

 RIGHT TO INFORMATION	 MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO.LTD. CIN NO. U40109MH2005SGC153646 Maharashtra State Load Dispatch Center Tele :91-022-27601762 (P) Office of The Executive Director 91-022-27601931 (O) Extn.1001 Maharashtra State Load Dispatch Center Email : edsldc@mahasldc.in Thane-Belapur Road, P.O. Airoli website : www.mahasldc.in Navi Mumbai Pin – 400 708.	
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Ref. No. ED/MSLDC/OP/GCC/

000904

Date: **21 APR 2026**

To,
As per mailing list GCC Core Group Members.

Sub: - Minutes of the 17th Grid Coordination Committee (GCC) meeting held on 30.01.2026 at C.O. Prakashganga, Mumbai.

Ref: 1. GCC invitation vide Letter No. ED/MSLDC/OP/GCC/No.189 dated 28.01.2026
2. Agenda circulated vide email dated 29.01.2026.

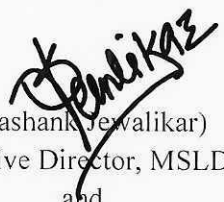
Dear Sir,

With reference to the above subject, the Minutes of the 17th Grid Co-ordination Committee (GCC) meeting held at C.O. Prakash Ganga, Mumbai on 30.01.2026 at 15:30 hrs in hybrid mode is enclosed herewith.

Thanking you.

Encl: As above.

With regards,


(Shashank Jewalikar)
Executive Director, MSLDC
and
Member Convenor of GCC

Copy s.w.rs. to:

The Director (Operations), Corporate Office, MSETCL, Mumbai.

Copy to:

- The Chief Engineer (STU), Corporate Office, MSETCL, Mumbai.
- The Chief Engineer (Special Projects), Corporate Office, MSETCL, Mumbai.
- The Chief Engineer (SLDC), Airoli, Navi Mumbai.

Mailing List of GCC Core Group Members:

Sr. No.	Name of Organization	Name of Nominee/Designation	Committee Position	Contact No.	E-mail ID
1	MSETCL	Shri Satish Chavan, Director (Operations)	Chairperson	022-26492162	dirop@mahatransco.in
2	MSEDCL	Shri. Yogesh Gadkari Director (Commercial)	Member	022- 26474211 / 26472131	directorcommsedcl@gmail.com
3	MSLDC	Shashank Jewalikar Executive Director (SLDC)	Member Convener	022-27601765	edsldc@mahasldc.in
4	MSETCL	Anil Bharsakle CE (O&M) (I/C)	Member	8554995004	ceom@mahatransco.in
5	MSPGCL	Shri. Anil Kathoye CE (Works)	Member	022-6942200 69843434 Ext. 3419	cegw@mahagenco.in
6	WRPC	Shri P. D. Lone, S.E. Commercial	Member	9867622823	comml-wrpc@nic.in
7	MEDA	Shri Manoj Pise, General Manager	Member	9422319093	gmr@mahaurja.com

Minutes of the 17th Grid Co-ordination Committee meeting held on 30th January 2026 at 15:30 hrs. at C.O., Prakashganga, Mumbai.

The 17th Grid Coordination Committee (GCC) meeting of the Core Group was held on 30.01.2026 at 15:30 hrs at C.O. Prakash Ganga, Mumbai.

The meeting was conducted both physically and via video conferencing. A list of members /participants is enclosed as **ANNEXURE - A**.

The Executive Director of MSLDC and Member Convener of the GCC welcomed all the members and other participants to the 17th GCC Meeting.

With the permission of the Chair, discussions for the 17th GCC Core Committee began as follows:

Item No.1: Agenda points from STU

Agenda point No.1:

Scheme of augmentation by addition of 1x50MVA, 220/22kV T/F along with HV & LV bays and 4x22kV feeder bays at 220kV Tambati S/s under EHV O&M Div., Panvel.

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme of augmentation by addition of 1×50 MVA, 220/22 kV transformer along with HV & LV bays and 4×22 kV feeder bays at 220 kV Tambati Substation under EHV O&M Division, Panvel.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

STU representative submitted that the 220/100/22 kV Tambati Substation, commissioned in the year 1995, is an important substation in Raigad District, supplying power to the MIDC area.

The substation has an installed capacity of 200 MVA, comprising 2×100 MVA, 220/100 kV ICTs.

Operational Constraints & Reliability issues:

At present, the maximum load on these ICTs has reached about 85 MVA, which includes:

- 44 MW load of 100 kV EHV consumers, and
- 41 MW load through 2×50 MVA, 100/22 kV power transformers.

Further, additional load requirements of 57.85 MW have been received for 220 kV Tambati Substation.

Scope of works

- Addition of 1x50MVA, 220/22kV T/F along with HV & LV bays and 4x22kV feeder bays at 220kV Tambati S/s under EHV O&M Dn., Panvel in Vashi Zone

Need of scheme

The STU representative highlighted that to satisfy the aforementioned load requirements, the utility had originally proposed the installation of a 1×100 MVA, 220/100 kV Inter-Connecting Transformer (ICT) at the 220 kV Tambati Substation. However, during the technical design phase, it was determined that the additional 100 MVA ICT capacity was unnecessary if a 1×50 MVA, 220/22 kV transformer installed instead.

Consequently, a revised proposal submitted to the 17th GCC for the 'Augmentation of the 220 kV Tambati Substation under the EHV O&M Division, Panvel,' which includes the addition of 1×50 MVA, 220/22 kV transformer capacity, along with associated HV & LV bays and four 22 kV feeder bays.”

Financial Implications & Timeline

- Estimated project cost: ₹ 1,690.57 lakh
- Target commissioning: FY 2027–28

Key observations and recommendations articulated by the committee

In order to meet present and future load requirements, address overloading issues, ensure N-1 compliance, and enhance overall system reliability and stability, the Committee, after detailed deliberations, ratified the scheme

All GCC members took note of the discussions

Agenda point No.2:

Scheme of augmentation by replacement of 2x12.5MVA, 100/22kV T/Fs by 2x25MVA, 100/22kV T/Fs at 100kV Bhokarpada S/s under EHV O&M Div., Panvel.

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme of augmentation by replacement of 2 × 12.5 MVA, 100/22 kV Transformers with 2 × 25 MVA, 100/22 kV Transformers at 100 kV Bhokarpada Substation under EHV O&M Division, Panvel.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC)::

Existing Infrastructure

The 100 kV Bhokarpada Substation was commissioned in the year 2010 and is presently equipped with 2 × 12.5 MVA, 100/22 kV Power Transformers.

Operational Constraints:

During FY 2024–25, the maximum loading on the transformers reached 64.48% under normal operating conditions.

Reliability Issues

It was highlighted that the substation caters to the critical load of Navi Mumbai Municipal Corporation (NMMC) water treatment plant. During tripping or outage of any one transformer, it becomes difficult to manage the entire load on the remaining transformer, thereby not satisfying the (N–1) reliability criterion.

Scope of works

- Replacement of existing 2X12.5MVA, 100/22kV T/Fs by 2X25MVA, 100/22kV T/Fs at 100kV Bhokarpada S/s under Vashi zone

Need for Augmentation

In view of:

- the existing transformer capacity,
- critical nature of the connected load,
- inability to meet (N–1) contingency criteria, and
- anticipated future load growth,

replacement of the existing 2 × 12.5 MVA, 100/22 kV transformers with 2 × 25 MVA, 100/22 kV transformers at 100 kV Bhokarpada Substation is proposed by MSETCL.

Financial Implications & Timeline

- Estimated project cost: ₹ 995.94 Lakh
- Target commissioning: FY 2027–28

Key observations and recommendations articulated by the committee

In order to meet present and future load requirements, address overloading issues, ensure N-1 compliance, and enhance overall system reliability and stability, the Committee, after detailed deliberations, ratified the scheme.

All GCC members took note of the discussions

Agenda point No.3:

Scheme of augmentation of substation by replacement of existing 1X25 MVA, 132/33 kV T/F by 1X50MVA, 132/33kV T/F at 132 kV Dahiwadi S/s under EHV O&M Division, Karad

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme of augmentation of substation by replacement of existing 1 × 25 MVA, 132/33 kV Transformer with 1 × 50 MVA, 132/33 kV Transformer at 132 kV Dahiwadi Substation under EHV O&M Division, Karad.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

The 132 kV Dahiwadi Substation was commissioned in the year 1982 and is presently equipped with one 50 MVA and one 25 MVA, 132/33 kV Power Transformers, catering to rural and agricultural loads.

Operational Constraints:

The maximum loading on both the existing transformers has reached more than 58% of their installed capacities.

Reliability Issues:

It was highlighted that during tripping or outage of the 50 MVA, 132/33 kV Transformer–I, particularly during evening peak load hours when MSKVY solar generation is not available, the existing 25 MVA, 132/33 kV Transformer–II is unable to cater to the total load, thereby not satisfying the (N–1) contingency criterion.

Load Growth & Demand Forecast

The substation caters to rural and agricultural consumers, with peak loading observed during non-solar hours. Considering the present loading levels and the inability to manage full load during transformer outage conditions, augmentation of transformer capacity is essential to meet present and future load requirements and to ensure reliable supply.

Scope of works

- Replacement of existing 1X25 MVA, 132/33 kV T/F by 1X50MVA, 132/33kV T/F at 132 kV Dahiwadi S/s under EHV O&M Division, Karad

System Study Chronology

- The project was initially approved under the MSKVY generation integration study.
- Subsequently, based on a revised system study conducted by the State Transmission Utility (STU), the earlier approved proposal was cancelled.
- As per the latest STU system study, communicated vide letter No. MSETCL/CO/CE/STU/Karad – Savlaj– Dahiwadi– Kale– K’Mahankal / 760 dated 04.07.2025, the augmentation of 132 kV Dahiwadi Substation has been re-proposed.

Financial Implications & Timeline

- Estimated project cost: ₹ 692.16 Lakh
- Target commissioning: FY 2026-27

Key observations and recommendations articulated by the committee

In order to meet the present & future load requirement, to address the overloading problems, N-1 compliance, MSKVY requirement, enhance system reliability and stability after detailed deliberation the committee, ratified the scheme.

All GCC members took note of the discussions

Agenda point No.4:

Scheme of augmentation of substation by addition of 1X50 MVA, 132-110/33kV T/f at 110 kV Kavathe Mahankal S/s

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme of augmentation of substation by addition of 1 × 50 MVA, 132–110/33 kV Transformer at 110 kV Kavathe Mahankal Substation.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

The 110 kV Kavathe Mahankal Substation was commissioned in the year 2010 and is presently operating with a total installed capacity of 100 MVA, comprising 2 × 50 MVA, 132–110/33 kV Power Transformers.

Operational Constraints:

It was observed that the maximum loading on the existing transformers has reached about 82% of the installed capacity.

Reliability Issues:

The representative highlighted that the substation does not fulfil the (N–1) contingency criterion. In the event of tripping or outage of one transformer, the remaining transformer is not capable of sustaining the entire load, thereby posing a risk to system reliability and grid stability.

Load Growth & Demand Forecast

The requirement for augmentation is primarily driven by the load demand projections submitted by MSEDCL, Kavathe Mahankal Division, vide letter dated 24.12.2021, as detailed below:

- Additional load demand: 15 MVA
- New infrastructure: Proposal for 03 Nos. of 33/11 kV substations, each of 5 MVA capacity

The cumulative upcoming load indicates a significant increase in demand, necessitating timely augmentation of the substation capacity.

Scope of works

- Addition of 1X50 MVA, 132-110/33kV T/F along with HV & LV Bays at 110kV Kavathe Mahankal S/s under EHV (O&M) Division, Sangli.

System Study Chronology

- The project was initially approved under the MSKVY generation integration study.
- Subsequently, based on a revised system study conducted by the State Transmission Utility (STU), the earlier approved proposal was cancelled.
- As per the latest STU system study, communicated vide letter No. MSETCL/CO/CE STU/Karad–Savlaj–Dahiwadi–Kale–K'Mahankal/760 dated 04.07.2025, the augmentation of 110 kV Kavathe Mahankal Substation has been re-proposed.

Financial Implications & Timeline

- Estimated project cost: ₹ 864.77 Lakh
- Target commissioning: FY 2026-27

Key observations and recommendations articulated by the committee

In order to meet the present & future load requirement, to address the overloading problems, N-1 compliance, MSKVY requirement, enhance system reliability and stability after detailed deliberation the committee, ratified the scheme.

All GCC members took note of the discussions.

Agenda point No.5:

Scheme of augmentation of substation by addition of 1X25 MVA, 132-110/33kV T/f at 110 kV Kale S/s under EHV O&M Division, Kolhapur in Karad zone

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme of augmentation of substation by addition of 1 × 25 MVA, 132–110/33 kV Transformer at 110 kV Kale Substation under EHV O&M Division, Kolhapur, Karad Zone.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

The 110 kV Kale Substation was commissioned in the year 1980 and is presently operating with 2 × 25 MVA, 110/33 kV Power Transformers catering to Industrial, Urban, and Agricultural loads.

Operational Constraints:

It was observed that the maximum loading on both the existing transformers has exceeded 78% of the installed capacity.

Reliability Issues:

The representative highlighted that the substation does not fulfil the (N-1) contingency criterion. During tripping or outage of any one 25 MVA transformer, particularly during evening peak load hours when MSKVY solar generation is not available, the remaining transformer cannot sustain 100% of the load, thereby posing a risk to system reliability.

Load Growth & Demand Forecast:

The load at 110 kV Kale Substation comprises Industrial, Urban, and Agricultural consumers, with increasing demand observed during peak hours. Considering the present loading levels and the inability to manage full load during transformer outages, augmentation of substation capacity is necessitated to meet present and future load requirements and to ensure reliable supply

Scope of works

- Addition of 1X25 MVA, 132-110/33kV T/f at 110 kV Kale S/s under EHV O&M Division, Kolhapur in Karad zone

System Study Chronology:

- The project was initially approved under the MSKVY generation integration study.
- Subsequently, based on a revised system study conducted by the State Transmission Utility (STU), the earlier approved proposal was cancelled.
- As per the latest STU system study, communicated vide letter No. MSETCL/CO/CE/STU/Karad-Savlaj-Dahiwadi-Kale-K'Mahankal/760 dated 04.07.2025, the augmentation of 110 kV Kale Substation has been re-proposed

Financial Implications & Timeline

- Estimated project cost: ₹ 630.36 Lakh
- Target commissioning: FY 2026-27

Key observations and recommendations articulated by the committee

In order to meet the present & future load requirement, to address the overloading problems, N-1 compliance, MSKVY requirement, enhance system reliability and stability after detailed deliberation the committee, ratified the scheme.

All GCC members took note of the discussions

Agenda point No.6:

Scheme of augmentation of substation by replacement of existing 1X25 MVA, 220/33 kV T/F by 1X50MVA, 220/33kV T/F at 220 kV Sonewadi S/s under EHV O&M Division, Babhaleshwar in Nashik zone

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme of augmentation of substation by replacement of existing 1 × 25 MVA, 220/33 kV Transformer with 1 × 50 MVA, 220/33 kV Transformer at 220 kV Sonewadi Substation under EHV O&M Division, Babhaleshwar, Nashik Zone.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

The 220 kV Sonewadi Substation was commissioned in the year 1991 and is presently equipped with 2 × 25 MVA, 220/33 kV Power Transformers, catering to the rural load of Mandavgan, Chass, and Bhorepathar areas in Ahilyanagar District.

Operational Constraints:

A requirement for one new 33 kV bay with 10 MVA load has been received from MSEDCL at 220 kV Sonewadi Substation. With the addition of this load, the available transformer capacity becomes inadequate during contingency conditions.

Reliability Issues:

It was highlighted that after addition of the proposed 10 MVA load, during outage or tripping of any one transformer, the remaining 25 MVA transformer will not be able to manage the total load, thereby not satisfying the (N–1) contingency criterion.

Load Growth & Demand Forecast

The substation supplies predominantly rural load, with additional demand arising due to the proposed 33 kV bay of 10 MVA capacity. Considering the future load growth, the proposed addition, and contingency operation requirements, augmentation of transformer capacity is essential to ensure reliable supply.

Scope of works

- Replacement of 1X25MVA, 220/33kV T/F by 1X50MVA, 220/33kV T/F

Need for Augmentation

In view of:

- the existing transformer configuration,
- proposed addition of 10 MVA load,
- inability to meet (N-1) reliability criteria, and
- anticipated future load growth,

Replacement of the existing 1 × 25 MVA, 220/33 kV transformer with 1 × 50 MVA, 220/33 kV transformer at 220 kV Sonewadi Substation is proposed by MSETCL.

Financial Implications & Timeline

- Estimated project cost: ₹ 907.82 Lakh
- Target commissioning: FY 2027-28

Key observations and recommendations articulated by the committee

In order to meet present and future load requirements, address overloading issues, ensure N-1 compliance, and enhance overall system reliability and stability, the Committee, after detailed deliberations, ratified the scheme.

All GCC members took note of the discussion.

Agenda point No.7:

Addition of 1X50 MVA, 100/22kV T/F along with 100kV AIS HV bay, 22kV GIS LV bay, 6x22kV GIS feeder bays, 1x22kV GIS Bus sectionalizer bay and 1x22kV GIS PT bay at 100kV Mumbra S/s under EHV (O&M) Div., Kalwa

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Addition of 1X50 MVA, 100/22kV T/F along with 100kV AIS HV bay, 22kV GIS LV bay, 6x22kV GIS feeder bays, 1x22kV GIS Bus Sectionalizer bay and 1x22kV GIS PT bay at 100kV Mumbra S/s under EHV (O&M) Div., Kalwa”. The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

- 100 kV Mumbra Substation was commissioned in the year 2015 and presently has an installed transformation capacity of 100 MVA comprising 2 × 50 MVA, 100/22 kV transformers.
- The substation supplies power to Mumbra–Shil area HT consumers, rural areas, and Kalyan Phata area.

Operational Constraints:

- The loading on both existing transformers has exceeded 75% of their rated capacity and is increasing rapidly due to upcoming commercial and residential developments, as well as changes in consumer load patterns.
- In the event of tripping or outage of one 50 MVA transformer, it becomes difficult to manage the load on the remaining transformer. Hence, the substation does not fulfil the ‘N-1’ contingency criterion.
- Further, M/s Torrent Power Limited has requested six (06) numbers of 22 kV feeders from this substation.
- In view of the above, the MSETCL, has proposed addition of one (01) number 50 MVA, 100/22 kV Transformer (T/F No.-5) along with associated bays at 100 kV Mumbra Substation.

Scope of Work

- Addition of 1X50 MVA, 100/22kV T/F along with 100kV AIS HV bay, 22kV GIS LV bay, 6x22kV GIS feeder bays, 1x22kV GIS Bus sectionalizer bay and 1x22kV GIS PT bay at 100kV Mumbra S/s under EHV (O&M) Div., Kalwa

Financial Implications & Timeline

- Estimated Project Cost: ₹ 1843.87 Lakh
- Target Commissioning: FY 2026-27

Key observations and recommendations articulated by the committee

In order to meet the present & future load requirement, to address the overloading problems, N-1 compliance, enhance system reliability and stability after detailed deliberation the committee, ratified the scheme.

All GCC members took note of the discussions

Agenda point No.8:

Addition of 1x50MVA, 132/33kV T/F along with HV AIS bay & LV GIS bay, 03x33kV GIS feeder bays, 1 No. GIS Bus coupler with PT bay and 1 No. GIS Bus Riser bay at 132kV Dahanu S/s under EHV O&M Div., Boisar in Vashi Zone

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Addition of 1x50MVA, 132/33kV T/F along with HV AIS bay & LV GIS bay, 03x33kV GIS feeder bays, 1 No. GIS Bus coupler with PT bay and 1 No. GIS Bus Riser bay at 132kV Dahanu S/s under EHV O&M Div., Boisar in Vashi Zone”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

- 132/33 kV Dahanu Substation was commissioned in the year 1997 and presently has an installed transformation capacity of 100 MVA, comprising 2 × 50 MVA, 132/33 kV transformers, catering to urban and MIDC loads.

Operational Constraints:

- The loading on the existing transformers has exceeded 75% of their rated capacity.
- In the event of outage or tripping of one of the existing 50 MVA transformers, it becomes difficult to manage the load on the remaining transformer and the substation does not meet the ‘N-1’ contingency criterion.
- The proposed scheme fulfils the criteria of system augmentation.
- MSEDCL has requested addition of one 50 MVA transformer along with three (03) numbers of 33 kV feeder bays at 132/33 kV Dahanu Substation vide letter No. DYEE/DRD/T/902 dated 29.08.2023.

- In view of the above, the MSETCL, has proposed addition of one (01) number 50 MVA, 132/33 kV transformer along with associated bays at 132 kV Dahanu Substation.

Scope of Work

- Addition of 1x50MVA, 132/33kV T/F along with HV AIS bay & LV GIS bay, 03x33kV GIS feeder bays, 1 No. GIS Bus coupler with PT bay and 1 No. GIS Bus Riser bay at 132kV Dahanu S/s under EHV O&M Div., Boisar in Vashi Zone

Financial Implications & Timeline

- Estimated Project Cost: ₹ 1,113.51 Lakh
- Target Commissioning: FY 2026-27

Key observations and recommendations articulated by the committee

In order to meet the present & MSEDCL additional load requirement, to address the overloading problems, N-1 compliance, enhance system reliability and stability after detailed deliberation the committee, ratified the scheme.

All GCC members took note of the discussion.

Agenda point No.9:

Addition of 3X167MVA, 400/220/33kV ICTs at 400 kV Karjat Sub-station

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Addition of 3X167MVA, 400/220/33kV ICTs at 400 kV Karjat Sub-station”.

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

- 400 kV Karjat Substation was commissioned in the year 2022 and presently caters to the load of Baramati, Solapur and Ahilyanagar areas through 2 × 500 MVA, 400/220/33 kV ICTs.
- 400 kV Girawali-1 and Girawali-2 transmission lines are the main source lines to the substation and provide supply to 220 kV Ahilyanagar, 220 kV Jeur, 220 kV Bhose, 220 kV Bhigwan and 220 kV Shirsuphal Substations.

Operational Constraints:

- The maximum loading on both the existing ICTs has exceeded 75% of their installed capacity.
- In the event of tripping or outage of any one of the existing ICTs, it becomes difficult to manage the load and the substation does not fulfil the ‘N-1’ contingency criterion.
- In order to meet the ‘N-1’ contingency requirement as well as to cater to future load growth, it is proposed to install additional 3 × 167 MVA, 400/220/33 kV ICTs at 400 kV Karjat Substation.

Scope of Work

- Installation and commissioning of 3 × 167 MVA, 400/220/33 kV Inter-Connecting Transformers (ICTs)
- Associated 400 kV, 220 kV and 33 kV bays, as required
- Associated protection, control, automation, communication systems
- Necessary civil works, testing and commissioning activities

Financial Implications & Timeline

- Estimated Project Cost: ₹ 5,369.75 Lakh.
- Target Commissioning: FY 2027-28

Key observations and recommendations articulated by the committee

ED, SLDC stated that the Girwali-Karjat line is operating under high loading conditions and is experiencing undervoltage issues and directed STU to verify the line loading against its rated capacity.

In order to meet the present and future load requirements, address overloading issues, ensure N-1 compliance and enhance overall system reliability and stability from a system perspective and considering the availability of space as well as the utilization of the removed old 3×105 MVA ICTs the committee after detailed deliberations, ratified the scheme for installation of 3×105MVA ICT (with further provision for a future one more 3×105 MVA ICT) instead of proposed no of 3×167MVA ICT as recommended by MTC.

All GCC members took note of the discussions

Agenda point No.10:

LE scheme for conversion of existing indoor SF6 & VCB AIS pertaining to 50 MVA, 220/22 kV TF-1, TF-2, TF-3, TF-4 LV bays and its 22 kV outgoing feeders to Indoor GIS along with replacement of transformer LV side 3-core cables by single core cables at 220 kV Mahape substation under EHV O&M Division, Kalwa, Zone- Vashi.

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “LE scheme for conversion of existing indoor SF6 & VCB AIS pertaining to 50 MVA, 220/22 kV TF-1, TF-2, TF-3, TF-4 LV bays

and associated 22 kV outgoing feeders to Indoor GIS, along with replacement of transformer LV side 3-core cables with single-core cables at 220 kV Mahape Substation under EHV O&M Division, Kalwa, Zone–Vashi.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

At 220/22 kV Mahape Substation, the LV side of the transformers and the 22 kV outgoing feeders are equipped with ABB make HPA-type indoor SF6 switchgear, commissioned approximately 24 years ago.

Operational Constraints:

The said SF6 breakers entered the “obsolete” phase about eight years ago, and M/s ABB Ltd., Nashik, has discontinued their production and manufacturing. As a result, spares and technical support are no longer available from the OEM or its authorized dealers.

Reliability Issues:

Due to the aging and obsolete nature of the switchgear, continued operation poses a risk to system reliability, particularly considering the importance of the substation and the criticality of the connected load.

Load Growth & System Constraints

The substation is located in an area characterized by high land cost and space constraints, with upcoming load demand from MSEDCL. In view of these constraints, expansion using conventional AIS equipment is not feasible, and adoption of compact GIS technology is technically appropriate.

Scope of works

- Construction of new GIS room & cable trenches for incoming & outgoing cables, dismantling of 22kV AIS bays, supply & erection of 22kV GIS bays (41 nos.), laying of XLPE power cables, termination of 22kV outgoing feeders, supply & installation of SCADA for 22kV

Need for Life Extension (LE) Scheme

In view of:

- obsolescence of existing indoor SF6 & VCB AIS switchgear,
- non-availability of spares and OEM support,
- space limitations and high land cost, and
- future load requirements of MSEDCL,

the conversion of existing indoor SF6 & VCB AIS panels of 50 MVA, 220/22 kV TF-1 to TF-4 LV bays and associated 22 kV outgoing feeders to Indoor GIS, along with replacement of transformer LV side 3-core cables with single-core cables, at 220 kV Mahape Substation is proposed by MSETCL.

Financial Implications & Timeline

- Estimated project cost: ₹ 4265.42 Lakh
- Target commissioning: FY 2026-27

Key observations and recommendations articulated by the committee

In view of obsolescence of existing indoor SF6 & VCB AIS switchgear, non-availability of spares and OEM support taking into consideration the space constraint in the existing substation, up gradation of technology, reduction in maintenance & enhancement of reliability of the system, after detailed deliberation, the committee ratified the scheme.

All GCC members took note of the discussions

Agenda point No.11:

Establishment of 132/33kV Shirud s/s, Tal. & Dist.- Dhule

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme for establishment of 132/33 kV Shirud Substation, Taluka & District – Dhule.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Supply Arrangement:

The load of Dhule Taluka is presently fed from 132/33 kV Dhule Substation and 220/33 kV Kundane (Dhule) Substation.

Operational Constraints:

Due to space constraints, addition of power transformers and erection of additional 33 kV outlets at 132/33 kV Dhule Substation and 220/33 kV Kundane Substation is not feasible.

Present Load Status at 132/33 kV Dhule Substation:

- Installed Capacity (ICT): 150 MVA
- Installed Capacity at 33 kV: 213.15 MVA
- Maximum Demand: 113.67 MVA
- Proposed additional load at 33 kV: 20 MVA

- Existing 33 kV feeders: 8 Nos., supplying 17 Nos. of 33 kV substations and 2 Nos. of HT consumers

Load Projection:

DISCOM has projected an additional load demand of 60 MVA in the area. It is proposed that approximately 45 MVA load of Dhule Substation will be shifted to the proposed 132/33 kV Shirud Substation.

Voltage Regulation Requirement:

For improvement of voltage regulation for downstream 33 kV load-serving substations, establishment of a new 132/33 kV substation is required.

Scope of Works

- 2 x 50 MVA, 132/33 kV Power Transformers with HV & LV bays.
- Construction of LILO on 132kV Borvihir TSS – Chalisgaon line for proposed 132/33kV Shirud s/s- 4.865 km
- 2 x 132kV Line Bays at proposed 132kV Shirud s/s
- 1 x 132kV Bus Sectionalizer Bay
- 1 x 132kV Bus Coupler
- 2 x 132kV PT bay
- 6 x 33 kV Outlets
- 1 x 33 kV Bus Sectionalizer Bay
- 2 x 33 kV PT Bay
- 2 x 200kVA, 33/0.4 kV Station Transformer along with Bays.

Objective of the Scheme

1. To cater to the upcoming load demand of HV consumers in the area
2. To ensure reliable and uninterrupted power supply
3. To provide load relief to 132/33 kV Dhule Substation and improve overall system performance

Financial Implications & Timeline

- Estimated project cost: ₹ 60.10 Crore
- Target commissioning: FY 2028-29

Key observations and recommendations articulated by the committee

Chairperson, GCC opined that, due to various transformer augmentation scheme, the 132/33 kV 25 MVA transformer will be available as spare, possibility of effective utilization of these transformer for project scheme shall be explored.

ED, SLDC has added that effective utilization of spare transformer shall align the implementation timeline aligns with system requirements of the projects schemes.

Chairperson, GCC directed to incorporate the 25 MVA transformer in the O&M scheme to ensure optimal and full utilization of the spare asset.

In order to meet the present and future load requirements of the Dhule area, address overloading issues, improve voltage regulation, and enhance overall system reliability and stability, after detailed deliberation and discussion, the Committee, ratified the scheme.

All GCC members took note of the discussions

Agenda point No.12:

Establishment of 220/132/33kV PM Mitra Textile Park sub-station, Tal. & Dist.- Amravati.

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme for establishment of 220/132/33 kV PM Mitra Textile Park Substation, Taluka & District – Amravati.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Industrial Development in the Area:

It was submitted that seven Mega Textile Parks have been sanctioned in Maharashtra State, out of which one Mega Textile Park is located at Additional Industrial Area, Nandgaon Peth.

Project Details:

MIDC is developing the PM Mitra Textile Park at Nandgaon Peth, Taluka & District – Amravati, and plans to establish the textile park over 410 hectares of land, adjoining the existing textile park in Additional Amravati Industrial Area.

Power Requirement & Load Projection:

MSEDCL vide letter no.22399 Dt. 08.07.2025 has requested load requirement of 144 MVA. Further the total estimated power requirement for the upcoming textile industries is approximately 334 MVA (at various voltage levels).

Need for New Substation:

In order to ensure reliable and uninterrupted power supply and to cater to textile industrial load and load growth in MIDC area, MSETCL has planned the establishment of a new EHV substation in the Amravati area.

Scope of Works

- 2 x 100 MVA, 220/132 kV ICT with HV & LV bays
- 2 x 25 MVA, 220/33 kV Transformer with HV & LV bays
- 220 kV DCDC line from proposed 400/220 kV Nandgaon Peth s/s with HPC conductor – 5.68 km
- 4 X 220 kV Line bays

- 1 X 220 kV Bus Coupler bay
- 1 X 220 kV TBC bay
- 2 X 220 kV Line bays at 400kV Nandgaon Peth s/s
- 2 X 220 kV PT bays
- 4 X 132 kV Line bays
- 1 X 132 kV Bus Sectionalizer bay
- 1 X 132 kV TBC bay
- 2 X 132 kV PT bays
- 1 X 10 MVAR, 132 kV Capacitor Bank with bays
- 6 X 33 kV Outlets
- 1 X 33 kV Bus Sectionalizer bay
- 2 X 33 kV PT bays
- 2 X 5 MVAR, 33 kV Capacitor Bank with bays
- 2 X 200 KVA, 33/0.4 kV Station Transformer

Objective of the Scheme

- To cater to the upcoming EHV and HV load demand arising due to textile industrial development in Amravati Taluka
- To ensure reliable and uninterrupted power supply to DISCOM consumers in the area
- To provide load relief to 220/132/33 kV Nandgaon Peth Substation

Financial Implications & Timeline

- Estimated project cost: ₹ 171.12 Crore
- Target commissioning: FY 2026–27

Key observations and recommendations articulated by the committee

In order to meet the load requirements of textile industries in PM Mitra Textile Park at Nandgaon Peth and additional MIDC load in the Amravati Taluka area, provide load relief to the 220 kV Nandgaon Peth Substation and enhance overall system reliability and stability, the Committee, after detailed deliberation ratified the scheme.

All GCC members took note of the discussions

Agenda point No.13:

Establishment of 220/22kV Mahalunge GIS sub-station, Tal.- Mulshi, Dist.- Pune

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme for establishment of 220/22 kV Mahalunge GIS Substation, Taluka – Mulshi, District – Pune.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Supply Scenario and Constraints

At present power supply arrangement for the Hinjewadi, Mahalunge, and Maan areas, which is currently catered by the following substations:

- 220/22 kV Hinjewadi Phase-II Substation
 - Installed Capacity: 100 MVA
 - Maximum Demand: 65 MVA
- 220/22 kV Flagship Substation
 - Installed Capacity: 1 × 50 MVA
 - Maximum Demand: 31 MVA
 - One 50 MVA Power Transformer is exclusively dedicated to the Flagship project

It was highlighted that, considering the physical distance from existing substations, coupled with rapid urban and industrial development, the present infrastructure is inadequate to support upcoming high-load projects without adversely impacting grid reliability and voltage profile.

Load Growth and New Demand

It was submitted that there is a continuous surge in load demand from residential townships, commercial centers, and industrial infrastructure in the area.

Further, M/s Mahalunge Land Developers Pvt. Ltd. has submitted a formal application for 110 MVA power demand for their integrated township project at Village Hinjewadi, proposed to be developed in a phased manner as under:

- Phase-I: 50 MVA
- Phase-II: 60 MVA

Considering the above projected demand, establishment of a new substation has become necessary. The scheme is proposed to cater to the increasing power demand from major townships, commercial developments, and industrial hubs in the Pune Metropolitan Area.

Scope of Works

- 2 x 50 MVA, 132/33 kV Power Transformers with HV & LV GIS bays
- 220kV MC LILO on Monopole on 220 kV Chinchwad-Pirangut SC (i.e 220 kV Hinjewadi-II- Pirangut) line between location no. 155-156 at proposed 220/22kV Mahalunge s/s- 0.15 km
- 2 x 220 kV GIS line bays
- 1 x 220 kV GIS Bus Coupler bay
- 2 x 220 kV GIS PT bays

- 12 x 22 kV GIS outlets
- 2 x 22 kV GIS PT bays
- 2 x 200kVA, 33/0.4 kV Station Transformer GIS bays

Objectives of the Scheme

- To cater to the existing and projected load demand of Hinjewadi, Mahalunge, and Maan areas.
- To ensure reliable, uninterrupted, and quality power supply in the Pune Metropolitan Area.
- To mitigate overloading of existing substations in Mulshi Taluka and improve overall system reliability.

Financial Implications & Timeline

- Estimated cost of the scheme: ₹ 87.06 Crore
- Scheduled commissioning: FY 2027-28

Key observations and recommendations articulated by the committee

ED, SLDC submitted that STU should prepare a comprehensive plan for upgrading the cable network in the Pune region. It was also suggested that a dedicated sub-group be formed for the Pune Metropolitan Region (PMR) to address planning and coordination issues.

The Chairperson, GCC emphasized the need for detailed mapping of the Pune sub-network along with all downstream networks in PMR for effective planning. In this context, the Hinjewadi-II to Hinjewadi cable was planned in August 2025.

A Pune Constraint Committee / sub-group has already been constituted for the Pune network. The committee will convene a meeting to review constraints across the entire PMR region, including the requirement of an additional cable between Hinjewadi-I and Hinjewadi-II.

STU shall confirm the same and initiate necessary coordination.

In order to meet the present and future load requirements of the Hinjewadi, Mahalunge, and Maan areas of Pune PMR region, to address overloading issues, and enhance overall system reliability and stability, the Committee, after detailed deliberation, ratified the scheme.

All GCC members took note of the discussions

Agenda point No.14:

Establishment of 132/22kV Wagholi -II GIS S/s at M/s. Ashdan Developers Pvt. Ltd, Tal-Haveli, Dist- Pune

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme for establishment of 132/22 kV Wagholi-II GIS Substation at M/s Ashdan Developers Pvt. Ltd., Taluka – Haveli, District – Pune.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Supply Scenario & Constraints

The STU representative submitted that the electricity supply to the Wagholi and Parner areas is presently being fed from the existing 400/220/22 kV Lonikand EHV Substation. The salient details of the Lonikand Substation are as under:

- Installed Capacity: 150 MVA
- Maximum Demand: 135.67 MW
- Percentage Loading: 90.44%

It was highlighted that, considering the high loading level, the existing capacity of the Lonikand Substation is inadequate to meet the present as well as future load demand. The feasibility of installing additional power transformers at the existing EHV substations was examined; however, due to space constraints, such augmentation is not feasible.

Load Growth & Demand Projection

The Wagholi area is undergoing rapid urban and infrastructure development, resulting in a continuous increase in power demand. The anticipated load requirement from upcoming developments in the area is approximately 215 MVA, which cannot be reliably catered by the existing network.

Further, M/s Ashdan Developers Pvt. Ltd. has submitted an application seeking 110 MVA power demand for their proposed development. The total projected demand of about 215 MVA from various upcoming projects in the Wagholi region necessitates establishment of a new substation.

Scope of Works

- 2x50 MVA, 132/22 kV T/Fs along with HV/LV GIS bays.
- Construction of LILO on 132 kV Lonikand II- Kharadi line -2.1 km approximately (UG cable- 2 km, O/H line – 50 meters).
- 2 x 132 kV GIS line bays.
- 1 x 132 kV GIS Bus Coupler bay
- 2 x 132 kV GIS PT bays.
- 12 x 22 kV GIS bays.
- 1 x 22 kV Bus Coupler bay.
- 2 x 22 kV PT bays.

Objectives of the Scheme

- To provide load relief to the 400/220/22 kV Lonikand Substation
- To cater to the growing power demand of Ashdan Developers, Wagholi, and Manjari (KH) areas

- To ensure reliable, uninterrupted, and quality power supply in the region

Financial Implications & Timeline

- Estimated Project Cost: ₹ 146.30 Crore
- Target Commissioning: FY 2028-29

Key observations and recommendations articulated by the committee

ED, SLDC submitted that along with augmentation of MVA capacity through substations, the associated transmission line network should also be planned, considering upcoming substations in the area.

In line with the earlier observations, the Chairperson, GCC directed STU to undertake a comprehensive review of existing line loadings vis-à-vis the proposed substations, and assess network adequacy, load flow conditions, and future loading scenarios to ensure integrated planning of both substations and transmission corridors.

In order to meet the present and future load requirements of the Lonikand, Wagholi, and Manjari (KH) areas, provide load relief to the 400/220 kV Lonikand Substation, address overloading issues, and enhance overall system reliability and stability, the Committee, after detailed deliberation ratified the scheme.

All GCC members took note of the discussions

Agenda point No.15:

Establishment of 110/22kV Gaikwadpada GIS substation, Dist- Thane with associated lines using 220kV equipment's and UG cable

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Scheme for establishment of 110/22 kV Gaikwadpada GIS Substation, District – Thane, with associated lines using 220 kV level equipment and underground cable.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Background and Previous Deliberations

The scheme was earlier deliberated in the 14th Maharashtra Transmission Committee (MTC) meeting held on 18.07.2025 and subsequently in the 14th GCC meeting held on 28.07.2025. During GCC deliberations, in view of the proposed corridor upgradation, the following recommendation was conveyed:

“ To consider 220kV switchgear along with 220kV cable for 110/22 kV Gaikwadpada GIS to be initially charged on 110kV so as to upgrade the said substation w/o switchgear / cable replacement after upgradation of the corridor and as per future MSEDCL load requirement.”

Accordingly, MSETCL has revised the scheme estimate by adopting 220 kV class GIS equipment and 220 kV UG cable (1200 sq. mm), while proposing initial operation at 110 kV level.

Existing Supply Scenario and Constraints

The Ulhasnagar area in Thane District is presently fed from the following EHV substations:

- 220 kV Anandnagar
- 100 kV Ambernath-I
- 110 kV Netivali (Tata Power)
- 110 kV Kamba (Tata Power)

It was noted that:

- The 220/22 kV Anandnagar and 100/22 kV Ambernath-I substations are critically loaded beyond 85%.
- In the event of failure of any incomer at the existing 22/22 kV switching stations (Gaikwadpada, Ashalepada, Ambernath), the total load cannot be diverted due to overloading constraints.
- No alternate EHV source is presently available to cater to contingency conditions or emergency load diversion.

Load Diversion and Future Demand

Upon commissioning of the proposed substation:

- 57 MVA load will be diverted
 - 42 MVA from 220 kV Anandnagar
 - 15 MVA from 100 kV Ambernath-I
- Additional future load of 20 MVA is proposed to be catered at the Gaikwadpada GIS Substation

Scope of works

- 2 × 50 MVA, 110/22 kV Power Transformers with associated HV (220 kV rated) & LV GIS bays.
- LILO of one circuit of 110 kV D/C Ambernath – Netivali (Kalyan) (Tata Power) line at the proposed substation using EHV underground cable – approx. 1 km (220 kV rated).
- 110 kV GIS Line Bays – 2 Nos (220 kV rated).
- 110 kV GIS Bus Coupler Bay – 1 No (220 kV rated).
- 22 kV GIS Outgoing Feeders – 12 Nos .

Objectives of the Scheme

- To provide load relief to 220 kV Anandnagar and 100 kV Ambernath-I substations.
- To improve reliability, redundancy, and quality of power supply in the Ulhasnagar region.
- To cater to the growing energy demand in Ulhasnagar and adjoining areas with future-ready infrastructure.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 131.42 Crore
- Target Commissioning: FY 2026-27

Key observations and recommendations articulated by the committee

In order to meet the present and future load requirements of the Ulhasnagar area, provide load relief to the 220 kV Anandnagar and 100 kV Ambernath-I substations, address overloading issues, and enhance overall system reliability and stability, the Committee, after detailed deliberation ratified the scheme.

All GCC members took note of the discussions

Agenda point No.16:

Establishment of 220 kV M/s JSW Mobility Ltd. MSETCL S/sn. using 220 kV UG + OH line At Bidkin industrial area developed by M/S. MITL – under Non-DDF

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Establishment of 220 kV M/s JSW Mobility Ltd. MSETCL Substation using 220 kV Underground and Overhead line at Bidkin Industrial Area developed by M/s MITL, under Non-DDF scheme.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Background and Regulatory Framework

It was submitted that STU has granted grid connectivity to M/s JSW Mobility Ltd. for a power demand of 75 MVA at Sector-22, Phase-II, Bidkin Industrial Area, Chhatrapati Sambhaji Nagar, under Non-DDF scheme, in accordance with the MERC SOP Regulations, 2021.

MERC vide SOP Regulations notified on 24.02.2021 has assigned the responsibility of arranging power supply to EHV consumers to the Transmission Licensee, through defined procedures, under DDF or Non-DDF, as opted by the consumer.

Need for the Scheme

- Establishment of the proposed 220 kV JSW Mobility MSETCL Substation at the consumer’s premises will facilitate reliable power supply to M/s JSW Mobility Ltd.

- The substation will also help in catering to future load growth of other industrial consumers in the Bidkin Industrial Area.
- The 220 kV Bidkin GIS Substation is presently under construction.
- In view of the urgency of power supply, an interim arrangement is proposed by providing LILO on the 220 kV Chitegaon – Chitepimpalgaon D/C line up to M/s JSW Mobility Substation, which shall remain in service till commissioning of the 220 kV Bidkin GIS Substation.

Scope of Works

- LILO on 220 kV Chitegaon – Chitepimpalgaon D/C line up to M/s JSW Mobility Substation.
- 2 Nos. of 220 kV GIS Bays with Bus at M/s JSW Mobility Substation.
- 2 Nos. of 220 kV GIS Bays at 220 kV Bidkin Substation.
- 220 kV Underground Cable from GIS Bays at Bidkin Substation up to the CTT Tower.

Objectives of the Scheme

- To provide power supply of 75 MVA to M/s JSW Mobility Ltd. under Non-DDF scheme as per MERC SOP Regulations, 2021.
- To provide connectivity from 220 kV Bidkin GIS Substation.
- To ensure interim grid connectivity through LILO arrangement on 220 kV Chitegaon – Chitepimpalgaon D/C line, considering the urgency of service connection and ongoing construction of Bidkin GIS Substation.
- The scheme shall form part of MSETCL ARR Petition.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 50.53 Crore
- Target Commissioning: FY 2026–27

Key observations and recommendations articulated by the committee

In order to fulfil the power demand of 75 MW under Non-DDF to M/s JSW Mobility, as per the provisions of the SOP Regulations, 2021, an interim arrangement by making LILO of the 220 kV Chitegaon–Chitepimpalgaon line up to M/s JSW Mobility Substation, to be established as interim arrangement till the commissioning of the 220 kV Bidkin GIS Substation and establishment of 220 kV Underground DC Cable from GIS Bays at 220 kV Bidkin S/Sn up to CTT Tower after establishment of 220 kV Bidkin substation as final arrangement. After detailed deliberation the Committee ratified the scheme.

All GCC members took note of the discussions

Agenda point No.17:

Revision in Scope and Cost for Establishment of 132/33 kV Shiradwad S/s, Tal- Shirol Dist- Kolhapur

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Revision in Scope and Cost for Establishment of 132/33 kV Shiradwad Substation, Taluka – Shirol, District – Kolhapur.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Background & Existing System Status

The STU representative submitted that at present, power supply to Ichalkaranji, Jaysingpur, and Kolhapur R-2 Division in Kolhapur district is being fed from the following EHV substations:

- 220/33 kV Tilwani S/S – 90.5% loading
- 110/33 kV Ichalkaranji S/S – 70.85% loading
- 110/33 kV Kurundwad S/S – 96% loading
- 220/33 kV Five Star MIDC S/S – 65% loading

It was highlighted that these substations are either heavily loaded or nearing critical loading levels. Further, the load demand is continuously increasing due to rapid urbanization and significant growth of power loom industries in the region. Over the last decade, the area has emerged as a major textile hub, wherein power loom industries require round-the-clock (24×7) reliable power supply.

Load Growth & Requirement for New Substation

In view of the above, MSEDCL has submitted a proposal for establishment of a new substation at Shiradwad. It was informed that the total pending load applications at various stages amount to 122.65 MVA. Considering the existing load, pending demand, and future growth, the present EHV substations at Tilwani, Kurundwad, Ichalkaranji, and Five Star MIDC are inadequate to cater to the projected demand.

Accordingly, to avoid overloading of existing EHV substations and to ensure reliable, uninterrupted, and quality power supply, establishment of a new EHV substation at Shiradwad is necessary. The proposed substation will strengthen the network, reduce interruptions, improve voltage profile, and enhance overall system reliability.

Revised Scope of Work

- **3 x 50 MVA.** 132-110/33 kV transformers with HV (AIS) and LV (GIS).
- 132 kV LILO on existing 110 kV Jawahar SSKL Hupari (Co-gen) -Tilwani line -14 kms.
- Replacement of 0.15 AAAC conductor of existing 110 kV Jawahar SSKL Hupari (Co-gen) LILO line by 0.2 ACSR panther conductor -16 kms.

- 2 x 132 kV line bays.
- 8 x 33 kV GIS bays
- **33 kV, 1 x 5 MVar Capacitor Bank.**

Objectives of the Scheme

- To cater to future load growth arising from development of the textile hub
- To avoid overloading of the existing transmission system
- To provide reliable and quality power supply to consumers

Financial Implications & Timeline

- Estimated Project Cost: ₹ 106.15 Crore
- Target Commissioning: FY 2027–28

Key observations and recommendations articulated by the committee

In order to provide reliable supply to textile hub, meet the present and future load requirements of the Shiradwad area, provide load relief to the nearby EHV substations, address overloading issues, and enhance overall system reliability and stability, the Committee, after detailed deliberation ratified the scheme.

All GCC members took note of the discussions

Agenda point No.18:

Establishment of 132/33kV Fulsawangi substation, Dist: Yavatmal

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Establishment of a 132/33 kV Fulsawangi Substation in Yavatmal District.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

The representative informed that Mahagaon Taluka in Yavatmal district is presently fed from 132 kV Gunj and 132 kV Umarched substations.

It was submitted that:

- The 132/33 kV Gunj Substation is equipped with 2 × 50 MVA transformers and is operating at a peak loading of 59.46%.
- The 132 kV Umarched Substation is equipped with 3 × 25 MVA transformers and is operating at a peak loading of 62.13%.

The representative further submitted that no space is available for additional 33 kV feeder bays at the 132 kV Gunj Substation. Also, diversion of load from the existing 33 kV switching station at 132/33 kV Umarkhed Substation is not feasible due to very large distance. Due to lengthy 33 kV feeders, poor voltage regulation observed.

It was also informed that new feeders are proposed under RDSS and Augmentation schemes, and MSKVY renewable generation is available in the area. Due to overloading of feeders, low voltage issues are being experienced in the Bhawani area, resulting in frequent trippings.

The representative further submitted that diversion of 10 MVA load of 33/11 kV Anantwadi Switching Station was earlier considered at 132/33 kV Mahur Substation and hence the same is not considered in the proposed Fulsawangi Substation.

Scope of Work

- 2 × 25 MVA, 132/33 kV Power Transformers along with HV and LV bays.
- LILO of one circuit of 132 kV Pusad–Gunj line at the proposed 132 kV Fulsawangi Substation (approx. 27.5 km).
- 2 × 132 kV line bays.
- 8 × 33 kV feeder bays, to be constructed as per the requirement of MSEDCL.
- Installation of 1 × 15 MVAR, 33 kV capacitor bank.

Objectives of the Scheme

- Improvement of voltage profile of Mahagaon Taluka.
- Meeting the load demand of MSEDCL.

The STU representative further informed that due to revision in Schedule of Rates (SOR), the estimated cost of the scheme has changed, however the scope of work remains unchanged.

Financial Implications & Timeline

- Revised Estimated Project Cost: ₹ 90.95 Crore
- Target Commissioning: FY 2028-29

Key observations and recommendations articulated by the committee

ED, SLDC enquired whether a direct double circuit (DC) source line from 220 kV Pusad is feasible, as the LILO portion is considerably long and requires review.

STU representatives informed that no spare bays/space are available at 220/132 kV Pusad and 132 kV Gunj substations to accommodate additional line bays. They also added that capacitor banks are proposed to address the under-voltage issue. The Chairperson, GCC observed that the proposed

alignment falls entirely within forest area, and hence a direct connection from Pusad may not be feasible.

In order to meet the present and future load requirements of the Mahagaon area, cater to the load demand of MSEDCL, to address poor voltage regulation issue, and enhance overall system reliability and stability power quality, the Committee, after detailed deliberation, ratified the scheme.

All GCC members took note of the discussions

Agenda point No.19:

Establishment of 220/33 kV Vadhvan Port Digital GIS S/s, Tal. Dahanu, Dist. Palghar”.

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Establishment of 220/33 kV Vadhvan Port Digital GIS Substation at Tal. Dahanu, District Palghar”.

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

- The power supply to Vadhvan area under Palghar district is presently fed from 132/33/11 kV Boisar-I MIDC Substation.

Operational Constraints:

- The percentage loading at 132/33/11 kV Boisar-I Substation is 71.88%, against the installed capacity of 250 MVA, with a maximum demand of 179.72 MVA.
- A phase-wise load requirement of 80 MVA has been proposed for the Vadhvan Port project, as communicated by MSEDCL.
- MSEDCL has informed that a new EHV Substation is required to be established for providing dedicated power supply to Vadhvan Port Project Limited (VPPL) at 33 kV level.
- Jawaharlal Nehru Port Authority (JNPA) is the principal promoter and project manager for the Vadhvan Port project.
- Vadhvan Port Project Limited (VPPL) is a Special Purpose Vehicle (SPV) formed for execution of the Vadhvan Port project.

Scope of Work

- 2 x 50 MVA, 220/33kV, Transformers with HV & LV GIS bays
- LILO on 220KV Tarapur - Boisar (PG) at 220 kV Vadhvan Port Substation. – 16.23 kM
 - DC line on DC towers- 9.982 kM
 - DC line on MC towers – 6.243 kM (3.057 kM at Vadhvan S/s end and 3.186 kM is considered for crossing locations) 2 x 220kV line bays.
- 2x220KV GIS Line Bays.
- 8 x 33kV GIS line bay.

Responsibilities:

- MSETCL shall be responsible for planning, design, execution, commissioning and operation & maintenance of the proposed 220/33 kV Digital GIS Substation.
- MSEDCL shall coordinate for downstream 33 kV distribution network and load drawl as per approved demand.
- VPPL / JNPA shall coordinate for land availability, statutory clearances and project-related requirements, as applicable.

Phase	Scope of Work	Responsibility
Phase – I	<ul style="list-style-type: none"> • 2 x 50 MVA, 220/33 kV TF* • 8 nos. of 33 kV outlets 	Cost: Borne by JNPA (noted as JNPA2) O&M: Borne by MSETCL
Phase – II	<ul style="list-style-type: none"> • Additional 1 x 50 MVA, 220/33 kV TF* <i>(Dependent on Vadhvan Port future load realization)</i>	Cost: Borne by JNPA (noted as JNPA2) O&M: Borne by MSETCL
Phase – III	<ul style="list-style-type: none"> • 2 x 50 MVA, 220/33 kV TF* • 8 nos. of 33 kV outlets <i>(Dependent on MSEDCL future load realization)</i>	Cost: Borne by MSETCL (under Capex) O&M: Borne by MSETCL

The STU representative further added that the phase-wise load requirement of 80 MVA has been received from the DISCOM vide letter no. 18460 dated 13.06.2024. The representative also submitted that the proposed Vadhvan Port Substation shall be established as a Digital Substation.

Objectives of the Scheme

- To cater to the load demand of the proposed Vadhvan Port by providing dedicated power supply.
- To ensure highly reliable and quality power supply to JNPA's power-sensitive cranes, machinery and equipment required for day-to-day port operations.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 215.14 Lakh.
- Target Commissioning: FY 2028-29

Key observations and recommendations articulated by the committee

In order to meet the load demand of Vadhvan port, to provide dedicated, reliable, qualitative power supply to JNPA's power sensitive cranes, machineries and equipment's requires for day to day port's activity, enhance system reliability and stability, after detailed deliberation the committee ratified the scheme.

All GCC members took note of the discussions

Agenda point No.20:

Establishment of 400/220 kV Padghe GIS s/s along with reorientation of 400kV and 220 kV lines.

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled "Establishment of 400/220 kV Padghe GIS Substation along with reorientation of existing 400 kV and 220 kV transmission lines." The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Background & Existing System Status

- The existing installed capacity at 400 kV Padghe Substation is as under:
 - 400/220 kV ICTs:
 - 3 × 315 MVA

- 1×600 MVA
- 2×500 MVA
- Total: 2,545 MVA
- 220/100 kV ICTs: 4×200 MVA = 800 MVA
- 220/22 kV Transformers: 2×50 MVA = 100 MV

Operational Constraints

- A total of 13 numbers of 400 kV lines and 10 numbers of 220 kV lines are connected to the existing 400 kV Padghe AIS Substation.
- The ICTs and transmission lines at 400 kV Padghe Substation are highly loaded, and the fault level of the 400 kV bus has reached **69 kA**.

Need of the scheme

- The proposed scheme is required to address constraints arising due to increased loading of 400 kV Padghe ICTs and elevated fault levels at interconnected substations namely:
 - 400 kV Padghe
 - 400 kV Velgaon
 - 400 kV Kudus
 - 765/400 kV Padghe (PG)
- The proposed scheme shall also facilitate evacuation of Renewable Energy (RE) power from Khavda Phase-IV and Phase-V projects without imposing constraints on the CTU network, particularly at 765 kV Padghe (PG) Substation.
- The scheme forms part of the Western Region Expansion Scheme (MMR) for Maharashtra.
- Further, there is large-scale development of Data Centers, Logistic Parks and other industrial units in and around Padghe area, necessitating creation of a new 400 kV level Substation to meet future power demand.

Scope of Work

- 3x500 MVA, 400/220 kV, [10 x 167 MVA with one single phase spare].
- 6x400 kV Line bays. (with 2100 MVA capacity).
- 2x400 kV Interconnection bays
- 4x220 kV Line bays

- 2x220 kV Interconnection bays
- 400 kV Line reorientation work
- 220 kV Line reorientation work

Objectives of the Scheme

- To mitigate constraints due to increased loading of 400 kV Padghe ICTs and high fault levels at interconnected substations namely Padghe, Velgaon, Kudus and 765/400 kV Padghe (PG).
- To enable unconstrained evacuation of Renewable Energy power from Khavda Phase-IV and Phase-V schemes through the CTU network.
- To meet the future power demand arising due to rapid development of Data Centers, Logistic Parks and industrial growth in the Padghe region by establishing a new 400 kV GIS Substation.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 580.55 Lakh.
- Target Commissioning: FY 2027-28

Key observations and recommendations articulated by the committee

ED, SLDC enquired whether any dedicated source line is proposed for evacuation of power with the addition of new ICT capacities in the network and whether any congestion is observed in the studies with the addition of 1500 MVA transformation capacity. It was also noted that both Kalwa and Padghe splits are included in the CTU plan for evacuation of RE power from Khavada.

The STU representative submitted that system studies for the 2029–30 timeframe have been carried out considering new corridors and HVDC links, and no network congestion has been observed. It was further clarified that the split arrangement is primarily due to fault level limitations and loading constraints of the existing ICTs, with RE power from Padghe split being routed to Kalwa split and the downstream network.

ED, SLDC suggested that a separate detailed GCC meeting be convened to discuss existing constraints and plan the 220 kV and downstream network requirements for the PMR and MMR regions.

The Chairperson, GCC concurred with the proposal and directed that the separate meeting be scheduled for detailed network planning of PMR and MMR regions.

The committee noted that Execution of the scheme is necessary for establishment of an additional interconnection between Padghe Split and Kalwa Split for routing power from 765kV Padghe(PG) to Padghe GIS to Kalwa and beyond system network.

In order to strengthen the 400 kV network in Mumbai and MMR region, enhance system reliability, the committee after detailed deliberations ratified the scheme.

All GCC members took note of the discussions

Agenda point No.21:

Upgradation of existing 132kV GCR Eklahare – Manmad – Chalisgaon DCDC line by composite 220kV/132kV MCMC Narrow Base Towers & Monopoles along with associated End Bays & Strengthening of Existing Bays (Vintage line corridor).

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Upgradation of existing 132 kV GCR Eklahare – Manmad – Chalisgaon DCDC line by composite 220 kV / 132 kV MCMC narrow base towers and monopoles along with associated end bays & strengthening of existing bays (vintage line corridor)”.

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Existing Infrastructure:

- The existing 132 kV transmission network in the region is overburdened due to continuous growth in industrial, agricultural and residential demand, and the lines have completed more than 40 years of service life.

Operational Constraints

- Presently, the 132 kV Manmad – Lasalgaon single-circuit line is critically loaded up to 80%. Further, due to 100 MW solar generation at 132 kV Chordiya Substation, the 132 kV Chordiya – Manmad circuit is also critically loaded.
- As per the guidelines issued for “Health Assessment and Action on Transmission Lines above 35 years”, the committee has recommended:
 - a) Exploration and study to determine the technically and economically optimal modernization pathway, and
 - b) Assessment of required power transfer capability of each corridor, along with recommendation of suitable conductor type, performance class and system voltage configuration for modernization.

Need of scheme

- In order to strengthen the existing transmission corridor and to create a reliable 220 kV network for Nashik – Manmad – Chalisgaon region, it is proposed to construct a composite 220 kV / 132 kV MCMC line within the existing 132 kV vintage line corridor.
- The proposed corridor shall act as an additional high-capacity evacuation path, enhance system redundancy, and ensure stable power supply for future decades.
- Power supply to Nashik District is primarily dependent on Nashik TPS (Generation) and 220 kV GCR Eklahare – BBLR DCDC line, which is continuously operating under overloaded conditions.
- There is no alternate strong 220 kV source available for Nashik, Manmad and adjoining load centers, resulting in poor voltage profile and reduced reliability during peak hours, leading to system instability.
- The proposed scheme shall also facilitate evacuation of upcoming 70 MW wind power proposed by M/s Jupiter Energy Ltd. on the 132 kV Manmad – Yeola line.

Scope of Work

- Upgradation of existing 132 kV GCR Eklahare – Manmad – Chalisgaon line by construction of Composite 220 kV / 132 kV MCMC line using 220 kV MC Narrow Base Towers and 220 kV MC Composite Monopoles, within the existing corridor (Total length: 137 km):
 - 220 kV GCR Eklahare – Manmad Line: 74.73 km
 - 220 kV Manmad – Chalisgaon Line: 63.559 km
- Upgradation of existing 132 kV LILO DCDC line from 220 kV Pimpalgaon Substation to 132 kV Ranwad Substation to 220 kV M/C line.
- Replacement of existing 0.2 ACSR conductor by High Performance Conductor (HPC) over a total corridor length of 18.17 km, as under:
 - LILO point to 132 kV Ozar S/s – 2.49 km
 - LILO point to 132 kV Ranwad S/s – 1.02 km
 - LILO point to 132 kV Lasalgaon S/s – 1.355 km
 - LILO point to 132 kV Chandwad S/s – 9.30 km
 - LILO point to 132 kV Chordiya S/s – 2.982 km
 - LILO point to 132 kV Pimpalkhed S/s – 1.02 km
- Construction of 4 × 220 kV bays at 220 kV Manmad Substation.
- Construction of 2 × 220 kV bays at 220 kV GCR Eklahare Substation.
- Construction of 2 × 220 kV bays at 220 kV Chalisgaon Substation.
- Construction of 2 × 220 kV bays at 220 kV Pimpalgaon (Wavi) Substation.
- 220 kV bus upgradation from twin to quad conductor at 220 kV Chalisgaon Substation.

- Strengthening of existing line bays at Ozar, Ranwad, Lasalgaon, Chandwad, Chordiya, Pimpalkhed, GCR Eklahare, Manmad and Chalisgaon Substations.
- Reorientation of 132 kV Ozar line bay at 220 kV Pimpalgaon Substation.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 1481.98 Lakh.
- Target Commissioning: FY 2028-29

Key observations and recommendations articulated by the committee

The Chairperson, GCC informed that the upgradation of the vintage corridor is planned in a phased manner under three packages (Package-A, Package-B, and Package-C).

It was further stated that the works will be executed sequentially, one package at a time, using ERS arrangements to ensure continuity of supply and avoid disruption during execution.

In view of to strengthen the existing transmission corridor and to create additional 220 kV network using existing ROW, to evacuate RE power to load centres, the committee after detailed deliberations ratified the scheme.

All GCC members took note of the discussions

Agenda point No.22:

Establishment of direct source line to 220 kV Satara MIDC S/Sn from 400 kV Karad S/Sn. By Erecting Link Line between 220 kV Karad – Sadawaghapur line and 220 kV Malharpeth – Satara MIDC line

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Establishment of direct source line to 220 kV Satara MIDC Substation from 400 kV Karad Substation by erecting a link line between 220 kV Karad – Sadawaghapur line and 220 kV Malharpeth – Satara MIDC line.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

- The 220 kV Satara MIDC Substation is presently fed from 220 kV Malharpeth and 220 kV Vankuswadi substations.
- The existing source lines pass through hilly terrain, and frequent outages / tripping occur due to fog and heavy lightning.

- These weather-related issues significantly affect the stability and reliability of power supply to the Satara region.
- In order to provide a more reliable 220 kV source, it is proposed to give a direct source from 400 kV Karad Substation by erecting a link line from LOC-10 of 220 kV Karad–Sadawaghapur line to LOC-74 of 220 kV Malharpeth–Satara MIDC line, thereby avoiding the existing line route passing through hilly terrain.

Scope of works

- Establishment of a direct source line to 220 kV Satara MIDC Substation from 400 kV Karad Substation by erecting a link line between 220 kV Karad – Sadawaghapur line and 220 kV Malharpeth – Satara MIDC line.
 - Link line length: 14.900 km

Objective of the scheme

- To provide direct connectivity to 220 kV Satara MIDC Substation from 400 kV Karad Substation, thereby improving power quality and reliability in Satara city and MIDC area.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 27.54 Crore.
- Target Commissioning: FY 2028-29

Key observations and recommendations articulated by the committee

In order to meet the present & future load at 220 kV Satara MIDC, to address the overloading problems, N-1 compliance, enhance system reliability and stability and for system point of view, after detailed deliberation the committee ratified the scheme.

All GCC members took note of the discussions

TPC Schemes

Agenda point No.23:

22kV AIS to GIS conversion at TPC-T Salsette RSS.

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “22 kV AIS to GIS conversion at TPC-T Salsette Receiving Substation (RSS).”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

The existing Salsette 22 kV MV AIS, commissioned in 1991, has completed its useful life. The existing switchgear is experiencing multiple defects, and the OEM has discontinued supply of spares, resulting in increased reliability concerns.

It was further submitted that:

- The distribution licensees have requested additional six (06) numbers of 22 kV outlets from Salsette RSS.
- In view of ageing infrastructure, non-availability of spares, and requirement of additional outlets, it is proposed to convert the existing 22 kV AIS to GIS at TPC-T Salsette RSS, along with addition of new 22 kV outlets.

Scope of Work

- Installation and commissioning of 22 kV GIS.
- Provision of Protection, Automation and Communication (PAC) system for the 22 kV GIS.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 38 Crore
- Target Commissioning: FY 2028-29

Key observations and recommendations articulated by the committee

In view of ageing infrastructure, non-availability of spares, and requirement of additional outlets, up gradation of technology , reduction in maintenance & enhancement of reliability of the system , after detailed deliberation, the committee ratified the scheme.

All GCC members took note of the discussions.

Agenda point No.24:

22kV AIS to GIS conversion at TPC-T Parel RSS.

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “22kV AIS to GIS conversion at TPC-T Parel RSS”.

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

- Parel- 22 kV MVA AIS commissioned in 1996.
- Existing switchgear is having multiple defects & OEM also stopped the supplying of spares.
- In view of above it is being proposed 22 kV AIS to GIS conversion at TPC-T Parel

Scope of works

- Installation & Commissioning of 22 kV GIS
- Protection, Automation & Communication system for 22 kV GIS.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 20 Crore
- Target Commissioning: FY 2026-27

Key observations and recommendations articulated by the committee

In view of ageing infrastructure, non-availability of spares, and requirement of additional outlets, up gradation of technology , reduction in maintenance & enhancement of reliability of the system , after detailed deliberation, the committee ratified the scheme.

All GCC members took note of the discussions.

Agenda point No.25:

Addition of 22kV GIS bus section at TPC-T Kolshet RSS .

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Addition of 22 kV GIS bus section at TPC-T Kolshet Receiving Substation (RSS)”.

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

The existing 22 kV AIS at TPC-T Kolshet RSS is configured with two numbers of bus sections, both of which are fully utilized.

It was further submitted that the distribution licensees have requested six (06) additional 22 kV outlets to cater to new load requirements. In view of the complete utilization of existing bus sections and the requirement of additional 22 kV outlets, it is proposed to add a 22 kV GIS bus section at TPC-T Kolshet RSS.

Scope of Work

- Installation and commissioning of 22 kV GIS.
- Provision of Protection, Automation and Communication (PAC) system for the 22 kV GIS.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 17 Crore
- Target Commissioning: FY 2026-27

Key observations and recommendations articulated by the committee

In view of ageing infrastructure, non-availability of spares, and requirement of additional outlets, up gradation of technology , reduction in maintenance & enhancement of reliability of the system , after detailed deliberation, the committee ratified the scheme.

All GCC members took note of the discussions.

Agenda point No.26:

Improvement of 110 kV Source Reliability to M/s Central Railways Chola TSS by providing 3rd source from Tata Power Kalyan RSS.

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Improvement of 110 kV source reliability to M/s Central Railways Chola Traction Sub-Station (TSS) by providing a third 110 kV source from Tata Power Kalyan Receiving Substation (RSS)”.

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

The 110 kV Central Railways Chola Powerhouse is presently fed from Tata Power Kalyan RSS through Chola–Kalyan-1 and Chola–Kalyan-2 lines. From the Chola Powerhouse, Central Railways feeds North-East and South-East traction loads through NE-1 & NE-2 and SE-1 & SE-2 lines respectively. The Thakurli TSS is also fed from the Chola Powerhouse.

It was further submitted that:

- The Chola–Kalyan-1 and 2 lines have a current carrying capacity of 550 A. There have been instances where the loading on these lines has reached 571 A, exceeding the rated capacity.
- Due to this constraint, the load is required to be restricted below the single-line capacity of 550 A under contingency conditions.
- Additional load demand is anticipated in view of railway track expansion works in the nearby area.
- There are frequent cancellations of planned line outages for routine maintenance from the Railway side due to high loading conditions in the Ghat section. Presently, outages are available only during night hours for 1–2 hours, impacting maintenance activities.

In view of the above constraints, M/s Central Railways has requested TPC-T to provide a third 110 kV source to Chola TSS from Tata Power Kalyan RSS to improve system reliability.

Scope of Work

- Construction and commissioning of approximately 2.5 km of 110 kV overhead line between TPC-T Kalyan RSS and Central Railways Chola TSS.

- Erection and commissioning of two (02) numbers of 110 kV AIS bays, one each at TPC-T Kalyan RSS and Central Railways Chola TSS.
- Provision of Protection, Automation and Communication (PAC) systems for the 110 kV bays at Kalyan and Chola.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 23 Crore
- Target Commissioning: FY 2029-30

Key observations and recommendations articulated by the committee

In view of the ensuring reliable and un-interrupted power supply to railway, N-1 compliance, after detailed deliberation, the committee ratified the scheme.

All GCC members took note of the discussions.

Agenda point No.27:

Upgradation of existing 110 kV AIS by 110 kV GIS with 33 kV level creation at TPC-T Malad RSS.

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Upgradation of the existing 110 kV AIS to 110 kV GIS along with creation of 33 kV voltage level at TPC-T Malad Receiving Substation (RSS)”.

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

- TPC-D has applied to STU for 33 kV load of 60 MVA from TPC-T Malad RSS.
- The existing TPC-T 110/22 kV Malad RSS has a transformation capacity of 210 MVA, comprising 2 × 75 MVA and 1 × 60 MVA transformers.
- At present, 33 kV voltage level is not available at TPC-T Malad RSS.
- To meet existing as well as future load requirements, it is proposed to create 33 kV level at TPC-T Malad RSS.
- Accordingly, it is proposed to combine the already approved 110 kV AIS to GIS conversion scheme with the creation of 33 kV level.

Scope of Work

- 110 kV AIS to GIS conversion at TPC-T Malad RSS.
- Installation and commissioning of 2 × 90 MVA, 110/33 kV power transformers, along with 33 kV GIS and Protection, Automation & Communication (PAC) system.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 205.43 Crore
- Target Commissioning: FY 2027-28

Key observations and recommendations articulated by the committee

In view of the space constraint in the existing substation, up gradation of technology , reduction in maintenance & enhancement of reliability of the system , to fulfil 33 kV load of 60 MVA demand of TPC-D, after detailed deliberation, the committee ratified the scheme.

All GCC members took note of the discussions.

Agenda point No.28:

Upgradation of existing 110kV Parel RSS by creation of 220kV level with 2 no's 220 kV source lines from Trombay -(TPC-T)

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Upgradation of the existing 110 kV Parel Receiving Substation (RSS) by creation of 220 kV voltage level, along with two numbers of 220 kV source lines from Trombay”.

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

Background and Observations in GCC

The STU representative highlighted that during the 16th GCC, the Chairperson, GCC opined that, in view of the significant increase in the estimated cost of the scheme post approval in the 13th GCC, the MTC should revalidate the reasons for the cost variation, which shall also be verified through prudence checks by STU under Capex Regulations, 2022.

Accordingly the STU representative submitted that:

The cost estimates discussed in the 13th MTC were based on a preliminary survey. Subsequent to approval in the 13th MTC, detailed route survey and engineering were carried out, which resulted in revision of the estimated cost. The initial cost was estimated on preliminary survey. Subsequently detailed survey carried, there was a significant change in cable length due in view of execution feasibility and railway crossings and required statutory permissions from Navy, CRZ

Also,

- TPC-T submitted the DPR to STU on 09th September 2025 for prudence checks, with cost estimates aligned to the scope discussed in MTC.
- TPC-T responded to data gaps raised by STU on 20th September 2025.

- Load flow studies were validated by STU on 18th November 2025.
- The details of change in cost with breakup is submitted by TPC-T vide email Dt.28.01.2026.

Cost Variation Details

The STU representative submitted the following details regarding cost variation:

- Estimated cost based on preliminary survey (13th MTC / 13th GCC): ₹ 400 Crore
- Estimated cost post detailed engineering and route survey: ₹ 729.06 Crore

Sr No	Description	Final Cost (Rs Lakhs)	Previous Cost (Rs Lakhs)	Remarks
1	220kV GIS bay at Parel RSS	6887.51	5510.01	Initially Outdoor GIS was considered. After details survey due to space constraints and to make provision for additional Transformer in future, Indoor GIS finalised.
2	220kV AIS bays at Trombay RSS	407.94	407.94	No change
3	220kV GIS bay at Mahalaxmi RSS	888.4	0	In the earlier cost estimates this scope was inadvertently missed out.
4	125MVA 220/33kV Transformer	3310.4	3310.4	No change
5	250 MVA 220/110/33kV ICT	2047.16	2047.16	No change
6	33kV GIS bays	827.33	827.33	No change
7	220kV Cable Package	30635.75	19626.46	Earlier cable route was @ 3.4 km, but after detail survey and consultation with Rly It was realised that the railway crossing considered location, was not feasible. Hence the route was changed in view of getting permissions from concerned authorities.
8	Protection system	927.29	741.83	The change in the cost was due to addition of bay extension at Mahalaxmi
9	Metering system	207.43	165.94	The change in the cost was due to addition of bay extension at Mahalaxmi
10	Automation System	451.73	362.97	The change in the cost was due to addition of bay extension at Mahalaxmi

Sr No	Description	Final Cost (Rs Lakhs)	Previous Cost (Rs Lakhs)	Remarks
11	Communication System	451.26	361.01	The change in the cost was due to addition of bay extension at Mahalaxmi
12	Electrical Auxiliaries & control cables	1099.62	302.89	The cost changed due to Indoor GIS building.
13	For HVAC, Fire & Mechanical Aux	1252.63	375.79	The cost changed due to Indoor GIS building.
14	Supply - Civil Works	6381.38	1364.46	Initially Outdoor GIS was considered. After details survey due to space constraints and to make provision for additional Transformer in future, Indoor GIS with building was finalised.
15	CCTV - Security system	99.03	19.81	The cost changed due to Indoor GIS building.
16	Transmission Lines	7138.32	4702.32	After details survey, some tower modifications, compensation and permission issues were incorporated in cost estimate.
A	Subtotal (₹ Lakh.)	62937.81	40120.98	
B	IDC	5562.35		The earlier cost discussed in MTC was without IDC
C	Overhead Cost@7%	4405.65		The earlier cost discussed in MTC was without overhead cost @7%
D	Total (₹ Lakh.)	72905.81	40120.98	

Scope of Work

- Source Lines
 - The 220 kV Parel–Mahalaxmi line (7 ckt-km), as approved by MERC, has already been commissioned in view of 220 kV Parel.
 - Commissioning of 220 kV Trombay–Parel-1 and Trombay–Parel-2 lines using existing RoW of TPC-T lines.
- Substation Works
 - Installation and commissioning of seven (07) numbers of 220 kV GIS bays (excluding two PT bays).
 - Installation and commissioning of one (01) number of 250 MVA, 220/110/33 kV ICT and two (02) numbers of 125 MVA, 220/33 kV power transformers, with future provision for one additional 125 MVA transformer.

- Installation and commissioning of 33 kV GIS bus sections, including 23 numbers of 33 kV GIS bays.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 729.06 Crore, including RI cost of ₹ 104.82 Crore.
- Target Commissioning: FY 2028-29

Key observations and recommendations articulated by the committee

STU representative apprised the Committee that the GCC has already directed that, in cases where there is no change in the technical configuration of a scheme and only the cost undergoes revision, the matter shall be confined to MTC. In such cases, re-approval at the GCC level is not required; however, the scheme may be placed before GCC for information purposes.

As discussed in 16th MTC and as submitted by TPC-T that the initial cost estimates were based on a preliminary survey & due to an incorrect/different route survey and changes in the cable route and length, the exact cost could not be accurately assessed at the initial stage. The scheme cost increased after conducting a detailed survey and engineering assessment, considering execution feasibility and the requirement of statutory permissions.

The Committee noted that the scheme is already approved in 13th GCC and was brought to 16th GCC due to variation in cost and the committee had directed MTC to only re verify if any changes in the technical composition of the scheme had led to significant change in the cost however as stated that there is no change in the technical composition of the scheme. Thus the committee took note of the appraisal and maintain it's approval granted through the 13th GCC subject to financial prudence check of the scheme by STU.

All GCC members took note of the discussions.

AEML Scheme

Agenda point No.29:

3rd, 220/33 kV, 125 MVA Transformer at BKC EHV S/s- (AEML-T)

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “3rd 220/33 kV, 125 MVA transformer at BKC EHV Substation”.

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

The existing firm capacity of BKC EHV Substation is 125 MVA, against which the present load is about 65 MVA, corresponding to approximately 52% utilization of firm capacity.

It was further submitted that:

- MERC, while approving the BKC DPR, has approved eight (08) numbers of 33 kV outlets, which have already been commissioned.
- An additional eight (08) numbers of 33 kV outlets are under implementation as part of the NDPR scheme, post MTC/GCC approval, and are expected to be commissioned by December 2026.
- With commissioning of these additional outlets, the substation loading is expected to increase, and the BKC EHV Substation is likely to cross its firm capacity within the next 1–2 years thereafter.

In view of the anticipated load growth, it is proposed to augment the transformation capacity at BKC EHV Substation by installation of a third 220/33 kV, 125 MVA transformer.

Scope of Work

- Provision of 220 kV bay.
- Installation and commissioning of one (01) number of 125 MVA, 220/33 kV transformer.
- Provision of 33 kV switchgear.
- Associated civil works.

Financial Implications & Timeline

- Estimated Project Cost: ₹ 60.12 Crore.
- Target Commissioning: FY 2028-29

Key observations and recommendations articulated by the committee

In order to meet the present & future load requirement, to anticipate the load growth, N-1 Compliance, enhance system reliability and stability after detailed deliberation the committee ratified the scheme.

All GCC members took note of the discussions.

MEGPTCL Scheme

Agenda point No.30:

Online Dissolve Gas Analysis for Transformer/ Reactor - Healthiness of critical assets (Transformers and Reactors) units across MEGPTCL's current assets- (MEGPTCL)

Discussion in 17th GCC:

The STU representative placed before the GCC a proposal titled “Online Dissolved Gas Analysis (DGA) for Transformers and Reactors – Healthiness of Critical Assets across MEGPTCL’s existing network.”

The STU representative made the following submissions before the Grid Coordination Committee (GCC):

- Online DGA provides continuous assessment of internal transformer and reactor conditions, enabling early detection of faults such as overheating, partial discharge, arcing, and other internal abnormalities.
- Proactive monitoring enhances system reliability and helps in preventing catastrophic failures.
- The existing practice of periodic offline DGA does not provide continuous or real-time monitoring of transformers and reactors.
- Installation of Online Gas Analyzer systems on critical and aging transformers and reactors enables real-time monitoring and timely fault diagnosis.

The STU representative further highlighted that:

- 34 Online DGA systems have already been installed, and
- 31 additional DGA kits are required under the present scheme.

Scope of works

- Installation of 31 No. Online Dissolve Gas Analyzer Kit or Transformer/ Reactor

Financial Implications & Timeline

- Estimated Project Cost: ₹ 10.08 Crore.
- Target Commissioning: FY 2028-29.

Key observations and recommendations articulated by the committee

STU representative informed that the Online DGA systems enable early detection of incipient faults, facilitating timely corrective actions. During FY 2022–23, alerts from the DGA system enabled MEGPTCL to carry out timely repair of two reactors, thereby avoiding potential major failures and outages. Considering the technical benefits of continuous monitoring and preventive maintenance, the MTC has recommended the scheme for submission to GCC for approval.

However, ED, SLDC sought clarification on the specific locations for installation of the proposed DGAs, including whether they pertain to new or existing transformers/reactors.

The Chairperson, GCC directed STU to submit a detailed report confirming the requirement, proposed locations (new/existing transformers or reactors) & apprise the same in the ensuing GCC meeting.

All GCC members took note of the discussions.

With these discussions the meeting concluded with vote of thanks.

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Annexure A

List of participants for 17th GCC meeting held on 30.01.2026

Sr no	Name of member	Designation	Committee position
1	Shri Satish Chavan	Director (Operations), MSETCL	Chairperson
2	Shri Shashank Jewalikar	Executive Director (MSLDC)	Member Convener
3	Shri. Anil Bharsakle	CE (O&M)	Member
4	Shri Sandip Patil	Chief Engineer (PP), MSEDCL attended on behalf of Director (Commercial) MSEDCL	Member
5	Shri. Anil Kathoye	CE (Works), MSPGCL	Member
6	Shri P. D. Lone,	S.E. Commercial, WRPC	Member
7	Shri Manoj Pise	General Manager, MEDA	Member