..
- Reliability and availability of the system will be improved.
- Life enhancement of existing line.

After detailed deliberation and discussion, the committee recommended the above proposal Replacement of existing conductor by High Ampacity conductor of 132KV Satana-Dindori line (Length=80 ckm) under Nashik Zone, for submission to GCC for approval.

Agenda Point No. 33:

Replacement of existing conductor of 132kV Kekatnimbhora-Pahur DCDC line (Length=18+18=36 Ckm) by High performance/ampacity conductor under Nashik Zone.

MSETCL representative placed before the MTC a proposal for Replacement of existing conductor by High Ampacity conductor of 132kV Kekatnimbhora-Pahur DCDC line (Length=18+18=36 Ckm) under Nashik Zone.

MSETCL representative stated that 132kV Kekatnimbhora-Pahur Ckt-I & II are commissioned on 11.04.2022. The major source to 132kV Pahur s/s is 132kV Deepnagar. The second source is from 220kV Kekatnimbhora s/s through 132kV Kekatnimbhora-Pahur Ckt-I & II.

The Current carrying capacity of 0.2 Panther ACSR conductor at standard temp is 487Amp. The Max load till now reached on 132kV Kekatnimbhora-Pahur ckt-I is 31MW/142Amp & for 132kV Kekatnimbhora-Pahur Ckt-II is 31MW/146Amp which is 30 % of the capacity of conductor. There is upcoming 50MW solar generation of M/s Lucerne Solar Pvt Ltd at 132kV level of 220kV Kekatnimbhora s/s.

After commissioning of above solar generation of 50MW, one line may get overloaded upto 125 MW (Approx.). During contingency, i.e. when one ckt of 132kV Kekatnimbhora- Pahur D/C line is out of service, the other ckt will be loaded to 125 MW (approx.) which is above its rated thermal capacity.

In view of above, for evacuation of proposed 50MW solar generation, requires conversion of existing conductor with High Performance Conductor for 132kV Kekatnimbhora- Pahur D/C line to satisfy N-1 Compliance.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of existing conductor by High Ampacity conductor of 132kV Kekatnimbhora-Pahur DCDC line (Length=18+18=36 Ckm) under Nashik Zone, for submission to GCC for approval.

Agenda Point No. 34:

Replacement of existing 0.2 ACSR conductor along with hardwares of 132kV Akole- Kombhalne line (Length=22.50 Ckm) by High Performance/ampacity Conductor under Nashik.

MSETCL representative placed before the MTC a proposal for Replacement of existing 0.2 ACSR conductor along with hardwares by High Performance Conductor (HPC) of 132kV Akole- Kombhalne line (Length=22.50 Ckm).

MSETCL representative stated that 132 kV Kombhalne Substation caters the demand of Sangamner Taluka, Akole Taluka, adjoining rural area and adjoining industrial pockets. It has source from 220 kV Babhaleshwar Substation via 132 kV Sangamner - Akole substation.

132kV Kombhalne has both the Solar and Wind generation attached to it. Total Solar power generation at Kombhalne is 50 MW from Bhageria group (Pvt Power Supplier) and wind generation from M/s K. P. Power Pvt Ltd of 50 MW. Upcoming solar generation at Kombhalne is about 20MW from Bhageria group (Pvt Power Supplier). 132kV Akole- Kombhalne line is crucial for evacuating this solar power.

The 132kV Akole- Kombhalne line has 0.2 ACSR Panther conductor, having current carrying capacity of 487 Amp at 65°C. Considering future load growth and increasing Solar and Wind Power generation, more power will be needed to evacuate at Sangamner via 132kV Akole- Kombhalne line. Therefore it is recommended to replace existing conductor by high ampacity conductor.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of existing 0.2 ACSR conductor along with hardwares by High Performance Conductor (HPC) of 132kV Akole- Kombhalne line (Length=22.50 Ckm), for submission to GCC for approval.

Agenda Point No. 35:

Replacement of existing 0.2 ACSR conductor along with hardware's by High Performance Conductor (HPC) and strengthening of associated line end bays on a) 132kV Ghatodi-Pusad SC line, b) 132kV SC line from 220kV Warud-132kV Warud Ss, c) 132kV Nandgaonpeth – Amravati SC line for RE power evacuation under Green Energy Corridor (GEC) under Amravati zone

MSETCL representative placed before the MTC a proposal for Replacement of existing 0.2 ACSR conductor along with hardware's by High Performance Conductor (HPC) and strengthening of associated line end bays on a) 132kV Ghatodi-Pusad SC line, b) 132kV SC line from 220kV Warud-132kV Warud Ss, c) 132kV Nandgaonpeth – Amravati SC line for RE power evacuation under Green Energy Corridor (GEC) under Amravati zone

MSETCL representative mentioned that Amravati District is RE prone area, where various Solar IPPs have applied for Grid Connectivity and STU section has approved Grid Connectivity for about 1520 MW Solar IPPs.

Out of these, 615 MW Solar Plants are commissioned and in working and balance 905 MW Solar Plants are under construction stage & likely to be completed soon.

In view of such upcoming Solar Power Generation in Amravati district, the existing EHV lines may get loaded beyond their thermal limit.

Considering existing & proposed RE generations, STU carried out Load flow study of above lines and recommended for HPC conversion on said EHV lines after load flow study.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of existing 0.2 ACSR conductor along with hardware's by High Performance Conductor (HPC) and strengthening of associated line end bays on a) 132kV Ghatodi-Pusad SC line, b) 132kV SC line from 220kV Warud-132kV Warud Ss, c) 132kV Nandgaonpeth – Amravati SC line for RE power evacuation under Green Energy Corridor (GEC) under Amravati zone, for submission to GCC for approval.

Agenda Point No. 36:

Replacement of existing conductor along with hardwares by High Performance Conductor (HPC) on various EHV lines and strengthening of associated line end bays for RE power evacuation under Green Energy Corridor (GEC) under Chhatrapati Sambhajnagar zone

- a) 132kV Partur-Partur DC line (14.7 km)
- b) 132kV Rajpimpri-Paithan line (11km)
- c) 220kV Solapur PG- Narangwadi DC line (25.81km)
- d) 220kV Beed-Patoda-Manjarsumba line (45km)
- e) 220kV Beed-Patoda line (35km)
- f) 132kV Bhoom-Kallam line (km)
- g) 132kV Bhoom-Paranda line (km)

MSETCL representative placed before the MTC a proposal for cited scheme. He mentioned that Chhatrapati Sambhajnagar District is RE prone area and due to such upcoming Solar Power Generation, the existing EHV lines may get loaded beyond their thermal limit. Considering existing & proposed RE generations, In addition to above STU has recommended for HPC conversion on above said EHV lines after load flow study.

132kV Partur-Partur DC line (14.33 Ckm):

132kV Partur substation has installed capacity of 2x50MVA, 132/33kV transformer & there is only one outgoing line from 132kV Partur substation. i.e. 132kV Partur-Jalna old line. Thus, to increase system reliability, second circuit stringing on 132kV Partur-Jalna old line is also proposed.

In addition to above, 100MW Solar Power Project of M/s. RK Infra Management Ltd. generation is proposed at 132kV level of 220/132/33kV Partur substation. STU has carried out load flow study as per feasibility report received from field office.

After Load flow study, STU department has concluded that, to evacuate this 100MW generation under N- 1 compliance, replacement of 132kV Partur (220kV)- 132kV Partur DC line using high performance conductor is required.

Thus, for evacuation of above RE, it is necessary to strengthen the existing grid of EHV transmission lines under Jalna District. The same is also included for year 2022-23 in the STU plan 2022-23 to 2026-27.

220kV Solapur PG- Narangwadi DC line (149 Ckm)

220kV Solapur PG- Narangwadi DC line was commissioned on 30.06.2021, which is D/C on D/C and has 74 km of route length. The 0.4 ACSR ZEBRA conductor is used on these lines having current carrying capacity of 590A @ 65 deg C & 739A @75 deg C. At present 715 MW Wind/Solar Generation project application are received at STU. Therefore, it is necessary to replacement the conductor of said line with high performance conductor.

220kV Beed-Patoda (47 Ckm) & Beed- Manjarsumba –Patoda (57 Ckm)

220kV Beed-Patoda DC line was commissioned on 14.07.2012, which is DC on DC and has 47 km of route length. The ACSR ZEBRA conductor is used on these lines having current carrying capacity of 590A @ 65°C & 739A @75°C.

In the year 2016, 220kV Manjarsumba substation was commissioned by making LILO on 2nd ckt. of 220kV Beed-Patoda line. The power supply from these two circuits feed to 220kV Manjarsumba, 220kV Patoda & 33kV substations connected to 220kV Manjarsumba & 220kV Patoda substations, which feeds power to urban, rural & agricultural area of Beed, Shirur & Patoda taluka of Beed district. 220/33kV Patoda substation has 220kV DC source line from 220/132/33kV Beed substation (one ckt.via 220kV Manjarsumba substation). It has 2x50MVA, 220/33kV transformers installed at substation.

500 MW Solar, 100 MW Wind Generation proposal were sanctioned by STU through Grid Connectivity at 220 kV Patoda S/s, further 500 MW hybrid Generation application received at STU. In view of the same, it is necessary to replace the conductor of said line with high performance conductor.

132kV Rajpimpri-Paithan line (59Ckm):

132kV Georai-Paithan SCDC line was commissioned on 14.02.1989, which is SC on DC tower.

The 0.2 ACSR PANTHER conductor used on this line is having current carrying capacity of 395A @ 65°C & 487A @75°C. In the year 2014, for evacuation of M/s. Panama Wind generation of 80MW at Mirkala Tal. Georai, the pooling station at Rajpimpri was made LILO on 132kV Georai-Paithan line. Most of the urban, rural & agricultural load of Georai, Majalgaon Taluka and Beed district & Paithan Taluka of Aurangabad district are fed from this line. At present 80 MW Wind Generation is connected at nearby vicinity. In addition to above 250 MW Hybrid (Solar+Wind) Power Generation proposed. For evacuation of these Hybrid Power Generation, it is necessary to replace the conductor of said line with high performance conductor.

132kV Bhoom-Kallamb line (43 Ckm) & 132kV Bhoom-Paranda line (37 Ckm):

132kV Bhoom-Kallamb & 132kV Bhoom-Paranda lines were commissioned in year 1992 & 2011 respectively. Both are S/C line on D/C tower. The 0.2 ACSR PANTHER conductor is used on this line having current carrying capacity of 395A @ 65°C & 487A @75°C. Most of urban, rural & agricultural area of Kallamb, Bhoom, Paranda & Washi taluka of Osmanabad district is fed from these lines.

132/33kV Bhoom substation is fed by 220/132/33kV Paranda substation by two connections i.e. 132kV Bhoom-Paranda S/C line and 132kV Paranda-Kharda-Bhoom S/C line.

Apart from this, Bhoom substation is also fed from 400/220/132kV Girawali substation via 132kV Girawali-Yedeshwari (Co-Gen)-Kaij- Kallamb-Bhom S/C line. 132kV Bhoom substation has 2x50MVA, 132/33kV transformers having average load of 43.8MW. At present 70 MW Solar Generation application received at STU. Further 150 MW Hybrid Power Project Load Flow study has been carry out by STU. After load flow study, it is observed that, with proposed generations, the above said lines are getting overloaded. Thus, for evacuation of 150MW hybrid power, it is necessary to replace the conductor of said line with high performance conductor.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of existing conductor along with hardware's by High Performance Conductor (HPC) on various EHV lines and strengthening of associated line end bays for RE power evacuation under Green Energy Corridor (GEC) under Chhatrapati Sambhajnagar zone, for submission to GCC for approval

Agenda Point No. 37:

Replacement of existing 0.4 ACSR conductor along with hardware's by High Performance Conductor (HPC) along with hardware's of a) 220kV Khaparkheda (new)- Kanhan (61.53km), b) 220kV Khaparkheda (old)- Suryalaxmi (56.35km) & c) 220kV Suryalaxmi- Kanhan (19.5km) under EHV PC O&M Zone, Nagpur

MSETCL representative placed before the MTC a proposal of Replacement of existing 0.4 ACSR conductor along with hardware's by High Performance Conductor (HPC) along with hardwares of a) 220kV Khaparkheda (new)- Kanhan (61.53km), b) 220kV Khaparkheda (old)- Suryalaxmi (56.35km) & c) 220kV Suryalaxmi- Kanhan (19.5km) under EHV PC O&M Zone, Nagpur

MSETCL representative stated that 220kV Khaparkheda substation and 220kV Kanhan substation, both under EHV (O&M) Division, Nagpur, are important and grid-connected substations. 220kV Khaparkheda substation was commissioned on 01.04.1988 and has completed almost 35 years of service life. 220kV

Khaparkheda - Suryalaxmi circuit is heavily loaded during the months of April, May and June, with the load reaching up to 580A. In the event of tripping or outage on the 220kV Khaparkheda - Kanhan circuit, the load increases up to 780A. Therefore, it is necessary to replace the existing 0.4 single zebra conductor with High Performance Conductor (HPC). Additionally, the following changes need to be carried out in the 220kV TBC and 220kV Suryalaxmi bay for the aforementioned work. Presently, the 220kV CTs have a ratio of 800-400-200/1A, which needs to be replaced by 1600/1 or 1600-800/1A, 5C. Also, the 220kV isolators and wave traps with a 1250A capacity need to be replaced by a 2000A capacity.

220kV Kanhan substation was commissioned on 01.04.1988 and has completed almost 35 years of service life. The 220kV Khaperkheda - Kanhan circuit originating from the 400kV Khaperkheda GCR and the 220kV Kanhan- Suryalaxmi circuit are the two sources feeding power to the 220kV Kanhan substation.

Additionally, the incoming source for the 220kV Suryalaxmi substation is the 220kV Khaperkheda-Suryalaxmi circuit originating from the 220kV Khaperkheda GCR. During the summer season in April 2022, the total load on the 220kV Khaperkheda - Kanhan (624 Amps, 220 MW) and 220kV Suryalaxmi-

Kanhan (526 Amps, 184 MW) circuits exceeded 1150A at the 220kV Kanhan substation. In this condition, if any one of the above circuits trips, the total current exceeds the rating of the conductor, i.e., 737 A. Consequently, the other circuit becomes overloaded and trips, leading to a total incoming supply failure at the 220kV Kanhan, 220kV Umred, 220kV Bhandara, 132kV Mauda, and 132kV Mansar substations.

On 10.05.2022, the 220kV Khaperkheda- Kanhan circuit tripped due to a fault at the Khaperkheda end. As a result, the 220kV Khaperkheda- Suryalakshmi circuit was overloaded and tripped at the Khaperkheda end, and the 220kV Kanhan, 220kV Umred, 220kV Bhandara, 132kV Mauda, 132kV Mansar substations, and some parts of Nagpur and Chandrapur district went into dark.

To avoid this kind of incidences, LTS is commissioned on the 220kV Khaperkheda- Kanhan and 220kV Suryalakshmi- Kanhan circuits. LTS operates when the load on the 220kV Khaperkheda- Kanhan circuit or 220kV Suryalakshmi- Kanhan circuit reaches 728 Amps.

Due to the operation of LTS at 132kV Mansar, 132kV Pardi, 132kV Uppalwadi, 132kV Bhandara, 132kV Mauda, 33kV Incomer-1, and 33kV Incomer-2 will trip at the 220kV Kanhan substation, thereby making 132kV Mansar substation dark and causing the system to become unstable.

This will also result in revenue loss. Hence, to avoid any unforeseen incidents due to an increase in load and to maintain the stability of power supply to the 220kV Khaparkheda (new)- Kanhan circuit, 220kV Khaparkheda (old)- Suryalaxmi circuit, and 220kV Suryalaxmi- Kanhan circuit, it is necessary to replace the existing 0.4 ACSR conductor (Zebra) of the above lines with a high performance conductor.

It will also be necessary to replace the existing 245kV CTs, 800-400/1A, with 245kV CTs, 1600-800/1A, at the 220kV Kanhan, 220kV Suryalaxmi, and 220kV Khaparkheda substation, so that bay equipment will be compatible with the capacity of high performance conductor.

Furthermore, outages on the 220kV Khaparkheda (new)- Kanhan circuit, 220kV Khaparkheda (old)- Suryalaxmi circuit, and 220kV Suryalaxmi- Kanhan circuit are not easily sanctioned due to system constraints. All maintenance works couldn't be completed on time. Hence, considering the necessity and importance, a subject scheme is prepared and proposed for approval.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of existing 0.4 ACSR conductor along with hardwares by High Performance Conductor (HPC) along with hardware's of a) 220kV Khaparkheda (new)- Kanhan (61.53km), b) 220kV Khaparkheda (old)- Suryalaxmi (56.35km) & c) 220kV Suryalaxmi- Kanhan (19.5km) under EHV PC O&M Zone, Nagpur, for submission to GCC for approval.

Agenda Point No. 38:

Providing additional 1X100MVA, 220/132kV ICT along with HV & LV bays at 220kV Shivajinagar S/s under EHV O&M Circle, Bhusawal.

MSETCL representative placed before the MTC a proposal for Providing additional 1X100MVA, 220/132kV ICT along with HV & LV bays at 220kV Shivajinagar S/s under EHV O&M Circle, Bhusawal.

MSETCL representative stated that 220/132/33kV Shivajinagar Substation is one of the important generation attached substation under Dhule District, said substation was commissioned in Year 2013.

Solar Generation is connected to 220kV Shivajinagar substation. After addition of 70 MW generations, the load on each Transformer during peak hours will be upto 70-75%. And, in that case if one of the TF is under outage / Tripping, the generation will not be completely managed on another 100 MVA TF resulting in loss of generation and revenue loss to MSETCL. New generation is proposed at 132kV level (100 MW through 132kV Shivajinagar-Huoban-Sakri Line) & also proposed at 33kV level. In case of tripping/outage on 1 No. of ICT load cannot managed on other ICT i.e. Not fulfil the (N-1) criteria. Hence, to satisfy (N-1) criteria & also to meet the future load demand, replacement of 2X100MVA, 220/132kV ICTs by 2X200MVA, 220/132kV ICT-I & II is proposed at 220kV Shivajinagar S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1X100MVA, 220/132kV ICT along with HV & LV bays at 220kV Shivajinagar S/s under EHV O&M Circle, Bhusawal, for submission to GCC for approval.

Agenda Point No. 39:

Providing additional 1X100 MVA 220/33-33kV T/F along with HV & LV bays at 220kV Shivajinagar S/s under EHV O&M Circle, Bhusawal.

MSETCL representative placed before the MTC a proposal for, Providing additional 1X100 MVA 220/33-33kV T/F along with HV & LV bays at 220kV Shivajinagar S/s under EHV O&M Circle, Bhusawal.

MSETCL representative stated that 220/132/33kV Shivajinagar Substation is one of the important generation attached substation under Dhule District, said substation was commissioned in Year 2013.

Solar Generation is connected to 220kV Shivajinagar substation. After addition of 70 MW generations, the load on each Transformer during peak hours will be upto 70-75%. And, in that case if one of the TF is under outage / Tripping, the generation will not be completely managed on another 100 MVA TF resulting in loss of generation and revenue loss to MSETCL. New generation is proposed at 132kV level (100 MW through 132kV Shivajinagar-Huoban-Sakri Line) & also proposed at 33kV level. In case of tripping/outage on 1 No. of T/F load cannot managed on other T/F i.e. Not fulfil the (N-1) criteria. Hence, to satisfy (N-1) criteria & also to meet the future load demand, addition of 1X100MVA, 220/33-33kV T/F is proposed at 220kV Shivajinagar S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1X100 MVA 220/33-33kV T/F along with HV & LV bays at 220kV Shivajinagar S/s under EHV O&M Circle, Bhusawal, for submission to GCC for approval.

Agenda Point No. 40:

Providing additional 1X25 MVA, 132/33kV T/F along with HV and LV bays at 132kV Samsherpur S/s under EHV O&M Circle, Bhusawal.

MSETCL representative placed before the MTC a proposal for, Providing additional 1X25 MVA 132/33kV T/F along with HV and LV bays at 132kV Samsherpur S/s under EHV O&M Circle, Bhusawal.

MSETCL representative stated that 132kV Samsherpur Substation under EHV O&M Division, Dhule was commissioned in Year 2016. 132kV Samsherpur S/s is attached with 30 MW Co-generation.

The load of Samsherpur is catered by 25 MVA 132/33kV T/F. Presently 01 no. of 33kV Bay requirement for 33kV Hatmohida Feeder is submitted by MSEDCL authorities in Year 2018. 132kV Samsherpur Substation is single Transformer Substation, hence in case of outage/tripping the load of Samsherpur will get affected. i.e. Not fulfil the (N-1) criteria.

Hence, to satisfy (N-1) criteria & also to meet the future load demand, additional 1X25 MVA 132/33kV T/F along with HV and LV Bay is proposed at 132kV Samsherpur S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1X25 MVA 132/33kV T/F along with HV and LV bays at 132kV Samsherpur S/s under EHV O&M Circle, Bhusawal, for submission to GCC for approval.

Agenda Point No. 41:

Replacement of 1X25MVA, 220/33kV T/F by 1X50 MVA, 220/33kV T/F at 220kV Dhule S/s under EHV O&M Circle, Bhusawal.

MSETCL representative placed before the MTC a proposal for, Replacement of 1X25MVA, 220/33kV T/F by 1X50 MVA, 220/33kV T/F at 220kV Dhule S/s under EHV O&M Circle, Bhusawal.

MSETCL representative stated that 220kV Dhule Substation is very vital important Substation under EHV (O&M) Circle, Bhusawal commissioned in year 2011. The Total installed capacity of 220kV Dhule Substation is 475 MVA (i.e. 2X200 MVA 220/132kV ICTs and 1X50 & 1X25 MVA 220/33kV Power Transformers);

Most of the load of Dhule Urban and Rural area is catered by 50 MVA 220/33kV TF-I and 25 MVA 220/33kV TF-II. On 25 MVA TF-II there are 2 heavily loaded feeder i.e. 33kV Lamkani and 33kV Varkhedi Feeder. 01 no. of new 33kV Feeder viz. 33kV Parola Road is commissioned at 220kV Dhule Substation and load will be taken by MSEDCL shortly.

The proposed scheme fulfils the augmentation criteria. In case of tripping/outage on 1 No. of T/F load cannot be managed on other T/F i.e. Not fulfil the (N-1) criteria. Hence, to satisfy (N-1) criteria & also to meet the future load demand, replacement of 1X25MVA, 220/33kV T/F by 1X50 MVA, 220/33kV T/F is proposed at 220kV Dhule S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 1X25MVA, 220/33kV T/F by 1X50 MVA, 220/33kV T/F at 220kV Dhule S/s under EHV O&M Circle, Bhusawal, for submission to GCC for approval.

Agenda Point No. 42:

Replacement of 2X25MVA, 220/33kV T/Fs by 2X50MVA, 220/33kV T/Fs at 220kV Bambhori S/s under EHV O&M Circle, Bhusawal.

MSETCL representative placed before the MTC a proposal for Replacement of 2X25MVA, 220/33kV T/Fs by 2X50MVA, 220/33kV T/Fs at 220kV Bambhori S/s under EHV O&M Circle, Bhusawal.

MSETCL representative stated that 220kV Bambhori Substation is commissioned in year 2011. The Total installed capacity of 220kV Bambhori Substation is 250 MVA (i.e. 2X100 MVA 220/132kV ICTs and 2X25 MVA 220/33kV Power Transformer).

The load of Jalgaon Rural, North Maharashtra University and Industrial Load nearby Jalgaon and Dharangaon Taluka – Rural, Ag, Industrial and Domestic Load is catered by 220kV Bambhori Substation. In case of tripping/outage on 1 No. of T/F load cannot managed on other T/F i.e. Not fulfil the (N-1) criteria. This scheme is proposed under ‘Mukhyamantri Saur Krishi Vahini Yojana (MSKVY 2.0) to ensure evacuation reliability & N-1 compliance. In view of above the scheme of replacement of existing 2X25MVA, 220/33kV T/Fs by 2X50MVA, 220/33kV T/Fs is proposed at 220kV Bambhori S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 2X25MVA, 220/33kV T/Fs by 2X50MVA, 220/33kV T/Fs at 220kV Bambhori S/s under EHV O&M Circle, Bhusawal, for submission to GCC for approval.

Agenda Point No. 43:

Replacement of 1X20MVA, 132/33kV T/F by 1X50MVA, 132/33kV T/F at 132kV Savda S/s under EHV O&M Circle, Bhusawal.

MSETCL representative placed before the MTC a proposal for Replacement of 1X20MVA, 132/33kV T/F by 1X50MVA, 132/33kV T/F at 132kV Savda S/s under EHV O&M Circle, Bhusawal.

He stated that 132kV Savda Substation is commissioned in year 1975. The load of Savda, Faizpur Urban & Savda, Faizpur Rural is catered by 132kV Savda Substation. Presently, in case of failure/ outage / tripping of one of the existing 50 MVA T/F remaining power transformers (i.e. other 50 MVA and 20 MVA T/Fs) not catered the load which may result into heavy load shedding as in Savda & Faizpur rural region. i.e. Not fulfil the (N-1) criteria.

Hence, to satisfy (N-1) criteria & also to meet the future load demand, replacement of 1X20MVA, 132/33kV T/F by 1X50MVA, 132/33kV T/F is proposed at 132kV Savda S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 1X20MVA, 132/33kV T/F by 1X50MVA, 132/33kV T/F at 132kV Savda S/s under EHV O&M Circle, Bhusawal, for submission to GCC for approval.

Agenda Point No. 44:

Replacement of 2X25MVA, 132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs at 132kV Dharangaon S/s under EHV O&M Circle, Bhusawal.

MSETCL representative placed before the MTC a proposal for Replacement of 2X25MVA, 132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs at 132kV Dharangaon S/s under EHV O&M Circle, Bhusawal.

MSETCL representative stated that 132/33kV Dharangaon Substation is commissioned in year 1987. The load in and around Dharangaon is catered by 132/33kV 25 MVA TF-I & T/F-II.

In case of tripping/outage on 1 No. of T/F load cannot managed on other T/F i.e. Not fulfil the (N-1) criteria. Hence, to satisfy (N-1) criteria & also to meet the future load demand, replacement of 2X25MVA, 132/33kV T/F by 2X50MVA, 132/33kV T/F is proposed at 132kV Dharangaon S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 2X25MVA, 132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs at 132kV Dharangaon S/s under EHV O&M Circle, Bhusawal, for submission to GCC for approval.

Agenda Point No. 45:

Providing additional 1X50MVA, 132/33kV T/F along with HV and LV bays at 132kV New MIDC Jalgaon S/s under EHV O&M Circle, Bhusawal.

MSETCL representative placed before the MTC a proposal for Providing additional 1X50MVA, 132/33kV T/F along with HV and LV bays at 132kV New MIDC Jalgaon S/s under EHV O&M Circle, Bhusawal.

MSETCL representative stated that 132kV New MIDC Jalgaon Substation is cater most of the urban, industrial and rural load of Jalgaon District; said substation was commissioned on Dtd. 11.03.1992.

132kV New MIDC Jalgaon Substation is resided in District headquarter feeding the urban area/Civil hospital/Private Hospitals/Critical Centre i.e. medical Hub/VIP rest house/ some of the agriculture/rural area and Jalgaon MIDC area having many HT consumers. MSEDCL has proposed 04 nos. of Substation [Out of which 03 nos. of 33kV Substation in MIDC area and 01 no. of 33kV Substation in Chincholi Shivar (Medical Hub Centre)]; also increasing MVA capacity of existing 33kV MSEDCL Substation at their end i.e. approximately 40-50 MVA load demand will increased in future.

In case of tripping/outage on 1 No. of T/F load cannot managed on other T/F i.e. Not fulfil the (N-1) criteria. Hence, to satisfy (N-1) criteria & also to meet the future load demand, additional 1X50MVA, 132/33kV T/F along with HV and LV Bay is proposed at 132kV New MIDC Jalgaon S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Providing additional 1X50MVA, 132/33kV T/F along with HV and LV bays at 132kV New MIDC Jalgaon S/s under EHV O&M Circle, Bhusawal, for submission to GCC for approval.

Agenda Point No. 46:

Replacement of 2X25MVA,132/33kV T/Fs by 2X50 MVA, 132/33kV T/Fs at 132kV Parola S/s under EHV O&M Circle, Bhusawal.

MSETCL representative placed before the MTC a proposal for Replacement of 2X25MVA,132/33kV T/Fs by 2X50 MVA, 132/33kV T/Fs at 132kV Parola S/s under EHV O&M Circle, Bhusawal.

MSETCL representative stated that 132kV Parola Substation is commissioned in year 2000. It caters the load of Parola Taluka and nearby villages. In case of tripping/outage on 1 No. of T/F, load cannot be managed on other T/F i.e. Not fulfil the (N-1) criteria. Hence, to satisfy (N-1) criteria & also to meet the future load demand, replacement of 2X25MVA,132/33kV T/Fs by 2X50 MVA, 132/33kV T/Fs is proposed at 132kV Parola S/stn.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 2X25MVA,132/33kV T/Fs by 2X50 MVA, 132/33kV T/Fs at 132kV Parola S/s under EHV O&M Circle, Bhusawal, for submission to GCC for approval.

Agenda Point No. 47:

Replacement of 2X25MVA,132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs at 132kV Bodwad S/s under EHV O&M Circle, Bhusawal.

MSETCL representative placed before the MTC a proposal for Replacement of 2X25MVA,132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs at 132kV Bodwad S/s under EHV O&M Circle, Bhusawal.

MSETCL representative stated that 132kV Bodwad Substation is commissioned in year 2002. It caters the load of Bodwad, Varangaon Rural, Jamner Rural. In case of tripping/outage on 1 No. of T/F load cannot be managed on other T/F i.e. Not fulfil the (N-1) criteria. Hence, to satisfy (N-1) criteria & also to meet the future load demand, replacement of 2X25MVA, 132/33kV T/Fs by 2X50 MVA, 132/33kV T/Fs is proposed at 132kV Bodwad S/stn.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of 2X25MVA,132/33kV T/Fs by 2X50MVA, 132/33kV T/Fs at 132kV Bodwad S/s under EHV O&M Circle, Bhusawal, for submission to GCC for approval.

Agenda Point No. 48:

Replacement of existing 0.4 ACSR Zebra Conductor by equivalent HPC (High Performance Conductor of 220kV PGCIL - Vasai Line (Presently termed as 220kV PGCIL-Nalasopra line) & 220kV Kamba - Vasai Line under the jurisdiction of Line (M) Sub-Division, Boisar under EHV O&M Circle, Kalwa & EHV Line maintenance S/dn., Padghe under EHV O&M Dn., Dombivali under EHV O&M Circle, Panvel

MSETCL representative placed before the MTC a proposal for Replacement of existing 0.4 ACSR Zebra Conductor by equivalent HPC (High Performance Conductor of 220kV PGCIL - Vasai Line (Presently termed as 220kV PGCIL-Nalasopra line) & 220kV Kamba - Vasai Line under the jurisdiction of Line (M)

Sub-Division, Boisar under EHV O&M Circle, Kalwa & EHV Line maintenance S/dn., Padghe under EHV O&M Dn., Dombivali under EHV O&M Circle, Panvel.

220kV PGCIL-Vasai Line:

220kV PGCIL-Vasai Line (now converted to 220kV PGCIL Nalasopara Line since 16.10.2017) was commissioned in the year 1997. The Scheme for Permanent Second Source to 220kV Nalasopara S/Stn is already approved under MBR No. MSETCL/ED/TR.O&M/SE-II/EE-VII/321 dated 15.01.2021 [(Dir (Ops) – 1753 dated 11.01.2021)]. Under this scheme the now dead 220kV PGCIL - Nalasopara Line will be recommissioned within one year (LOA issued to M/s. MD Transcon Pvt. Ltd, Navi Mumbai vide no. CE/VSH/2480 dated 27.09.2022). And the present 220kV PGCIL - Nalasopara Line will be converted to original 220kV PGCIL-Vasai Line in coming years.

Presently, 220kV PGCIL - Nalasopara (future 220kV PGCIL-Vasai) Line has 0.4 ACSR Zebra Conductor with current carrying capacity of 737 A and thermal capacity of 810 A. The present loading of 220kV PGCIL - Nalasopara is 771A/ 271 MW, and in future this line will be converted as the 220kV PGCIL - Vasai, then though the load of 220kV Nalasopara S/S will be cut off, but the additional load of about 200 MW will be added on this line due to upcoming 05 nos. of S/S which are proposed by DFCCIL, Bullet Train, MRVCL and MSETCL.

Thus, considering the present loading situation and upcoming loads and conversion status, the total loading on this line will be much higher than the thermal rating of 0.4 ACSR Zebra Conductor and the incident of snapping of conductor, elongation of conductor due to aging leading to problem of low ground clearance and induction to the people in low clearance area will be more and there is risk of electrically fatal accidents.

220kV Vasai Kamba:

The 220kV Vasai Kamba Line which was firstly 220kV Padgha - Tarapur Circuit - 2 line and commissioned in the year 1984, then converted to 220kV Padgha - Boisar CKT 2 in the year 1987 and then converted as 220kV Padgha Kamba Line in the year 1997 and in the year 2002 as 220kV Vasai Kamba Line which means this line have crossed the useful life of 35 years. Hence, due to aging effect the elongation of conductor has started and in various span the conductor came down and there is ground clearance issue, most of the time the local public complain regarding the induction due to line. Though, the incidents of conductor snapping on these two lines are NIL but as the line has rendered the useful service life, it needs the replacement for better service in future years.

If the 220kV PGCIL - Nalasopara (future 220kV PGCIL Vasai) Line trips, then the 220kV Kamba - Vasai & 220kV Padgha - Nalasopara Vasai Line cannot take the load of 220kV Nalasopara, 220kV Vasai S/S with existing conductor. Recently, such incident happened on 01.09.2022 when 220kV PGCIL - Nalasopara Line tripped and then 220kV Padgha - Nalasopara - Vasai Line also tripped resulting in complete darkness at 220kV Nalasopara S/S for 6 hours.

Therefore, considering all above aspects and in order to cater the present and future upcoming loads, the higher capacity conductor is required. He added that If the 220kV PGCIL - Nalasopara (future 220kV PGCIL Vasai) Line trips, then the 220kV Kamba - Vasai & 220kV Padgha - Nalasopara Vasai Line cannot take the

load of 220kV Nalasopara, 220kV Vasai S/S with existing conductor. Recently, such incident happened on 01.09.2022 when 220kV PGCIL - Nalasopara Line tripped and then 220kV Padgha - Nalasopara - Vasai Line also tripped resulting in complete darkness at 220kV Nalasopara S/S for 6 hours.

Also, most of the parts of these two lines passes though the creek area, due to presence of saline weather, all the hardwares of these lines have rusted heavily and become prone to breakage and may result in frequent breakdown of line in coming years.

Thus, in order to cater the present and future loading and upcoming future industrial loads in the belt of Nalasopara and Vasai, Virar Industrial Belt and also to avoid the low ground clearance issue the replacement of existing 0.4 ACSR Zebra conductor with by equivalent HPC (High performance Conductor) is very much necessary. Therefore, considering all above aspects and in order to cater the present and future upcoming loads, the higher capacity conductor is required.

After detailed deliberation and discussion, the committee recommended the above proposal of Replacement of existing 0.4 ACSR Zebra Conductor by equivalent HPC (High Performance Conductor) of 220kV PGCIL - Vasai Line (Presently termed as 220kV PGCIL-Nalasopra line) & 220kV Kamba - Vasai Line under the jurisdiction of Line (M) Sub-Division, Boisar under EHV O&M Circle, Kalwa & EHV Line maintenance S/dn., Padghe under EHV O&M Dn., Dombivali under EHV O&M Circle, Panvel , for submission to GCC for approval.

Agenda Point No. 49:

Scheme for Construction of LILO on 400 kV Lonikand-I – Jejuri Ckt I with Quad Moose conductor at 765 kV Shikrapur (Pune, Power Grid) SS with replacement of Twin Moose conductor of existing line with High Performance Conductor (HPC). - Under Pune Zone

MSETCL representative placed before the MTC a proposal of Scheme for Construction of LILO on 400 kV Lonikand-I – Jejuri Ckt I with Quad Moose conductor at 765 kV Shikrapur (Pune, Power Grid) SS with replacement of Twin Moose conductor of existing line with High Performance Conductor (HPC). - Under Pune Zone

MSETCL representative stated that at present load of Pune Dist. is mainly fed from 400 kV Lonikand-I, Lonikand-II, Jejuri&Chakan SS. These 400 kV substations are dependent on three power sources which are: 400 kV Talegaon PG, 400 kV Koyna Stage IV via 400 kV Karad substation & 400 kV Parli Girwali via 400 kV Karjat substation.

The tripping / breakdown on any of these sources, results in overloading of major 400 kV & 220 kV lines in Pune District & force load shedding needs to be carried out on downstream 220 kV & 132 kV network. Hence for additional 400 kV source line, scheme for construction of 400 kV DC line from 765 kV Shikrapur (Pune, Power Grid) Substation to 400 kV Lonikand – II Substation was sanctioned. (BR No 154/11, dated 19.05.2022).In LFS it was clear that after execution of this modified scheme the fault level reduces from 44 kA to 35 kA at 400 kV Lonikand substation.

The strong source of 765 kV Shikrapur (Pune, PG) substation will be available to both the 400 kV Jejuri and Lonikand Substations. This scheme will be helpful in strengthening of CTU - STU network and enhance ATC / TTC of Maharashtra.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme for Construction of LILO on 400 kV Lonikand-I – Jejuri Ckt I with Quad Moose conductor at 765 kV Shikrapur (Pune, Power Grid) SS with replacement of Twin Moose conductor of existing line with High Performance Conductor (HPC). - Under Pune Zone, for submission to GCC for approval.

Agenda Point No. 50:

Establishment of 132/33 kV Selu s/s, Tal-Selu Dist: Parbhani.

MSETCL representative placed before the MTC a proposal of Establishment of 132/33 kV Selu s/s, Tal-Selu Dist: Parbhani.

MSETCL representative stated that at present, the power supply to Selu is fed from 132 kV Pathari , Jintur & 132 kV Partur s/s. Selu Taluka does not have any EHV substation. Existing 132 kV Pathari, 132kV Jintur & 132 kV Parthur s/s having lengthy 33kV feeders. Hence the consumers at the far end are facing low voltage problems. For 132 kV Parthur s/s increase in load growth is at the farthest end i.e. from 33 kV Dhengali Pimpalgaon, Walur switching stations and onwards. This stations are on 33 kV Selu feeder and 42.5 km, 43.5 km away from 132 kV Parthur respectively with %VR as 18.75%. Considering the geographical condition & existing electrical network, establishment of 132 kV Selu Substation will improve voltage regulation and power supply quality.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme for Establishment of 132/33 kV Selu s/s, Tal-Selu Dist: Parbhani, for submission to GCC for approval.

Agenda Point No. 51:

Scheme for conversion of 110 kV DCDC to 132 kV DCDC line from Mayani LILO point to Diganchi s/s for up gradation of voltage level

MSETCL representative placed before the MTC a proposal of Scheme for conversion of 110 kV DCDC to 132 kV DCDC line from Mayani LILO point to Diganchi s/s for up gradation of voltage level

MSETCL representative informed that in Satara & Sangli district main network is of 110 kV level, 110 kV Oglewadi - Degaon DCDC is the main transmission line which is in service since 1963. The line has completed its service of 60 years.

Line I of 110 kV Oglewadi-Degaon feeding to Mayani, Dighanchi & Pandharpur which caters major load of Mayani, Dighanchi area (100 MW) and is connected to co-gen plant (Sadguru SSK) (11.3 MW). Line-II made LILO to 110 kV Kaledhon (wind Power S/s) & 110 kV Palaswadi (TATA Solar S/s) for evacuation of renewable energy (wind & Solar, 150 MW). Therefore, Mayani LILO point to Dighanchi line needs to be upgraded to 132 kV level so that Oglewadi - Dighanchi network can be operated at 132 kV Level.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme for conversion of 110 kV DCDC to 132 kV DCDC line from Mayani LILO point to Diganchi s/s for up gradation of voltage level, for submission to GCC for approval.

Agenda Point No. 52:

Scheme for Establishment of 132/33kV Kanashi Substation Dist.- Nashik

MSETCL representative placed before the MTC a proposal of Scheme for Establishment of 132/33kV Kanashi Substation Dist.- Nashik

MSETCL representative explained that At present the power supply to Kalwan Taluka is fed from two EHV substation ie.132/33kV Kalwan & 220/33 kV Bhendi s/s. 220/132kV Bhendi s/s is having source from 220 kV Malegaon ss. The installed capacity of 132/33kV Kalwan is 125 MVA. Maximum demand reached to 73.7MVA. 9 nos of 33kV feeders from Kalwan ss having capacity of 94MVA & 3 nos are proposed in ongoing scheme, so the total installed capacity of DISCOM will rise to 108 MVA. After Establishment of 132/33 kV Kanashi S/s voltage profile of Kalwan Taluka, will be improve. There will be reduction in the interruptions/breakdowns thereby reducing line losses. Load relief to existing 132 kV Kalwan s/s, after establishment of cited S/s.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme for Establishment of 132/33kV Kanashi Substation Dist.- Nashik, for submission to GCC for approval.

Agenda Point No. 53:

Establishment of 132/33 kV Barashiv(Hanuman)s/s, Tal- Aundha Dist: Hingoli.

MSETCL representative placed before the MTC a proposal of Establishment of 132/33 kV Barashiv (Hanuman)s/s, Tal- Aundha Dist: Hingoli.

MSETCL representative informed that presently south part of Aundha Taluka is fed from 3nos of EHV substations as follows: 220/33kV Hingoli (50 MVA), 132/33kV Kurunda (100MVA) & 132/33 kV Jintur (100MVA). At present there is no any EHV substation adjacent to existing EHV substations to divert the lengthy feeders. Various 33kV feeders are feeding multiple 33 kV substations. To overcome the low voltage problem at various 33 kV MSEDCL Feeders and to get reliable, quality supply, it is necessary to establish new EHV s/s in Aundha Taluka.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme for Establishment of 132/33 kV Barashiv (Hanuman)s/s, Tal- Aundha Dist: Hingoli, for submission to GCC for approval.

Agenda Point No. 54:

Construction of 132kV DC line on MC towers from 220kV Chakan-II S/s (Loc No. 39) to LILO point of 132kV Vighnahar-132kV Mahindra Forging line - 9.9 km

MSETCL representative placed before the MTC a proposal of Construction of 132kV DC line on MC towers from 220kV Chakan-II S/s (Loc No. 39) to LILO point of 132kV Vighnahar-132kV Mahindra Forging line - 9.9 km

MSETCL representative stated that at present, 132 kV Chakan Substation is one of the major source to feed power supply to various industrial consumers on 132kV network of Chakan area. 132 kV Chakan Substation is connected to 220 kV Alephata source through 132 kV Mahindra Forging Substation to 132 kV Vighnahar Substation to 132 kV Narayangaon Substation. Considering upcoming development in industrial area of Chakan, it is necessary to provide alternate power supply to existing 132 kV Chakan Substation. The scheme for construction of 132 kV Chakan to 220 kV Chakan II Substation is included in STU Plan 2021-22 to 2025-26 for the year 2023-24.

The surrounding area of existing 132kV Chakan (Kharabwadi) is densely populated, urbanized and industrialized therefore, no separate belt available for 132kV Proposed 132kV line. Therefore, it is proposed new scheme for construction of 132kV DC line on MC towers from 220kV Chakan-II S/s (Loc No. 39) to LILO point of 132kV Vighnahar-132kV Mahindra Forging line of 9.9 km is required. After completion of above work, 220 kV Alephata, 220 kV Chakan Phase II & 220 kV Chinchwad Substation will get connected into grid which will help in load management at 132 kV level in Chakan area. Further, 132 kV Tayyo Nippon Substation will have alternate source of supply. **The reliability & availability of 132 kV network between Chakan – Chinchwad – Alephata pocket will be improved. Voltage profile of 132 kV Network between Chinchwad to Chakan corridor will be improved.** There will be saving in transmission losses is 1.61 MW, after completion of this work.

After detailed deliberation and discussion, the committee recommended the above proposal of Scheme for Construction of 132kV DC line on MC towers from 220kV Chakan-II S/s (Loc No. 39) to LILO point of 132kV Vighnahar-132kV Mahindra Forging line - 9.9 km, for submission to GCC for approval.

Agenda Point No. 55:

LILO of 400 kV Kharghar- Vikhroli Line at Tata Vikhroli plot

TPC-T representative placed before the MTC a proposal of LILO of 400 kV Kharghar- Vikhroli Line at Tata Vikhroli plot

TPC-T representative explained that scheme is part of the DPR 'Establishing connectivity between North and South Mumbai by 400 kV Phase I, Creation of 400 kV level at existing Dharavi RSS with 400 kV Tata Power Vikhroli - Dharavi S/c line' which is approved in MTC, GCC and STU and submitted Hon'ble commission for further approval.

TPC-T representative mentioned that in the 7th GCC meet, TPC-T was asked to make presentation on the proposed scheme. The scheme of installing 400 kV LILO station to make LILO arrangement of one of the

400 kV Kharghar – Vikhroli D/c lines at TPC owned plot near Vikhroli for extending 400 kV supply to Dharavi RSS. GCC opined that “the said scheme is critical to establishment to 400kV network in South Mumbai. Hence a site visit to be planned by CE STU along with TPC-T and MSETCL representatives for verifying the feasibility of necessary line termination and connectivity arrangement at Tata Power Vikhroli Plot”.

GCC has ratified the establishment of 400kV station at Dharavi for inclusion in STU Five-year plan for implementation in 7th GCC. STU, MSETCL representatives along with TPC-T conducted a site visit of proposed site to check availability of space and feasibility of the proposed LILO option on 24th May 2023 and validated the feasibility the report for which has been submitted to STU by TPC-T. The representative of TPC-T also informed that Length of cable from proposed Tata Vikhroli Plot to Dharavi Receiving station will be less by 0.7 km as compared to cable length from KVTPL and Dharavi Receiving station. This will result in reduction in cable cost and associated RI charges. He highlighted advantages of scheme and mentioned that as the space is available for expansion, this scheme will facilitate the proposed 400 kV Ring network planned for South Mumbai.

During the discussions it was observed that KVTPL has not responded to the correspondence from STU regarding the availability of the space for additional bay at 400kV KVTPL, Vikroli ss and TPC-T has also not enclosed in the report submitted any written confirmation from KVTPL regarding non availability of space at 400kV KVTPL, Vikroli ss. In view of non-availability of KVTPL representative at the forum it was decided to have separate discussions in this regard between STU, TPC-T & KVTPL. Accordingly a meeting was conveyed on 30.04.2024 for discussion of the above issue. During the above meeting KVTPL representative gave an oral confirmation of non-availability of the space at 400kV KVTPL, Vikroli ss, however he also stated that he will confirm in writing after due consultation with GIS OEM and their civil wing regarding the same in a week.

Considering this, it is decided that a final decision in the matter will be taken by STU and apprised to MTC based on the written submission by KVTPL regarding the availability of space for 400kV Bays at 400kV KVTPL Vikroli substation. No further deliberations in MTC are foreseen as the scheme has already been discussed in the MTC & 7th GCC has already ratified the scheme of 400kV Dharavi ss.

Agenda Point No. 56:

Installation of New 110/22 kV Sub-station at Mulashi

TPC-T representative placed before the MTC a proposal of Installation of New 110/22 kV Sub-station at Mulashi.

TPC-T representative stated that the scheme was advised by “Hon’ble Deputy Chief Minister” to meet additional Load demand of MSEDCL & low voltages in Mulashi and adjacent. Joint site visit by MSEDCL officials and Tata Power Representatives was carried out on 12.01.2024 to finalize location of proposed S/s. Subsequently, Chief Engineer (Pune Zone) confirmed location near Nive Village technically viable via letter dated 02.02.2024

After detailed deliberation and discussion, MTC Committee expressed that as per the procedure the proposal / requirement of MSEDCL for Substation in the area is not yet received at STU. Therefore after receipt of Requirement from MSEDCL this scheme will be discussed, in next MTC Meeting.

Agenda Point No. 57:

Installation of New 110/33 kV Sub-station at Badlapur

TPC-T representative placed before the MTC a proposal of Installation of New 110/33 kV Sub-station at Badlapur.

TPC-T representative informed that to meet Load demand of MSEDCL of @ 52.8 MVA in the Badlapur and adjacent area, this scheme is required.

TPC-T representative further highlighted the major scope of work:

1. LILO of 110 kV Ambernath – Neral line at badlapur.
2. 110 kV GIS (07 bays including PTs) and 22 kV GIS (20 bays including PTs) along with Protection, Communication and Automation.
3. 2 X 110 kV / 22 kV, 125 MVA Transformers

TPC-T representative explained that Meeting for this project was held at the office of Director (operations), MSEDCL on 05.01.2024 between MSEDCL Kalyan Zone and Tata Power representatives. Tata Power Transmission expressed interest and briefed about the plan of installation of station at Badlapur. Further Tata Power submitted expression of interest to SE, Kalyan Circle II on 16.01.2024

TPC-T representative highlighted that CE, Kalyan Zone submitted proposal to CE (Distribution), MSEDCL regarding establishment of new 110 / 22 kV S/s at Badlapur East in order to cater existing and future load growth in Badlapur and adjoining area. Further, CE (Distribution) MSEDCL, has validated this proposal and submitted the proposal to The Director (Operations), MSETCL on 04th March 2024 via letter no CE (Distribution)/SE (Planning)/EHV S/Stn./6927.

After detailed deliberation and discussion, MTC Committee approved the scheme in principle & recommendation to GCC however directed M/s TPC-T to submit DPR to STU for joint study & validation.

Agenda Point No. 58 & 59:

Upgradation of existing 110/33/22 kV Transformer at Saki RSS

Upgradation of existing 110/33/22 kV Transformer at Malad RSS

TPC-T representative placed before the MTC a proposal of Upgradation of existing 110/33/22 kV Transformer at Saki RSS & Malad RSS.

TPC-T representative explain that Saki Transformer commissioning in 1981 and completed useful life of 43 years. Also, Malad Transformer commissioning year : 1989 and completed useful life of 35 years. In the past, TPC-T has submitted the DPRs to Hon'ble commission on 22nd July 2020 based on poor DGA results. He further added that Hon'ble commission while referring back DPRs directed to adopt O & M practices like oil filtration and monitor the parameters. And if the problem is not resolved then may come back with fresh proposal.

TPC-T representative highlighted that since then, TPC-T has carried out oil filtration and monitored the parameters like the Polarization Index, Winding Capacitance, Furan content which indicated deterioration.

TPC-T has consulted M/s V.J.T.I. for Residual Life Assessment study. The recommendation is "Based on test results, condition of Transformer's insulation is highly deteriorated. Residual life of Transformer is expected 2 to 3 years hence Tata Power is suggested to plan for replacement of Transformer". Considering load growth & useful life of 35 yrs, TPC-T proposes:

- 1) Upgradation of exiting 110 / 22 kV, 75 MVA Transformer # 3 by replacing with 90 MVA, 110 / 33 / 22 kV Transformer at Saki.
- 2) Upgradation of exiting 110 / 22 kV, 75 MVA Transformer # 2 by replacing with 90 MVA, 110 / 33 / 22 kV Transformer at Malad.

After detailed deliberation and discussion, the committee recommended the above both proposal for Up gradation of existing 110/33/22 kV Transformer at Saki RSS & Malad RSS, for submission to GCC for approval

Agenda Point No. 60:

220 kV GIS Upgradation at Salsette

TPC-T representative placed before the MTC a proposal of 220 kV GIS Upgradation at Salsette

TPC-T representative explained that Present 220 kV GIS at Salsette is M/s Toshiba (Japan) make commissioned in 1992. At present, 220 kV Salsette is interconnected with TPC-T 220 kV Borivali RSS, 220 kV Trombay RSS and MSFTCL 220 kV Kalwa RSS. Rated Short time current rating of the existing Salsette 245 kV GIS is 40 kA. The existing fault level of 220 kV Salsette after commissioning of 400 kV KVTPL Vikhroli substation is 59 kA which is far beyond the rated capacity of existing 220 kV GIS (40kA).

TPC-T representative added that through this project, TPC-T proposes to upgrade the existing 245 kV GIS (40 kA) by new 245 kV, GIS (17 bays excluding PTs). New 245 kV GIS STC rating shall be 63 kA, 3 sec as compared existing GIS with 40 kA, 3 sec in line. This will ensure reliable and uninterrupted power supply to existing & expected load growth at Salsette RSS.

After detailed deliberation and discussion, the committee recommended the above proposal for 220 kV GIS Upgradation at Salsette, for submission to GCC for approval

Agenda Point No. 61:

Installation of 220/33 kV Station at Vile Parle

TPC-T representative placed before the MTC a proposal of Installation of 220/33 kV Station at Vile Parle

TPC-T representative explained that at present, there is no EHV station on the western periphery of Mumbai between 110 kV Tata Power Malad RSS to Tata Power Versova and between Tata Power Versova

and Tata Power Mahalaxmi RSS. Load demand in Western suburbs is increasing at an average 3 to 4 % per annum. To meet additional Load demand of DISCOMs of 80 MVA in Juhu / Vile Parle area, this S/s required.

This scheme was discussed in 2nd MTC meet held on 20th Dec 2021. STU directed to TPC- and AEML to conduct joint study for the proposals of 220 kV Vile Parle (TPC) and 220 kV Khardanda (AEML) and submit report. Joint study conducted by TPC-T and AEML. Joint study & new load requirement whereas verified by STU.

TPC-T requested MTC Committee members, to accord MTC Approval for the cited scheme, so as to process land acquisition

After detailed deliberation and discussion, the committee recommended the above proposal for “Installation of 220/33 kV Station at Vile Parle”, for submission to GCC for approval

Agenda Point No. 62:

220 kV Tilak Nagar EHV Station Scheme

AEML-T representative placed before the MTC a proposal of 220 kV Tilak Nagar EHV Station Scheme

AEML-T representative mentioned that currently there is no EHV Station between TPC Vikhroli and AEML-Chembur EHV Station including the area till Chunabhatti/Sion on eastern side of Central Railway. In this region, Major Load growth expected due to high raise buildings, shopping complex, Commercial Business hubs, Upcoming Transport infrastructure development in the region, SRA projects & new development. He added that Estimated load in this region is 126MVA Approx (75 MVA New + 51 MVA reshuffling).

Major scope of scheme is as follows:

- a) Installation of 220 kV GIS EHV Substation at Tilaknagar with 220kV (7 nos.) and 33kV (28 nos.) GIS Bays,
- b) 2x125 MVA Transformers (220/33kV), including procurement of land, Civil work for substation building etc.
- c) LILO of TPC Vikhroli -Trombay line at proposed 220kV Tilaknagar EHV S/s
- d) SCADA, Security equipment's provisions.

He highlighted that to meet the load growth with reliable power supply and facilitated development Transmission substation will be required.

After detailed deliberation and discussion, MTC Committee directed M/s AEML-T to submit DPR to STU for Load Flow study and for further discussion.

Agenda Point No. 63:

2nd feed Chandivali (220 kV Aarey-Chandivali Link)

AEML-T representative informed that the Scheme is included in Transmission License No. 1 of 2011 under case no. 127 of 2022 dated 30.05.2023

AEML-T representative informed that this Scheme was already discussed in 7th & 8th MTC meeting, In 8th MTC STU had presented the load flow studies, based on upcoming Amazon load it was observed that 2nd Ckt of Aarey-Chandivali was overloaded above its Thermal Limits. Thus, alternatively, STU suggested to 220kV S/C of Aarey-Chandivali Line and 220kV S/C of Aarey-TPC Saki Line. AEML-T agreed to the alternative solution suggested by STU.

He added that major load is expected in Chandivali area in view of upcoming data centers and commercial developments, hence strengthening of Transmission Network is required.

After detailed deliberation and discussion, the committee recommended the above proposal of 2nd feed Chandivali (220 kV Aarey-Chandivali Link and 220kV S/C of Aarey-TPC Saki Line), for submission to GCC for approval.

Agenda Point No. 64:

250 MW BESS (DTPS) Scheme

AEML-T Representative presented “Proposed 250MWh BESS Scheme” details along with necessity of the scheme in case of contingency in the network. He stated that Provision of BESS for Transmission entity, introduced in Draft MYT Regulation 2024, MERC .

It was mentioned that BESS with Grid level capacity embedded within Mumbai System can provide much required relief during contingency in MMR network, also support Load leveling / peak saving, Network congestion mgmt., Voltage / Frequency regulation, Spinning reserve, Black start capability etc.

Major scope of scheme is as follows:

- Battery Storage Scope:
- 250 MWh BESS, with Transformers, 220 & 33kV GIS & cable
- 220kV D/C UG Cable connectivity from existing AEML DTPS Main Bus-1 & 2 with BESS System.
- Control & protection systems

After detailed deliberation and discussion in view of the provision of BESS for Transmission entity, introduced in Draft MERC MYT Regulation 2024 the committee instructed AEML-T to submit a revised DPR. The technicalities of same can be jointly studied prior to the next control period so as for further recommendations.

Agenda Point No. AD1:

Revised Administrative Approval due to revision in scope of work, cost and procurement plan for the scheme of Supply, Installation, Testing and Commissioning of 125 MVAR, 400kV Bus Reactor along with new bay and allied equipment,
A) At 400kV Chandrapur Switching Substation with NGR under Nagpur Zone.
B) i) At 400kV Chakan S/s under Pune Zone ii) At 400kV Lonikand-I S/s, by replacement of old 50 MVAR, 400kV Bus Reactor under Pune Zone.

MSETCL Representative placed before the MTC a proposal of Revised Administrative Approval due to revision in scope of work, cost and procurement plan for the scheme of Supply, Installation, Testing and Commissioning of 125 MVAR, 400kV Bus Reactor along with new bay and allied equipment,
A) At 400kV Chandrapur Switching Substation with NGR under Nagpur Zone.
B) i) At 400kV Chakan S/s under Pune Zone ii) At 400kV Lonikand-I S/s, by replacement of old 50 MVAR, 400kV Bus Reactor under Pune Zone.

MSETCL Representative informed that the earlier scheme had been recommended in 1st MTC meeting. CE Pune informed that 400kV Jejuri SS is predominantly low voltage area. The peak seasonal load of 400kV Jejuri is about 1300MVA against the present ICT capacity of 3x500MVA. Thus, there is no (N-1) redundancy at Jejuri. There will be requirement of additional 500MVA, 400/220kV ICT. However, installation of 125MVAR, 400kV Reactor at 400kV Jejuri S/S will leave no space for 4th ICT. Hence, CE Pune has recommended to consider 4th 500MVA, 400/220KV ICT instead of Reactor and recommended to remove the scope of SITC of 125MVAR, 400kV Bus Reactor at 400kV Jejuri S/s from sanctioned scope.

Accordingly, STU has carried out revised system study for installation of additional 400kV, 500 MVA ICT in place of sanctioned 400kV, 125 MVAR Reactor at 400kV Jejuri Substation and recommended for installation of additional ICT in place of Reactor.

After detailed deliberation and discussion, the committee recommended the above proposal of "Revised Administrative Approval due to revision in scope of work, cost and procurement plan for the scheme of Supply, Installation, Testing and Commissioning of 125 MVAR, 400kV Bus Reactor along with new bay and allied equipment,
A) At 400kV Chandrapur Switching Substation with NGR under Nagpur Zone.
B) i) At 400kV Chakan S/s under Pune Zone ii) At 400kV Lonikand-I S/s, by replacement of old 50 MVAR, 400kV Bus Reactor under Pune Zone", for submission to GCC for approval.

Agenda Point No. AD2:

Scheme of procurement of balance 04 Nos of ICTs & 02 Nos of PTRs of various ratings along with required New Uninhibited High Grade Mineral Insulating Oil out of earlier sanctioned scheme of procurement of 21 Nos of ICTs & PTRs as emergency/critical spares in all zones of MSETCL.

MSETCL Representative placed before the MTC a proposal for Scheme of procurement of balance 04 Nos of ICTs & 02 Nos of PTRs of various ratings along with required New Uninhibited High Grade Mineral Insulating Oil out of earlier sanctioned scheme of procurement of 21 Nos of ICTs & PTRs as emergency/critical spares in all zones of MSETCL.

MSETCL representative mentioned that to meet emergency requirements arising out of failure of ICTs/Power Transformers, MSETCL, need to have spare ICTs/Power Transformers available. As the failure affects power supply & procurement time/supply period is also long for new ICTs/Power Transformers. Moreover, in view of early restoration of the power supply in the event of failure of Transformers/ICTs, extra spare stock of Power Transformers/ICTs is very essential. This Scheme was approved in Board Meeting dtd 04.03.2024.

After detailed deliberation and discussion, the committee recommended the above proposal for “Scheme of procurement of balance 04 Nos of ICTs & 02 Nos of PTRs of various ratings along with required New Uninhibited High Grade Mineral Insulating Oil out of earlier sanctioned scheme of procurement of 21 Nos of ICTs & PTRs as emergency/critical spares in all zones of MSETCL”, for submission to GCC for approval.

Agenda Point No. AD3:

Installation of Centralized BESS for Transmission at Trombay

TPC-T Representative placed before the MTC a proposal for Installation of Centralized BESS for Transmission at Trombay.

TPC-T Representative informed that after scrutiny, DPR was returned by STU.

After detailed deliberation and discussion in view of the provision of BESS for Transmission entity, introduced in Draft MERC MYT Regulation 2024 the committee instructed TPC-T to submit a revised DPR. The technicalities of same can be jointly studied prior to the next control period so as for further recommendations

Agenda Point No. AD4:

Installation of Distributed BESS for Transmission at Saki, Mankhurd & Salsette

TPC-T Representative placed before the MTC a proposal for Installation of Distributed BESS for Transmission at Saki, Mankhurd & Salsette

TPC-T Representative informed that after scrutiny, DPR was returned by STU.

After detailed deliberation and discussion in view of the provision of BESS for Transmission entity, introduced in Draft MERC MYT Regulation 2024 the committee instructed TPC-T to submit a revised DPR. The technicalities of same can be jointly studied prior to the next control period so as for further recommendations

Agenda Point No. AD5:

220 kV Khardanda Scheme

AEML-T representative placed before the MTC a proposal, of **220 kV Khardanda Scheme**

AEML-T Representative mentioned that no Transmission substation between Versova to Bandra covering a stretch of 15 kms on western side of suburb & Huge development potential and anticipated growth of power demand in & around Khardanda area due to upcoming re-development, up gradation in transport infrastructure like proposed Metrorail project, fly overs connecting west / east area, development of commercial establishment etc.

In absence of sufficient Transmission capacity, laying long 33kV feeders from nearby EHV stations will lead to high losses & undue CAPEX burden. In view of above, it is proposed to commission 220/33kV EHV Substation . This scheme was discussed in 2nd, 6th, 7th , 8th MTC. AEML-T representative submitted that Considering the load growth and new load details, the EHV scheme implementation in the area is very much important.

After detailed deliberation and discussion, the committee recommended the above proposal for “220 kV Khardanda Scheme”, for submission to GCC for approval.

Agenda Point No. AD6:

220 kV Borivali-Ghodbunder-Boisar LILO Line augmentation

AEML-T representative placed before the MTC a proposal, of 220 kV Borivali-Ghodbunder-Boisar LILO Line augmentation

AEML-T Representative mentioned that to match the uprating capacity of MSETCL Overhead Line, AEML-T proposes to Install of a 220kV GIS near the existing LILO Tower, Tapping of MSETCL line through 220kV GIL/ Cable system will be connected to proposed 220kV GIS switching station and existing 220 kV underground D/C cable from AEML Ghobunder will be connected to proposed GIS switching station. This is augmentation of existing LILO scheme. For strengthen transmission line corridor and power flow capacity utilizing the GIS switching station, this augmentation required.

Major scope of scheme is as follows:

1. Procurement of land
2. Installation of 220kV GIS with necessary arrangement
3. Termination of existing 220kV line cable i.e. from Ghodbunder EHV station to pro- posed GIS switching station
4. Overhead line tapping from tower to 220kV GIS through Gantry / GIBD arrangement
5. Construction of Control room along with Compound wall & necessary infrastructure
6. To upgrade Protection and SCADA System

After detailed deliberation and discussion, the committee instructed AEML-T to submit revised DPR, after implementation of suggestion given by STU. Joint Load flow study will be carry out by STU, for further recommendations & Approvals.

Agenda Point No. AD7:

132 KV DCDC link line by making LILO of one circuit of 220 KV Amalner (A-II) to Nardane line to one circuit of 132 KV Amalner (A-I) to Parola line

MSETCL representative placed before the MTC a proposal, of 132 KV DCDC link line by making LILO of one circuit of 220 KV Amalner (A-II) to Nardane line to one circuit of 132 KV Amalner (A-I) to Parola line.

MSETCL Representative Mentioned that presently, 132 KV Amalner-I having source only through S/C line from 220/132KV Amalner-I subsequently connected to 132KV Parola ss. During any contingency of 132KV Amalner-II –Amalner-I S/C line will hamper supply to both substations and also 132kv Parola ss, as there is no any alternative/additional source to them.

Due to urbanization, there is no possibility of second circuit stringing or conversion even on monopole from 132KV Amalner-I to Amalner-II ss . Cabling laying also not possible. To resolve above issue the best option is -132 KV DCDC link line by LILO on 132KV Amalner –Nardane to LILO on 132KV Amalner-Parola line. This link line will be second source to 132KV Amalner, 132KV Nardane & 132kv Parola substation .

She added that 132 KV Amalner & 132 KV Parola s/s are single source substations fed from 220 KV Amalner ss through 132 Amalner –I --Amalner II SCSC line & 132 KV Amalner-Parola DCDC line. In case of interruptions of 132 KV Amalner-I ,Amalner- II SCSC Line supply of both 132KV Amalner & Parola gets interrupted. Considering populated area of Amalner & Parola city, second line is essential. Maintenance point of view, it is difficult to carry out the routine, emergency work due to single line source. Therefore, It is not possible to lay second source from 220 kv Amalner(A-II) to 132 KV Amalner –II ss.

After execution of this scheme, It will eliminate single line source connectivity of 132 KV Amalner –I SS, 132 KV Parola SS and enable N-I criteria to 132 KV Amalner –I –Amalner –II SCSC Line. This scheme will help for proper maintenance activity of 132 KV Amalner (A-II)-Amalner(A-I) Line. Reliability of supply will be increase.


After detailed deliberation and discussion, the committee recommended the above proposal for “132 KV DCDC link line by making LILO of one circuit of 220 KV Amalner (A-II) to Nardane line to one circuit of 132 KV Amalner (A-I) to Parola line”, for submission to GCC for approval.

Points for discussion:

Review of Projects under STU Plan 2022-23 to 2026-27

It is decided that all Licensee shall submit the progress of projects included in STU Plan for review on Quarterly basis. The Progress report shall be submitted on or before 5th of each Quarter Month.

SE (STU), Member Convener offered the vote of thanks to all the MTC members and other participants and concluded the 9th MTC Meeting with the permission of the Chair.


Chairperson - MTC
Chief Engineer (STU)